Thomas Grønvoll

Red Barrels

Narrative, Rules and Mechanics in Video Games

Kandidat: Thomas Grønvoll

Universitetet i Oslo

Det Humanistiske Fakultet

Veiledere: Christian Refsum og Gunnar Liestøl

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Introduction

Ever since I got my first game console, a Nintendo Entertainment System, in the early 90's video games have been a big part of my life, and they've shown me wonderful stories and experiences that rival those I've experienced from literature and film. Not in exactly the same fashion, but in a way that is unique to the medium and the stories have been important none the less. Over the years, video games have grown in both scope and complexity, along with the technology that enables video games to be crafted, bringing forth video games that are on a scale that we've never seen before. The medium today cannot easily be compared with the medium of the early days of gaming, though the roots are still very much visible.

Whether video games can be narrative has been hotly debated, and even the question of whether video games have artistic merit and can be called art has been debated. Roger Ebert, the famous film critic, stated in 2010 that he believed video games can never be art[1]. We might debate the narrative nature of video games, but it cannot be overlooked that they are narrative experiences and that people around the world are enjoying video games as both play and stories.

My intention with this thesis is to shed some light on important aspects of video games as narrative vehicles, to provide analytical tools for understanding the narrative potential that is inherent in video games as art, entertainment, and a channel for communication. These aspects are important for understanding video games from a narrative perspective, not only because they are beneficial but because they can also be negative and work against video games as a narrative medium.

-Thomas Grønvoll-

[1] http://www.rogerebert.com/rogers-journal/video-games-can-never-be-art

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Chapter 1:
Rules and Narrative

Video games have become one of the most important storytelling mediums in today's culture, in sheer size, surpassing the monetary revenue of Hollywood film production in 2009[2] and producing works that have budgets on par with and even surpassing Hollywood blockbusters. *Grand Theft Auto V* (Rockstar North, 2014) had a development and promotion budget of over 2 billion NOK ($265 million), which is more than Hollywood blockbusters such as James Cameron's film *Avatar's* (2009) $237 million budget. Video games have indeed become a force to be reckoned with as a means of both entertainment and as a storytelling device, if only for the sheer scale and reach of the medium; World of Warcraft (Blizzard Entertainment, 2004), a massive multiplayer online roleplaying game (MMORPG), had 10 million subscribers as of 2014[3], with over 100 million accounts having being created since the game was launched in 2004.

Video games have grown to become a vast and diverse medium that is consumed and produced by people from around the world, making use of the opportunities that worldwide communication technologies present. It has given new voices a chance to have their stories and experiences heard, especially with the rising trend of indie developers where major online retail channels, like Steam[4], have given a platform for easy distribution for them. These voices are opening up for new forms of artistic expression, using the format to present their stories and experiences, in ways that are unlike the simple interactive fun that originated the rise of video games as a medium. Now we have games like *Papers, please* (Lucas Pope, 2013), which details the troublesome life of a civil servant in a fictional eastern bloc country during the Cold War era, *This War of Mine* (11 bit studios, 2014) which shows the horrifying experiences of civilians trying to survive while stuck in the middle of the siege of Sarajevo, and *Home* (Benjamin Rivers, 2012), a Stephen King-esque story about the a man who can't remember the last days and whose wife has gone missing, where nothing is certain and the narrative refuses to give you a direct and final answer. The common element of these games is that they portray very real and serious experiences, experiences that we're familiar with from

[2] http://www.telegraph.co.uk/technology/video-games/6852383/Video-games-bigger-than-film.html
[3] http://www.polygon.com/2014/11/19/7250737/world-of-warcraft-warlords-draenor-10-million-subscribers
[4] Steam is a service provided by Valve Corporation that provides digital distribution of video games and other kinds of software.

film and literature, but in new and unique ways that we haven't seen before, thanks to the interactive nature of video games and the potential that therein lies.

But how do games tell stories? Do games have narratives or are narratives something that is just added to games, lying on top and not really connected with the play itself? There are several differences between traditional narrative mediums and video games as a storytelling medium, first and foremost of which are the rules and the fact that games are interactive works that actively works against the Reader/Player, in the form of challenges that must be overcome in order to proceed. The player takes an active role in the work, to overcome these challenges.

This all means that we cannot just make use of the traditional narrative theories and practices that we know from film and literature, but neither does it mean that we must begin from scratch. To this end, I will look at some of the important areas of videogames and how they relate to narrative, both beneficial and troublesome areas, to then suggest a starting point for a narrative theory for video games.

Video games as an artistic format has grown up alongside the Nintendo-generation which popularized video games; they've grown from the youth and children that consumed the groundbreaking works of the medium from the mid 80's to the mid 90's, to adults who not only demand more mature content in the games they consume, but who also have become the creators of new games. In this way we can claim that video games have grown up along with the first wave of consumers; the average gamer is today about 30 years old, with an approximately even split between male and female gamers[5].

Why is it important to analyze games from a narrative perspective? Simply because it is more and more becoming the soapbox utilized by people from around the world to have their heard and to share their experiences with the rest of the world, which means that we need the tools to understand and analyze their works, their stories, and the meanings inherent in them. In other words; we need to analyze games as narratives, because they are produced and presented as narratives.

The relationship between rules and narrative is crucial to understand as we continue forward. We've left behind the days when it was necessary to separate narrative theory from the theoretical approach to video games in order to legitimate games studies as a separate and

[5] As by the 2014 statistic published by the Entertainment Software Association: http://www.theesa.com/wp-content/uploads/2014/10/ESA_EF_2014.pdf

distinct discipline. This relationship has been the center of conflict for the ludiologist vs narratologist theoretical war, which lasted about ten years and which has only recently reached a cease-fire agreement.

Theorists like Jesper Juul and Marku Eskelinen, with the latter being more harsh and unforgiving, were firmly against narrative theory being used in games studies and looked harshly upon narrative interpretations of video games.

"The operation of framing something as something else works by taking some notions of the source domain (narratives) and applying them to the target domain (games). This is not neutral; it emphasises some traits and suppresses others. […] Nevertheless, my point is that: 1) Games and stories actually do not translate to each other in the way that novels and movies do. 2) There is an inherent conflict between the now of the interaction and that past or 'prior' of the narrative. You can have narration and interactivity at the same time; there is no such thing as a continuously interactive story. 3) The relations between reader/story and player/game are completely different - the player inhabits a twilight space where he/she is both an empirical subject outside the game and undertakes a role inside the game."

(Juul, 2001)

"If I throw a ball at you I don't expect you to drop it and wait until it starts telling stories. On the other hand, if and when games and especially computer games are studied and theorized they are almost without exception colonized from the fields of literary, theatre, drama and film studies. Games are seen as interactive narratives, procedural stories or remediated cinema. On top of everything else, such defininations , despite being successful in terms of influence or funding, are conceptually weak and ill-ground, as they are usually derived from a very limited knowledge of mere mainstream drama or outdated literary theory, or both. […] To put it less nicely, it's an attempt to skip the 20th century altogether and avoid any intellectual contact with it, a consumerist double assassination of both the avant-garde and advanced theory."

(Eskelinen, 2001)

Ludology, to clarify is the name adopted for "games studies"(taken from the latin word "ludo", which means "I play"), while narratology should be rather straightforward. In this context, a ludologist is one who wishes to study games as something unique, which strangely enough ended up as a focus upon the rules, *"to see the focus shift unto the mechanics of game play"* (Jenkins, 2001), while a narratologist is one who wishes to study games as a storytelling medium. The debate and heated tempers have now been cooled down and people have begun to see it, not as an either/or situation, but a field where both views can

be expressed to discover different aspects of what a game is. It also allows us the opportunity to analyze how game-mechanics can, in part, tell stories in and of themselves.

As Espen Aarseth comments on the ludo-narrative debate in recent time:

Tragically, in the field of game studies the term 'narratology' has changed meaning and does not refer to academic discipline of narrative theory, but to a more or less mythical position taken by an imagined group of people who are seen to believe that games are stories. (Aarseth, 2012)

This comment is proof enough for me to be sure of one thing as we continue our work in the games studies; while we now look to rules and narrative, we must first lay the ground work and establish what we actually mean with these two terms; vague use of terms and incomplete understanding of said terms was one of the reasons why the war between ludologist and narratologist raged for so long, in my opinion.

But one of the difficulties lies within the fact that games studies is a new academical field of study that is influenced from a lot of different fields, as video games in themselves are not so much "games" as integrated crossmedia packages in the form of a software program (Aarseth, 2012). Video games draw inspiration and theoretical work from several fields of art and entertainment, which all have their own discourse and their own views, opinions and different ways of applying a term. Film, comic books, novels, theatre, etc.; Drawing influence from all these fields to create a new academic field and a new breed of cultural products means a lot of adaptation and negotiation, not only to make the "foreign terms" work in our field, but also as to get a firm understanding of what they actually mean in their own native fields. We cannot make use of something we do not understand. First of all, we shall now take a look upon a term that is unique to games, namely rules; it has to be said that it is true that there are rules in other mediums, like genre conventions, for instance, but these are closer to suggestions, rather than the meaning and implementation of rules in games. There has already been written some excellent works on this theme, by Jesper Juul, and Katie Salen & Eric Zimmerman, whom I will reference as we proceed[6].

[6] For the novice of Games Studies and video games in general, I recommend visiting the website companion for *Half-real* for updated dictionary of terms concerning video games and games studies. This can be found at: http://www.half-real.net

Rules

Rules are what differentiate games from other kinds of play. Probably the most basic definition of a game is that it is organized play, that it is to say rule-based. If you don't have rules you have free play, not a game. Why are rules so important to game? Rules impose limits—they force us to take specific paths to reach goals and ensure that all players take the same paths. They put us inside the game world by letting us know what is in and out of bounds.

(Mark Prensky, 2003)

Rules are the most important aspects of a game, and while we can find plenty examples of games that do not feature a narrative, we cannot find a game that does not feature a set of rules. That games have rules is the foundation of games studies, and is one the few things both factions in the ludology vs narratology debate agreed upon. Rules govern permitted and forbidden actions in a game, and they are the arbiter of the win/loss conditions of gameplay events in said game. As such, it is of utmost importance that rules are fixed, clearly stated and easy to understand, as they are not up for subjective interpretation. If we look to Salen and Zimmerman's work, *Rules of Play*, they mark this point as one of the major characteristics of rules: *"Rules are explicit and unambiguous."* (2004, p. 122) This contrasts the narrative and fictional part of a game, which ideally leaves elements open for interpretation. Rules need to be clearly stated and easy to grasp so that the participating players can agree upon them, so the various players are actually playing the same game, though variations have a tendency to emerge and additional rules have been added upon existing ones to create a different gameplay experience of that particular game; traditionally called "houseruling", a phenomenon that is often seen in tabletop roleplaying games, where groups change or add rules to suit their desires and/or the needs of their game session.

Where we in later years have experienced a trend in games that open for your unique experience[7] and focus heavily upon this aspect of videogames, the rules that form the basis of the game are the same for every player across the board, the formal structure of the game remains the same, even if the experience is different. Not only is it necessary that every player play by the same rules for the game to work, it is also necessary that they agree upon them. This again harkens back to Salen and Zimmerman's claim that rules need to be clearly stated

[7] Several major games the last ten years have focused upon this aspect in gaming, both as a side of the gameplay and in promotion of the game. Most important in this aspect is the *Mass Effect* trilogy; which in the end received a lot of negative criticism for failing to deliver upon a satisfactory ending to this «personalized experience» and restricting the freedom the players had come to expect. This indicates the huge potential that video games have as a narrative medium.

and easy to understand, as they are not up for subjective interpretation. Any such deviation and interpretation of the game, can lead to the game breaking down. *"It is not enough that rules are explicitly and unambiguously stated: the interpretation of the rules must also be shared."* (Salen, 2004, p. 122)

With this is mind, we must also take note that while the rules have to be explicit and unambiguously stated, there are times when there are differences between the rules and game-mechanics that apply to various players, in what is called symmetric and asymmetric play, most often used in Player versus Player (PvP) game activities, but also in Player versus Enemy (PvE) multiplayer activities and single player activities where the player controls several different characters. Symmetric play and rules are when all players make use of and follow the same rules; everyone involved has the same tools at their disposal and the same abilities. Then we have partially asymmetric play, where there are small differences between the rules and mechanics for players according to the role they fill in the game activity, but the overall rules and mechanics are similar between all players; Medics can heal and revive fallen players, warriors can take and do more damage, thieves can pick locks. No one character can do everything, but has a niche role to fill. Finally there are games of asymmetric play, where the rules and mechanics are not at all similar between players. This can be likened to the situation of the Dungeon Master (DM) and the players in *Dungeons & Dragons* (Gary Gygax & Dave Arneson, 1974), the prototypal tabletop roleplaying game, where the DM controls the monsters, the environment and sets up the traps and obstacles that the players have to overcome throughout the dungeon. But even here, the rules are explicitly stated and balanced towards each other as a whole, even with individual differences.

In some sense, rules are there to limit the player and her actions, to focus her towards the goal that is the actual challenge of the game and the win/loss conditions. This is the view of rules proposed by Salen and Zimmerman, also proposed by Marc Prensky, but which both Jesper Juul (author of *Half-Real)* and I find problematic. The example of *Yatzee* has been used by Salen/Zimmerman, and has been commented upon by Juul:

> *Rules limit player action. The chief way that rules operate is to limit the activities of the player. If you are playing the game of Yatzee, think of all the things that you could do with the dice in that game: you could light them on fire, eat them, juggle them, or make jewelry of them. […] Rules are 'sets of instruction,' and following those instructions means doing what the rules require and not doing something else instead.* (Salen, 2004, p.122)

Juul views rules as setting up potential actions, which have meaning within the context of the game and I whole-heartedly agree with him on this. Rules describe the possible and meaningful actions we have in the context of a given game, they describe the challenges we have to work against and the tools we have to overcome these challenges. Yes, we can eat the dice, we can make a necklace of out them and we can worship them as our new gods of Randomness, but in the context of the game, doing so has no meaning. Therefore, by taking these actions you are no longer playing the game, you have stepped outside the game and abandoned it. This is similar to what Jonathan Culler says in *Structural Poetics: "The cultural meaning of any act or object is determined by a whole system of constitutive rules: rules which do not regulate behavior as much as create the particular forms of behavior."* (Culler, 2008, p.5)

The view that rules are limitations that force you to follow specific paths, to ensure that all players play the game along the same path is rather diminishing for games and games studies, especially since the major asset of games is the player's role as an active and configuratory participant in the game. The view of Salen/Zimmerman and Prensky hints of an opinion that we are only along for the ride, we have no idea in saying where we end up and how we get there. This is a strange contradiction to the freedom that games allow players, in my opinion. This is of course only a difference in semantics, as the final and practical outcome, namely the rules, will be the same in both circumstances.

When it comes to video games, rules become a bit more complicated that what we have discussed so far, simply because a large amount of the rules have been hidden away from plain view, in a concept called "Black Box Syndrome". Where you know the state of the game in a board game or other kind of physical game, you seldom know the whole picture in a video game. The software of the game has been given the responsibility of upholding the rules and the state of the game, which in "physical" games would be upheld by the players or a referee. Salen and Zimmerman exemplify this with miniature wargames, like *Warhammer Fantasy Battle* (Games Workshop, 1983) or *MechWarrior: Dark Age* (WizKids, 2002), where you move miniature figures across a battlefield, following rules concerning movement, combat range, line of sight etc. The rule-sets for this kind of game is fairly complex, bordering on too complex for some players, but transferred into a video game setting, the rules and variables can be expanded far beyond what human players can manage. The trouble that arises with this is that, while in table-top miniature gaming you have an understanding of

the events and the why and how of their outcomes, in video games you can't observe the inner mechanisms of the rules, that which happens under the hood or in the "black box".

This automation of the rules and the way they are hidden within the inner workings of the software, i.e. within the "black box", create a different gameplay experience for the player as she experiences the game. It can be debated whether this is a positive or negative evolution, but both different kinds of gameplay have their pros and cons, and are generally very different games which give the player a different experience, even if the rules might be the same. This hints at the important suggestion that while the rules might be the same, differences in gameplay, presentation and fiction can lead to vastly different gameplay experiences.

Not only are the rules in a video game or, to use a better term, a digital game, hidden from our immediate view, but there is also the question of what exactly constitutes a rule in a digital game. "*Rules are the logical underbelly beneath the experiential surface of any game. But because games are innately structural, it can be tricky to distinguish which structures in a game are part of the rules and which are not.*" (Salen, 2004, p.120) Salen and Zimmerman here talk about rules in general, not about video games in particular. They further go on to ask the question about whether the rules in a digital game is the same as the games programing code, which both they and I agree on that it is not. The rules of the game are implemented in the code, but the code (i.e. the software) is not the game itself.

Video games lead themselves rather easily to implementing rules and construct games, as the computer and the software combine to make a state-machine, where the player's input change the state of the game, as controlled by the game, which is constituted by the rules, software and the computer. The constituative rules, i.e. the formal structure of the game, are the abstract, core mathematical rules that are contained within the games code, which goes beyond names and design. Salen and Zimmerman has us look to poker to exemplify this; we know that it is played out using a deck of cards, containing 52 cards, arranged into four suits, ranging in value from one to thirteen, with the addition of 2 to 4 jokers, which have optional and conditional uses. Extrapolating from this, we can play poker or indeed any game that demands a deck of card, using any kind of item or presentation, as long as it follows the system of fifty-two units arranged equally into four groups, with each unit arranged numerically in value from one to thirteen. The change in design or name of a piece in a game, i.e. experiential changes, is thus irrelevant to the rules, though the gameplay experience undergoes changes because of the modification of the rules. The way that games, and the

various elements that constitute games and the gaming experience, function in conjunction with the player can be illustrated like this:

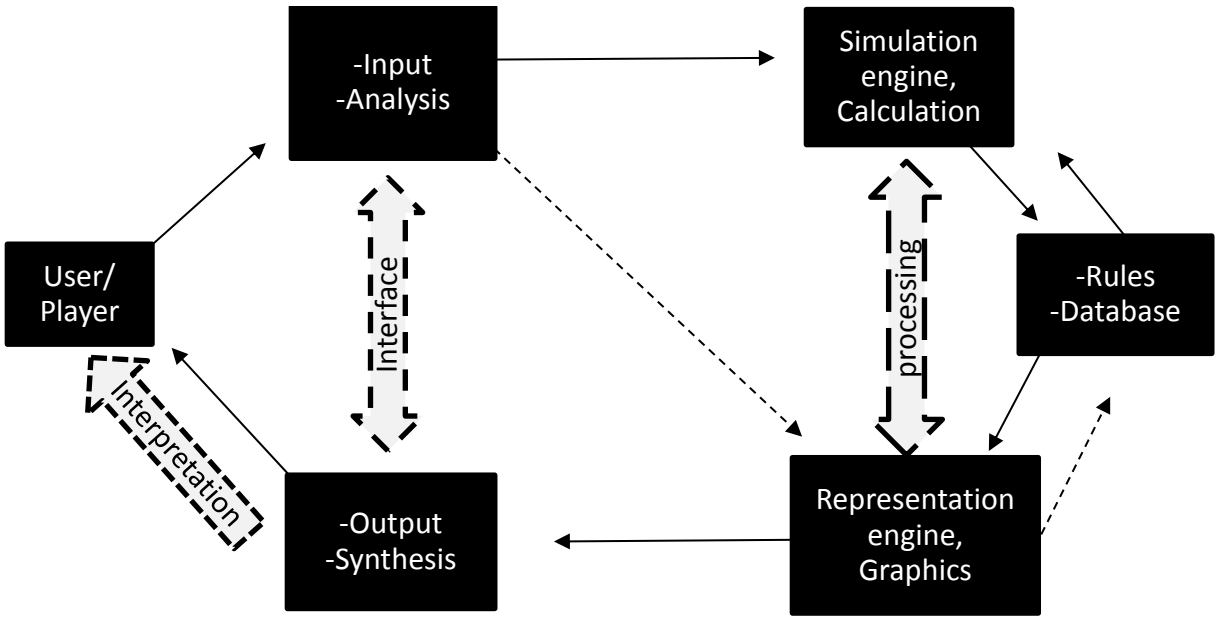

Fig. 1.1: *this modified version of Aarseth's model of the components of a generalized role-playing game, demonstrates the operations of the game and the player in a digital game situation. The player observers and interprets the output (the visuals of the game) and responds in kind through the input, i.e. the gamepad/keyboard. The uphold of the rules and the computation of the game happens in the segment labeled 'processing'.*

We can consider this as an operational model of communication for how the player receives information from the game and interacts with it. This model is important to keep in mind as it provides a holistic view of the operational structure of games and the components that make up a game, and we can from this see that chances in one component will affect other components in a cascading motion.

Based on all of this, I will propose this statement about what should be considered as a rule within a digital game:

Every aspect that affects the formal structure of the game
is to be considered a rule within the context of said game.

This definition is broad, but covers every possibility within a game and its software when we try to describe what is and what is not part of the rules. As Salen/Zimmerman describes it:

The graphics and audio are not intrinsic to these formal qualities of the games and therefore can be changed while keeping the formal structure the same. On the other hand, if visual representation has an impact on the formal structure of the game, it is part of the rules. (Salen, 2004, p.145)

Here I wish to bring up an example from Juul that focuses upon that exact aspect of a game, where he considers the importance of fiction in video games. In his example, he discusses the importance of graphics in *Quake III Arena* (id Software, 1999), in relation to the players' interest in the representational/fictional aspects of a game:

In a survey of Quake III Arena players, Retaux and Rouchier (2002) discovered that Quake III Arena players were initially attracted to the graphics of the game, but as they played more, they would modify the graphical settings on their machines to get higher frame rates (and therefore faster feedback) at the expense of graphical detail: the more experienced the player, the less the graphics mattered. (Juul, 2011, 139)

A major failing with Juul's argument here, which is against the importance of fiction in games as represented by the graphics of this game, is that he fails to realize that this change in graphics is ultimately breaking a rule within the game. Yes, the player will experience faster feedback and quicker response from the game, but in his visual example, we can easily see this as breaking the rule, i.e. cheating, as it modifies the rules and breaks the game. Lowering the quality of the visual presentation of a game is not by definition cheating, but these games also feature the potential to replace the visual presentation (i.e. textures) with a presentation that is either 1) easier for the computer to process, giving the player an edge over others where it concerns hardware performance, or 2) changes game mechanics in the player's function. Going by the illustrations Juul uses to describe this phenomenon, it is clear that his example falls under both these points. The other players become much easier to spot with the modified settings, than compared to what the game intended, giving the player with the modified game an advantage over the others, which goes against several of Salen and Zimmerman's characteristics of rules in games, of which I have already named a few and will now present in full:

1) Rules limit player action *(Rules present the actions that have meaning in this context)*
2) Rules are explicit and unambigious
3) Rules are shared by all players
4) Rules are fixed
5) Rules are binding
6) Rules are repeatable

(Salen, 2004, p.142)

This modification of the game constitutes a break with all of the characteristics that Salen and Zimmerman presents as characteristics of what rules are. An important point to note here is that while it is true that it is not merely the rules that make the game, the smallest change in the rules has the potential to create a butterfly effect that radically changes the gameplay experience and the game itself. In this example the design of the representational reality of the game is part of the challenge, where visuals are important in the process of identifying and spotting enemies.

To use *Quake Arena III* or its "sibling" *Unreal Tournament* (Epic Games, 1999) as an example again; in these high paced, multiplayer shooters, should the number of "lives" each player has per round of the game be reduced from infinite to for example five, the happenstance mayhem that occurs would be reduced, as a consequence from each life having a greater weight within the rules of the game. If we compare this to another multiplayer shooter game such as *Mass Effect 3* (Electronic Arts, 2012), where you only have one life per round of the game, the gameplay experience is quite different and there is less mayhem, the focus is sharper and the demand for effective team play is greater. It is a relatively minor change in the rules, but the effect upon the gameplay is striking in scale and leads to very different experiences with different focuses.

In classic arcade games, the traditional message "GAME OVER! Press START to continue!" has been a frustrating, yet welcome sight for generations of players, symbolizing a loss, yet also symbolizing the potential to continue onwards from where you fell victim to fate, at the price of a coin. Yet, what if this potential of continuation disappeared and the player only had one attempt at the game, no matter how badly she did? This is an interesting question that I will further explore later on, in Chapter 4, concerning mechanics in video games and how they convey meaning.

Abstract Vs. Representational

I shall now diverge a bit and get into a special divide when it comes to video games that is of importance for the rest of this work, namely the difference between abstract and representational games; this is to show that as a medium, video games have a lot of room to

wiggle about within and just as not all film is narrative and not all text is narrative, neither are video games.

Abstract games are those games that have no fictional reality to represent; the best example of such games is the classic game known throughout the world, namely *Tetris* (Alexey Pajitnow, 1984). In *Tetris,* you are not on a quest to save the prince, nor are you conquering Russia for the glory of Uncle Australia. You are simply making blocks of various size and form disappear by configuring them into a correct position, made difficult by the speed of the game itself, with the aim to reach the highest score. While there has been attempts to interpret this as an attack upon the American way of life or whatnot, there is nothing in the game to hint at this. Tetris, Tic-Tac-Toe and football are all abstract games; games that are pure game; all rules and no narrative.

Here I am borrowing a classification from Jesper Juul (2011, p. 142) that describes the five main types of games, ranging from the two extreme outer points:

1) Abstract Games (The game and the pieces of the game have no meaning or representational value, beyond itself as a game)
2) Iconic Games (The elements of an iconic game have iconic meaning; a deck of cards or chess are good examples of this kind of game.)
3) Incoherent world Games (This refers to a game that has a narrative or a fictional element, but where there is a discrepancy between the game play and the fiction, thus leading to the actions or events in the game not making sense as part of the fiction, but still valid according to the rules.)
4) Coherent world games (These games have worlds where the rules and the fiction create a coherent whole)
5) Staged Games (Staged games are at best a framing device for, in most cases, abstract games, much like the *Mario Party* series (Hudson Soft, 1998) or *Rayman Raving Rabbids* (Ubisoft, 2006), where you have a fictional world that frames segments of mini-games.

What I dub representational games are those that would fall under point 3 and 4 of Juul's categories, while point 5 is admitted begrudgingly and under suspicion.

This difference is an important aspect of video games, concerning its relationship between rules and narrative. The focus upon narrative in games have grown in scale and importance over the last ten years, a period which has seen both some of the biggest successes

in the history of games and some of the most exciting experiments on the possibilities that video games allow us. I will go out on a limb here and attribute this growth in importance on games' ability to represent a reality in such a way that it allows a sharper focus upon the narrative and the action of the game, rather than requiring the player to imagine said reality on her own. The increased power and experience of representation allows game-creators to focus upon a story and the games' possibility to tell stories, and not rely on only play to make a game into an interesting experience.

This is not an attempt to downplay the players' imagination and subjective experiences, but rather an attempt to show the development of a storytelling-"language" for games. And again, I wish to point out that not all games have a focus upon storytelling. One of the most popular video games of all times, *Angry Birds* (Rovio Entertainment, 2009)[8], does not focus upon narrative, merely making use of it as a window-dressing for the humor and the puzzles that make up the game and can be placed somewhere in the borderlands between Juul's second and third category. There are plenty of examples like this that show us that it isn't easy to classify a game as either/or and that there is a lot of grey areas, but as general categories, Juul's theory works as a tool to think of games and their representational value.

Narrative

As we now try to lay the groundwork on the terms that we use in this work, we now come to narrative. What a narrative is can be discussed for ages; we just need to look to Gérard Genette and his *Narrative Discourse*, where he opens with this statement*: "We currently use the word narrative without paying attention to, even at times without noticing, its ambiguity, and some of the difficulties of narratology are perhaps due to this confusion."* (1980, p.25)

What a narrative is can be discussed for even longer than that when it comes to the question: What is a narrative in the context of a digital game? Narrative and the theory thereof has been a central topic of literature studies for decades, and has also been expanded beyond literature to other mediums, most prominently film. And as video games, have grown as a medium and as a technological phenomenon we can see that they tend to mature and to attempt to create meaningful experiences that explore the human condition in a way that caters to adults. This turn for more mature content in games is not especially strange, as the

[8] Per 11.03.2013, *Angry Birds* had 1.7 billion downloads across various platforms.

medium is a rather new phenomenon in the context of world history and cultural production. Video games first emerged in the 1960's, with games such as *Spacewar!* (Steve Russell, 1962) and *Colossal Cave Adventure* (William Crowther, 1976), and exploded for real into the culture scene in the 1980's and 1990's, and as that generation has grown up playing *Super Mario Bros.* (Nintendo R&D4, 1984) and *Resident Evil* (Capcom, 1996), to name but a few, video games has followed it and catered to the changing demands of its audience. We can also see that the people who were the players at the start of this cultural explosion are the ones who create new content today.

However, how will we use the term narrative in the context of video games? This becomes especially difficult as the traditional views of narrative faces some rather steep challenges when we introduce it to the dynamic nature of video games.

Worthy of mention as well, is the role the receiver plays in a work. Traditionally, the role of the receiver (reader/viewer) is that of the interpreter; you observe the material and create an interpretation of it, based upon the content and your subjective experience[9]. While we have a lot of the same in video games, we also have the configurative role of the player, by which I mean that the story is progressed by the player's actions. Not merely progressed, but dependent upon the player's action. In a game, the narrative will not proceed beyond a given point unless the player manages to overcome the challenge that she faces at that point. How can we incorporate the need for facing and overcoming challenges in a narrative?

This we must see in conjunction with Espen Aarseth's theory of ergodic literature[10], non-linear literature that requires non-trivial effort to proceed through the text. Non-trivial effort means, to clarify, making choices and having to perform actions beyond simple flipping a page or viewing a film. Ergodic literature is known mostly through the hypertext of the internet and other digital forms of literature. An early and well-known type of ergodic literature is the Choose-Your-Own-Adventure[11] (CYOA), where the story develops along the choices of the receiver, albeit in a simple and rudimentary way. These games follow a simple branching plot structure, that we can still see being used in games today, so in essence, the CYOA genre is the forefather of the modern day digital game with a narrative focus.

[9] See especially Stanley Fish's *Is there a text in this class?* for further information about the role of the reader.
[10] In his work, *Cybertext: Perspectives on Ergodic Literature* (1997), Aarseth gives a thorough presentation of the concept of ergodic literature and is a recommended reading for study of games and digital mediums as storytelling channels.
[11] This genre first became popular in the 1940's and -50's, reaching its popularity peak in the 70's and 80's, and having become more of an interesting side-note with a rather limited presence today.

It is important that we have a grounded view of the terms that we apply to this work, as the consequences of cross-field misunderstanding has led the to the already mentioned narratology/ludology debate that ravaged games studies for close to ten years. This importance becomes even more important as we later on shall delve into the creation if a narrative theory for video games. We must remember that narrative is not just narrative and that there are several different views on the subject and interpretations of it, so we must be clear on what it is we are referring to.

Juul, in his work *Half-Real* (2011, p.156), gives us six examples of narrative that are relevant to games as storytelling devices, to rid us of the confusion about what kind of narrative it is we are talking:

1) Narrative as the presentation of a number of events
2) Narrative as a fixed and predetermined sequence of events
3) Narrative as a specific type of sequence of events
4) Narrative as a specific type of theme – humans and antrophomorphic entities
5) Narrative as any kind of setting in a fictional world
6) Narrative as the way we make sense of the world

This is a solid foundation to proceed from, as it covers both perspectives we know from traditional narrative theory and perspectives we need to study narrative in games. But beyond this, in the context of video games, we also usually think of narrative in the sense of spatial, embedded and emergent, a thought that we attribute to Henry Jenkins and his 2004 article *Game Design as Narrative Architecture,* though his focus is more upon narrative as a setting through which the player can explore the story, i.e spatial storytelling. These are several forms of storytelling that is made use of in games that is rarely, if ever, found in literature or film, though these are not completely unrelated to elements that we know of from literature and film. The heavy use of these forms of storytelling in video games warrant a cursory introduction.

Spatial: Spatial narrative can be a rather strange concept, but one that in truth has been around for years, even before video games adopted it. Spatial storytelling is the essence of amusement park attractions. It can also be compared to the use of narrative space, especially in modernist literature, which frequently makes use of description of the space of a

story to pause and control the flow of a story. *"The story element is infused into the physical space a guest walks or rides through. It is the physical space that does much of the work of conveying the story the designers are trying to tell…"* (Don Carson, as quoted in Jenkins, 2004)

It is storytelling through scenery and location, where the player's exposure to the narrative comes through her exploration of the game world. There are games that focus heavily upon this form of storytelling; one example is *Journey* (Thatgamescompany, 2012), where the player explores a vast and dreamlike narrative space, trying to make sense of what she sees, a game of exploring and understanding the strange and unknown. It also makes good use of embedded storytelling.

Embedded: Akin to spatial narrative, embedded narrative is also presented through the game world and exploration, but in more traditional forms of conveyance, often across multiple channels of information (i.e. audio, visual and textual) and not through the scenery

> *"The author of a film or book has a high degree of control over when and if we receive specific bits of information, but a game designer can somewhat control the narrational process by distributing the information across the game space."* (Jenkins, 2004)

Special consideration must be given to how information is presented in this way, since as a game designer you cannot be certain that a player will actually come over that specific piece of information that you wish her to receive, thus delivery of essential information must be essential to the development of a game. This can be seen in, for instance, *Deus Ex: Human Revolution* (Eidos Montreal, 2011), where the idle chatter of NPCs in the game often deliver information and shed light upon both larger and smaller events and characters in the game, both those directly and indirectly pertaining to the narrative and the play. *Dragon Age: Inquisition* (Bioware, 2014) makes use of these techniques too, as the player can happen upon illustrations in the game, showing landmarks that lead to secrets and treasure, which again links it to spatial storytelling as you must explore the narrative space to find these landmarks.

Emergent: The least traditional narrative is emergent narrative, where nothing is structured beforehand and there is no planning behind it. There is no story for us to explore, as the narrative is created by our own actions, what we do create the narrative, the story that is told in the game. "Emergent narratives are not prestructured or preprogrammed, taking shape through the game play, yet they are not as unstructured, chaotic, and frustrating as life itself." (Jenkins, 2004) A good example of this kind of game is *The Sims* series (Maxis, 2000)

If we now go back to Juul's examples, the first three examples he gives are those that we would classify as traditional ideas of what narrative is. Juul himself refutes that games are, or even can be, narratives in this sense, though he does admit that some types of games (progressions games) can be considered narratives due to their linear structure. His argument is that games "are not *representations* of events, they *are* events." But I disagree here, as he trying to make games fit into the form of traditional narratives, which are non-interactive and non-ergodic, and he does not attempt to re-interpret narrative into something that can be applied to games.

There are two ways of viewing games and the way they present challenges to the player; games of progression, which I mentioned earlier, and games of emergence. These two types of games lead to very different experiences and gameplay, where progression games are games where you overcome a series of challenges in sequence and emergence games are where the challenge comes from the rules. Juul has given a short but fitting test for whether a game falls into the category of either progression or emergence:

> *Search for a guide to the game on the internet. If the game guide is a walkthrough (describing step by step what to do), it is a game of progression. If the game guide is a strategy guide (describing rules of thumb for how to play), it is a game of emergence.* (Juul, 2011, p.71)

These are the two extreme outer points of the scale, with many examples of games that contain elements of both, existing in the grey areas in between. MMO (Massive Multiplayer Online) games like *World of Warcraft* (Blizzard Entertainment, 2004) and *The Secret World* (Funcom, 2012) are prime examples of this grey area, as they contain both a traditional quest structure (progression) and strategies (emergence) required to overcome challenges and defeat foes, both NPC (non-player characters) and other players.

The structure of the sequential challenges in progression games lends itself easily to narrative as the presentation of a series of events and a fixed and predetermined sequence of events, while it becomes more challenging in a game of emergence. But games of emergence are growing rapidly in popularity and have been used well to give players a way to play a narrative as they see fit. *Deus ex* (Ion Storm, 2000) and its prequel *Deus Ex: Human Revolution* (Eidos Montreal, 2011) are prime examples of this, where the players are free to explore and overcome challenges in any way direction they see fit, using the tools available to them. This type of gameplay is rapidly becoming the hallmark of the RPG (Role Playing

Game) genre, which is also the genre that is most commonly focused upon storytelling and narrative.

Conclusions

But as to not wander too far off topic, while it is true as Juul and other theorists of the Ludology disposition claim, that games are not narrative in the traditional sense of the word, it does not mean that games cannot contain narratives or be narrative, it merely means that it is necessary to construct a narrative theory for video games, that leaves room for the dynamic structure that is necessary for games.

In traditional narrative, we have a series of events that is presented to us, as the reader of a book or the viewer of a film, but in games we also have challenges that we must overcome and rules by which we must abide. This is part of the narrative of games, as we must see the challenges themselves as part of the story and see that there is the possibility of using action to provide a narrative.

The idea that games cannot be considered narrative simply because they are events to be played/acted out, just doesn't cut it. The events that a player has to go through to overcome a challenge to progress in a game, is as much planed and controlled as the words on a page of a novel, if not even more so as the act of creating a game is infinitely more complex than that of writing (though this must not be seen as a comparison of quality, complexity of content or any sort of superiority either way, simply a statement about the actual complexity of coding a digital game contra that of writing). In order to create a narrative theory for video games, even a narrative theory for interactive mediums at all, we need to go beyond the borders of the traditional narratology and allow ourselves to explore the boundaries of the new medium.

We need to find a way to translate the narrative theory that we know into something that makes sense and is of use for us when we analyze video games from a storytelling perspective, so that we can see how meaning is being created and delivered by games in a unique way. Interactive narratives have been explored earlier in the form of cybertexts, as Espen Aarseth as done, but while this is relevant for video games as a story-driven medium, it does not paint the whole picture and there are unique elements to video games that require special attention. Cybertexts, to a large degree, are explorations within literature as an interactive medium, but this format does not contain the same structures that we find in

games. We need a narrative approach that appreciates and investigates the video games and the competitive and challenging element that they contain. Challenges in themselves are meaningful, what we do in a game —both within and beyond the borders of the game's context— is meaningful, and how we do it is meaningful. All of this must be explored and understood in order to further progress and build upon games as a field of study, both narratively and otherwise, which is the premise for this work.

Chapter 2:
Ludonarrative Dissonance

This term, ludonarrative dissonance, has become part of the lingo of game critique, gaining attention the last years in particular, and focuses upon the relationship between gameplay and narrative in video games. The importance of it and its usefulness as a theory has been vividly debated, both in forums, blogs and by games critics[12], some seeing it as one of the most important elements of game studies, while other see it as merely the latest buzzword of the game studies academical and critical circle. It has also been suggested that the term "internally conflicted" (Errant Signal, 2013) is a better description, though I disagree with this, as it generalizes the specific problem that ludonarrative dissonance conceptualizes.

Video games are a multi-layer art form that opens up for some interesting thoughts when we consider storytelling in this medium, especially considering the configurative role of the player in a game and how she traverses the story, the paths that open and close as she progresses through the game; they are ergodic literature (Aarseth, 1997). Video games tell stories in several ways; most noteworthy in the example I am using here, through the game's narrative and its gameplay. There is the story that is told to us, through narration, dialogue, text and cut-scenes (what we know from traditional mediums) and the story that we experience as we play the game, the ludic channel, also known as gameplay. Ideally, these are the same stories, playing on the strengths of the channel in which they are told, to complete each other, construct and deliver a solid, unified story and game. If not considered, what is conveyed to the player through the different channels of a game can end up telling different stories, which are in opposition to each other. While this might be intentional from the game designer's, it is also something that often comes about unintentionally when the nature of the various channels has not been understood and contemplated as a narrative medium and how they work in unison.

It is when you have a dissonance between these aspects of the game that we experience trouble for the narration of a game and its themes, in both directly delivered narrative and gameplay, and opens up ways for a game to undermine the message that it is trying to deliver. This is when we experience ludonarrative dissonance, a term that was

[12] Jim Sterling is a prominent video game journalist, reviewer and critic that has talked about ludonarrative dissonance in the Youtube show *The Jimquisition:* *https://www.youtube.com/watch?v=W4Oe0ev8bjA*

originally coined in 2007 by Clint Hocking, in his critique of *Bioshock* (Irrational Games, 2007). According to Hocking, ludonarrative dissonance is the situation where there is *"a powerful dissonance between what a game is about as a game, and what it is about as a story"* (Hocking, 2007), as the themes of a game is expressed through the gameplay and the narrative, ideally working in communion according to the strengths and weaknesses of each separate layer of the medium, yet also quite often overlooked and ignored.

Hocking first made use of the term in context with *Bioshock* and conceptualizes the dissonance we, as players, experience between the narrative of the game and the play of the game. These two contradict each other when it came to themes and story, where in *Bioshock* we are shown an exploration and commentary upon Randian Objectivism, but was forced by the game to follow a predesigned path that removed our ability to choose in the narrative what we were able to choose in the play, at least in any significant way. The game breaks with what Hocking calls the two "contracts" of the game, namely; *"Seek power and you will progress"* and *"Help Atlas and you will progress"*[13], the first being the ludic contract of the gameplay and the second being of the narrative contract of the story. Hocking describes ludic contracts as "the ludic contract works in the sense that I actually feel the themes of the game being expressed through mechanics" (Hocking, 2007), and we can describe the narrative contract as the themes of the game expressed through story.

Ludonarrative dissonance is important to consider because of the complex multilayer nature of video games, which are compounds of literature, film, music and gameplay. Here, gameplay is the most important to consider as it is the one that has seen the least attention as a pure narrative layer, yet is one of the most important. Gameplay is loaded with meaning, which is given context within the story of the game, and the challenges that make up the gameplay can be ripe with metaphors. Ludonarrative dissonance does not just force us to examine the relationship between gameplay and narrative, but also to look at the thematic conveyance of gameplay, its potential for metaphor and meaning.

Actions carry with them meaning, especially so within a game, as to play a game is to play with meanings within a certain context, that of the game itself. *"To play a game is to rely on and interact with representations the game generates. […] Games represent by creating complex internal systems of meaning."* (Salen, 2004, p.364) The narrative and the fiction is there to give context to these actions, to give the performance of them meaning, while the

[13] When Hocking says "you will progress" he refers to progression within the game and its story.

performance of the actions feed the thematic side of the narrative, creating an oroborus that loops back on itself.

"*Examining a number of games examples in detail, it turns out that fiction in video games plays an important part in making players understand the rules of the game. […] The player then experiences the game as a two-way process where the fiction of the game cues him or her into understanding the rules of the game, and, again, the rules can cue the player to imagine the fictional world of the game."* (Juul, 2011, p. 163)

This forms the game's internal consistency, narrative and gameplay working together to form a unified whole, be that a dissonant or resonant whole.

Ludonarrative dissonance places the focus upon this relationship between gameplay and game-narrative, necessary to tackle games as a storytelling medium in its own unique way. Challenges, actions and game-mechanisms are conveyors of meaning, themes and narrative in games as much as traditional narrative conveying channels which are used in more traditional narrative mediums, albeit in a rather alien fashion compared to what is common in for example film, literature, theatre and music. While traditional narrative wants us to proceed at speed forward, play and challenges wants to slow us down and it works against our progress; the player needs to conquer the challenges to proceed. We can liken this to pauses in traditional narratives, but these do not actively attempt to halt the reader's progress through a text, nor is there a skill requirement necessary for progress, beyond the ability to read.

"When you read from a cybertext, you are constantly reminded of inaccessible strategies and paths not taken, voices not heard. Each decision will make some parts of the text more, and others less, accessible, and you may never know the exact results of your choices; that is, exactly what you missed." (Aarseth, 1997, p.3)

Gameplay, and games in general, as a narrative medium is ergodic literature taken to the extreme, it is not only non-trivial literature, it is directly challenging; while the game designers want you to continue through their work, the game itself works against you; creating mountains that need to be climbed in order to proceed with the story. Thus, it is paramount that we closely examine the relationship between narrative and play in a game in order to further understand the role games play as a unique narrative medium, to understand this tug of war between progress and delay, the application of throttle and brake. An understanding of not only the way challenges in games delays, influence and direct the narrative, but also an understanding of the narrative of challenges itself, how challenges can tell stories. How mechanics and challenges can convey themes, metaphor and meaning.

Since the gameplay at least colors the narrative of a given game —if it isn't directly a part of it or delivers narrative on its own, as I suggest— it is important that we look upon the themes that are portrayed by the mechanics as well. *Bioshock Infinite* is a pure First Person Shooter (FPS) game, a breach with the Action/RPG blend that made up the core of the original game and the spiritual predecessors in the *System Shock*-series[14]. The *System Shock* games were RPGs utilizing a first person perspective, in a cyberpunk setting. In *System Shock 2* (Looking Glass Studios, 1999) the player has to increase her abilities with a limited amount of experience points which she receives through the course of play, which means that she can develop a few skills to their full potential, while being lacking in others. In *System Shock* (Looking Glass Studios, 1994) there were no skills to develop, but instead focused upon the tools, which the player had a limited amount to carry, to achieve the same varied gameplay. The game-mechanics in *Bioshock Infinite* are, compared to these two games and the previous *Bioshock* games, simplified and exaggerated, going from games with large amounts of difference in kind to a game with almost only difference in scale[15].

The gameplay in *Bioshock Infinite* focuses upon traveling through the various levels of the game and conquering the various challenges that are presented to the player, i.e. clearing the level. To do so you are presented with an assortment of weapons, that can be upgraded in various ways to suit each player's style. This is a standard fare for FPS games, hailing back to the classic iterations of the genre, like *Wolfenstein 3D* (id Software, 1992), *Doom* (id Software, 1993) and *Duke Nukem 3D* (3D Realms, 1996). In a lot of ways, *Bioshock Infinite* hails back to these games, the genre's version of the 1980's action movie; simple and violent fun. It is a power fantasy, where we wade through hordes upon hordes of enemies that stand in our way, at times simply because they stand in our way, in a violent and bloody manner. We move from area to area in our attempt to escape Columbia and Father Comstock, killing scores upon scores of police, soldiers and civilians as we proceed. The violence is graphic and bloody, often reminiscent of Quentin Tarantino movies like *Kill Bill* (Quentin Tarantino, 2003) and *Grindhouse* (Quentin Tarantino, 2007), yet it rings shallow as there is no acknowledgement of it, either in play or in narrative. The only acknowledgement that we are murdering our way through a great portion of the population of this utopia comes from a

[14] This move away from the RPG/FPS origins has been constant in each iteration of the *Bioshock* series, moving finally to the pure FPS gameplay of *Bioshock Infinite.*

[15] Difference in kind and scale refers to gameplay and game-mechanics with either a set of different game-mechanics or tasks to do (kind), or where there is one set of game-mechanics with only a difference in the scale of the mechanic. Put differently; where we once required or could make use of different tools to clear a challenge, there is now the choice of a gun or a bigger gun.

single scene which plays out the same, no matter how we play out the event. There is no feedback from the game to acknowledge our actions beyond the change in the state-machine; the enemies are dead and we can proceed to the next scripted event.

Ludonarrative dissonance decrees that there are two primary sources for conveying meaning in games; namely, the narrative and the play. But the question we have to ask in this circumstance is what happens when the two are at odds with each other? What happens when we have two sources of meaning and information that tries to tell stories that are different from each other? Why and how does this happen?

Narrative themes

Bioshock Infinite, the third game in the series and the prequel[16] to the critically acclaimed original *Bioshock* (2K Boston and 2K Australia, 2007) and its sequel *Bioshock 2* (2K Marin and 2K Australia, 2010), is one of the few Trippel-A games these days that focuses upon mature themes and tries to make it a part of the games very core, focusing upon delivering a deep narrative as well as gameplay, a feature that the series has become famous for. The series has roots going back to the critically acclaimed *System Shock* games of the 1990's, which in every sense spawned their own genre[17], but has made a steady beeline towards a pure FPS experience, rather than the Action-RPG roots of *System Shock* (Looking Glass Studios, 1994) and especially *System Shock 2* (Looking Glass Studio/Irrational Games, 1999). This change in genre is noteworthy for the sake of the expectations that the player will have for the game and its meanings prior to directly engaging the game and the first interactions with the game, before the game is able to deploy its own meanings. This game is part of an established series, and part of the spiritual succession to another series, which leaves the player with expectations towards it.

In *Bioshock Infinite* we assume the role of Booker DeWitt, a former Pinkteron agent and soldier, who had been involved in both the Massacre at Wounded Knee and the Boxer Rebellions, and is now making a living as a Private Investigator, drowning himself in booze to escape the nightmares of his past misdeeds and bad choices. When the story starts for us, we, in the role of Booker, is on our way to the utopian city known as Columbia, which through the

[16] Bioshock Infinite takes place in 1912, while Bioshock takes place in 1960. The games also overlap at some points, as Bioshock Infinite to a certain degree makes use of time travel.
[17] The non-linear RPG Action-Adventure

magic of science is floating amongst the clouds, high above the United States, to liberate a young girl named Elizabeth, held captive by the enigmatic Father Zachery Hale Comstock, the antagonist of the game; a common trope for video games, hailing back all the way to Donkey Kong and beyond. After rescuing Elizabeth, we learn more of the background and history of both the setting and the characters that we are involved with, as we try to make our escape from Columbia, but eventually end up falling deeper into the rabbit hole, while we spend the rest of the game either trying to catch up to Elizabeth as she runs away from us or to again rescue her from enemies that have captured her.

"Any sufficiently advanced technology is indistinguishable from magic"

(Arthur C. Clarke, 1973)

Like in the other *Bioshock* games, science plays a great part of the game's setting and fictional structure. All the games of the series are set in a tarnished utopian city, placed in a hostile environment where the existence of the city requires so advanced science, that it is essentially magic. This element is essential to the *Bioshock* series, this "magical"-science that seeps through every part of the narrative and the gameplay, to color them both. While in the original game, it was predominantly social science and a Randian Objectivist view that laid at the core of the story, in *Bioshock Infinite* it is the Many-Worlds interpretation of Quantum Theory that forms the scientific background of the story. Though, unlike the first game in the series, here the game does not critique the science (be it hard science or social science) that lies as a background to the game and its events.

Upon first meeting the damsel in distress of this particular game, Elizabeth, we are introduced to her unique abilities, used both in the told-narrative and the gameplay. She can pick locks and she can, more importantly, open windows to alternate worlds, known as tears; a byproduct of the Many-Worlds interpretation, which postulates that for every possible choice and every outcome of an event, there is a world. This is a common trope used in both science fiction and fantasy, be it in movies, literature, film or comics. To a certain degree, which is never fully explored or explained in the game, she can also open windows to different places in time, which is especially apparent when Elizabeth opens a tear to 1980's era Paris, though this is something that the game never really explores.

Fig. 2.1: *Elizabeth opening a tear to 1980's Paris (Bioshock Infinite, Irrational Games, 2013)*

This ability and the theory of the Many-Worlds Interpretation is the precondition of the game's narrative and its themes, namely choices and the changing of them, as we often come to a dead end where the only way to progress in the game is to jump over to a different world, where the outcome of choices is closer to what we require to progress. In one world, the gunsmith is dead and thus the rebellion cannot be supplied with weapons; in another, he is alive and the guns can be procured for the rebellion, yet we can never go back to the world we came from. In the game, Elizabeth describes her ability as a form of wish fulfillment and it works as a Deus Ex Machina within the narrative. When we hit the brick wall, we simply travel to a world where the brick wall is not there.

As we, as the player, move forward in the game, we realize that Booker's point of view is an unreliable one, as his reason for being here is a pasted together pastiche of several memories from different time-flows. This is a byproduct of travel between the different worlds, and his real purpose in the game is not to rescue the girl, whom he gave up in the first place, but to undo the choices he made that lead up to this point, something that we are told towards the end of the narrative. In one world, Booker refuses to receive a baptism, as he believes his sins cannot be washed away, finding instead his solace in booze; in another world, Booker accepts the baptism and arises as Zachary Hale Comstock, a deeply devout man that eventually rises to power and notoriety, who comes into contact with the scientist that is behind the floating city and the travel between the different worlds, thus setting in

motion the events that leads up to the conclusion of the game. The choices must be undone, so that these events never unfold, as we are told by Elizabeth towards the end of the game.

So far, I have described some of the twists and turns of the game's narrative, which are numerous and convoluted —as often is the case with stories that aim for complexity and involve time-travel and its like— but what they all have in common is the central theme of the game, namely Choice and Consequence. The narrative explores the different outcomes of choices; the consequences of what would have happened if Booker continues his search for Elizabeth or instead joins the rebellion, for instance. Booker and Elizabeth travel through these different worlds, as need directs them, to reach outcomes of choices and events that will allow them to move forward through the story; no single world holds all the outcomes that they require to continue, every world is different in lesser or greater ways, and you cannot know the consequences until after the deed is done and the choice is made.

***Fig. 2.2**: Two in-game depictions of Booker DeWitt, from different alternative worlds, one where he is a hero of the revolution and one where is abhorred as the Anti-Christ. (Bioshock Infinite, 2K Games, 2013)*

There are many themes evoked in Bioshock Infinite, but there are few themes that are engaged by it. Racism, religion, workers' rights, class, all of these are themes that are

displayed in the game, but act as a backdrop, never being engaged by the game or involved with the narrative itself. Class and workers' rights are referenced in dialogue, especially in the levels of the game where the player makes her way through the factory and shantytown district, but they are commentaries of background noise. Neither is engaged in the game; it's simply that and nothing more. We're shown a world with racial segregation, where there are separate bathrooms for blacks and the Irish, but this is, again, never engaged. The closest we come to engaging one of these themes is in the raffle scene, where we can choose between throwing a ball at either the mixed race couple or the announcer, but the outcome of this choice is always displayed in the same way. Even not choosing and letting the timer run out (this being one of two choice-actions in the game dependent on a timer) will play the scene out differently. The only difference between the possible actions are either when and from whom you are given a reward later in the game, or, in the case of letting the timer run out, not getting a reward.

Thus I will categorize the themes that are present in the game in two ways; either referenced or engaged. Referenced themes are those that are shown but not involved with the game, acting merely as a backdrop to the actions of the game, and engaged themes which are those that are involved with the game and the narrative.

The themes that are engaged in the game are those of choice and consequence, which lies at the core of the narrative. Through the play, we learn (through dialogue, and by exploring the areas that we visit and by finding voice recordings from different characters in the game) that the different worlds are different because of different outcomes of choices and because of chance. The Chinese gunsmith chooses to marry a white upper class woman instead of a Chinese woman and abandons his Buddhist faith to join the cult of personality surrounding the prophet Zachary Hale Comstock, which leads to his release when he is arrested, instead of leading to his death due to a brutal police interrogation. The flip of a coin lands heads in one world and tails in another. A person is born a woman in one world and a man in another.

This means that our narrative journey through Columbia can be described as Booker's own personal limbo, where he is forced to confront his own actions and choices. From giving up his own daughter to settle a debt, to murdering and mutilating during the Wounded Knee Massacre and the Boxer Rebellions, until we reach the very end and are confronted with the choice that would change the world of this narrative and the setting; the baptism and absolution of Booker's sins. We see the choices that Booker had made that lead to where we

begin our story, and we see the consequences of those choices. Booker made a choice that we now have to own up to and try to make right; choice and consequence.

These are the narrative themes of *Bioshock Infinite*, but games have other ways of conveying meaning, so what are the themes presented to us through the gameplay? The narrative is made complicated by the gameplay, which, if not creating a narrative of its own, colors the narrative and can lead to a vastly different narrative than what was originally intended. Actions have their own innate meaning and in a narrative where Choice and Consequence are the ruling themes, their meaning becomes ever so much more important, especially when choices become so clearly depicted as in this game.

Jesper Juul dauntingly posits in his 2001 article *Games Telling Stories?* that stories(narrative) have little to no place in games and that games at best can have a narrative added to them, but that games cannot be considered to be narrative in nature, a position that he relaxed upon in later years, but it is still important to mention this theoretical position, one which I wholeheartedly disagree with. Why do I disagree with this? Well, Juul sees a narrative in a game as something separate from the game itself that serves no purpose to the actual game, but if we now look to the *Bioshock* series as examples, we can see that while the narrative might not serve a purpose for the gameplay, a position that I disagree with, the game, i.e. the gameplay, serves a purpose in the narrative and must therefore be considered in these circumstances as we look to what games and gameplay can provide for narrative. The gameplay of a given game actively affects the story of the game, in the same way that music and lighting will affect the story of a film. *"To play a game is to rely on and interact with representations the game generates. […] Games represent by creating complex internal systems of meaning."* (Salen, 2004. p. 364) Gameplay is playing with meanings within the game, and thus will affect the narrative of the game as it is another part of the games meaning.

Even if Juul is right in this, which he has later on admitted to not being certain of himself and is a stance that he has softened in later works, games are important as storytelling mediums, narrative mediums, because they open for different ways to approach storytelling simply for the reason that the interactivity of the gameplay colors the reception of the narrative. If anything, the question is not whether stories have a place in games, but what place games have in storytelling? But most of all, these kinds of questions are wrong, as they do not add to the medium in any way; it only seeks to limit, to draw borders.

Mechanical analysis

Here we'll now look at the game-mechanics of *Bioshock Infinite*, in order to show the way that the play and the story of the game are at odds with each other and convey different themes. Firstly, Father Comstock is who he is because he accepted baptism and left his old life as Booker DeWitt behind, a life of violence as a soldier during the Battle of Wounded Knee, which leads to him meeting Rosalind Lutece, a genius of theoretical physics, forming a partnership that eventually leads to the creation of Columbia, a flying utopia and embodiment of the American Dream. The funding and resources Lutece is given eventually leads to the discovery of a way to at first contact other possibility-worlds, then to travel to these worlds and even different futures, which is used by Comstock to foresee the future and establish himself as the prophet. But all this also leads to Comstock aging beyond his years, becoming sterile and unable to father an heir to his empire and vision.

On the other hand, Booker DeWitt refuses the baptism, believing that his sins cannot be washed away that easily, which leads to him working as a Pinkerton agent and strong-arm for the government and business owners in worker riots, ending strikes violently. Eventually he also meets a woman, falls in love and has a child with her, but sadly the woman dies in childbirth and he is stranded as a single parent, leading him to drink, gambling and debt.

"Bring us the girl and wipe away the debt" – Robert Lutece (Bioshock Infinite, 2013)

Here we see the different outcomes and consequences of a single action, accepting or refusing baptism, which results in two different worlds and two different Booker DeWitts. Comstock uses the technology that allows him to travel between different worlds to travel to Booker's world and to arrange to buy Booker's daughter from him when he is at his lowest. But Booker changes his mind in the last moment and gives chase to Comstock and Lutece, leading to the portal between the different probability-worlds to close and sever his daughter's pinkie finger, causing her to be in two different worlds at the same time and gives her the ability to manipulate and create tears in the fabric between all the different probability-worlds. This forms the pretense for the game's narrative, the background for where we enter into it when we take on the role of Booker DeWitt, but we only learn this towards the end of our journey, as Booker DeWitt is not a trustworthy narrator, due to memory loss and confusion.

This theme of choice and consequence is primarily told to us in the post-play of the game, as I label it, when we've finished the last challenges of the game and walk through a

dreamlike reality with Elizabeth, Booker's daughter and the female protagonist, to reach the narrative's conclusion, Booker and Comstock's death and the cancelation of the choice that set all the events that we've been presented with in motion. But it is also present in the rest of the game's narrative, as the events that we experience through play are all connected to this. Characters die and come back to life between the different realities which we visit. In one world, Booker had abandoned his search for Elizabeth and joins the worker's revolution against the upper class of Columbia and its police force, dying and becoming a martyr for the cause, side by side with Cornelius Slate, a former comrade in arms from Booker's days as a soldier, and a man that we had fought just moments before in a different reality. Different choices lead to different outcomes, indeed.

But is this represented in the gameplay? The moments of choice that are present in the game, beyond gameplay tactics based on resources at the time, are rather limited. All in all there are just four choices to be made, two of which are on a timer and two of which will halt the game indefinitely until you make a choice.

Fig. 2.3: *The raffle, one of the first scenes in Bioshock Infinite (Irrational Games, 2013)*

The first choice in the game that you get to make is on a timer; you're part of a crowd and have just won the raffle for the first toss against the racially mixed couple that is bound together on the stage. Here you are given the choice of throwing the ball either at the couple

or at the announcer or you can allow the timer to run out. The narrative outcome is the same no matter what; you are never actually given the chance to toss the ball, because a police officer will notice the letters AD that are branded into the back of your hand, marking you as a wanted man in the city, before your choice is put into action or as the timer runs out, which leads to a cutscene that begins a fight with the local police who try to murder you. The player is never given any information about the context of the situation, forcing us to make a choice based on our own preferences or pass upon making it, not anything that is relevant to either the narrative or Booker DeWitt as a character. The mechanical outcome is only different between whether you throw the ball or not. If you choose the option to throw the ball at either of the two, you will be given a reward from whomever you did not choose to throw at, in the form of a random piece of clothing that changes your character's abilities, but if you do not throw the ball, you do not get any reward. It is only through choosing to throw the ball at the announcer that the game will acknowledge your choice explicitly; the couple will meet you and give you the reward later on in the game, thanking you for your help. If you had thrown the ball at the couple, you would have been given the reward from the assistant of the announcer, in a similar scene, which will happen none the less, but you will never again come upon the couple.

This shows us that there is only one possibility that is right, throwing the ball, as it is the only option that gives us a reward, and the only outcome that the game acknowledges. There is no difference between the two scenes, neither mechanically or narratively, as they have no impact upon the narrative and is never further referenced or acknowledged by it, nor is there a difference in the outcome of the situation. Being racist or not, it does not matter, the game treats it no differently. It only punishes you for not taking action, but it does not inform you that you are being punished. It is only through multiple playthroughs of the game, where the player explores the different outcomes of the choices that this becomes apparent.

The second choice that you are presented with in the game halts the game indefinitely until you make the choice, as there is no way around the choice. Elizabeth is stopped by Rosalind and Robert Lutece, who present her with two brooches —one depicting a cage and one depicting a bird— which we then must choose between. The outcome of this choice is that for the remainder of the game, Elizabeth will bear that brooch on a chocker necklace around her neck. Beyond this, there is no change to the game, the mechanics or the narrative, nor is there made any reference to it. Mechanically it sets the Elizabeth that we travel with apart from other versions of Elizabeth that we encounter towards the end of the game, but the

contrast is that they are not wearing chocker necklaces to display them as different, not that they are wearing a different brooch than what we chose. In the context of the narrative and the setting, the Lutece siblings signify the importance of choice and the different potential outcomes, but here the choice has no difference in outcome and no importance to the narrative.

It can be argued that there is symbolic meaning between the two motives, that has an impact upon the narrative, with the traditional interpretation being imprisonment and freedom, but these two symbols are both used within the game with different connotations than what we know from common usage in our culture. The bird is the Songbird, a biomechanical nightmare creature and Elizabeth's jailor, thus reversing the traditional interpretation of it in this context, and the cage is shown later in the game to be a symbol for control of the Songbird, as the same symbol is used for a musical code to control the creature. Thus at the time of the choosing between the two brooches, we're relying on symbolism that within the context of the game does not make sense.

The third choice we are given is when we're waiting for a ticket clerk to finish on the phone; we can either wait patiently until the timer runs out after which the clerk stabs our hand, or we can draw our weapon on him and get ready for the fight that comes no matter what we choose. During the fight, Elizabeth becomes abhorred by the violence that we dole out and runs away, with no change in dialogue or portrayal between the two possibilities of our choice. Mechanically this means that for a period we lose the ability to open locked doors, because Elizabeth is needed for this mechanic to function, as a consequence for both choices, but this is unimportant as for the time that we are without her, there are no locked doors to pick. It also leads to a visual change for Booker, if we let the timer run out and the clerk stabs him through his hand, the hand marked with AD. When we meet up with Elizabeth again, she will tear a piece of cloth from her dress and use that to bind the wound, from here on we will spend the rest of the game with a bandage around the right hand.

The fourth and last choice that we have in the game comes after we've fought with Cornelius Slate and his men, where we stand before Slate as he lies on the ground and he puts a gun in our hand, telling us to "finish your plate, soldier" and orders us to kill him. Here we have the choice to kill him or we can leave him there. If we chose to finish him, a cutscene follows where we look at Elizabeth as we finish the deed. If we chose to leave him, we can find him later on, having been taken prisoner by the police, tortured and lobotomized. The

mechanical outcome of this choice is always the same; we get the item that we were searching for and are able to continue onwards to the next fight.

None of the choices in the game carry with them any sort of agency, where we are able to enact in a meaningful way, both within the gameplay and within the narrative. If we see the choice events in the context of the greater themes that are present in the narrative and dialogue of the game (choice and consequence) we see that none of these choice actions reflect these themes, since none of them have any depth to them or have any consequence to their outcomes. There are changes following the choices, graphical ones that are not referenced again, and one instance of when or if you get a reward, but none of these are choices that can be called agency or impact the story. The choices cannot be considered meaningful if they do not have any consequences.

The choices are shown as an important game mechanic in that they're especially brought to our attention; they break up the flow of the game, stopping us in our progression and introduces a new visual element in front of us, and force us to consider the choice and the possible outcomes, even with the limited information we have available of the context of the choice. We also have no knowledge of the potential outcomes of the choices that we make, save for in the case of letting Slate live or die, and even here we do not know the full extent of the consequences. Breaking the flow of the game up in this fashion gives the act of choosing importance, but the consequences of these choices and how they are implemented into the game acts against this and the greater themes of the game. They are illusions of choice rather than actual choices, leading us to believe that we actually have agency where we have none. The visual changes are the game referencing what we chose, to make us believe that there is a choice to be made. Even if we look at these acts not as illusions of choice, but as actual choice events and situations of agency, the message they deliver shows us that the choices that we make are unimportant in the grand scale of the story, which goes against the message delivered by the narrative and creating the ludonarrative dissonance that is rampant in the game.

***Fig, 2.4**: Rosalind Lutece blocking the player's progress until she accepts what is offered. (Irrational Games, 2013)*

Slowing down the flow of the game in this way is used similarly in other events, similar to the choice-events, but where there are no choices to be made, illusions of which or not. Here the game pauses until the player acknowledges the prompt to press a button that is displayed, with no option to continue except by performing the prompt. For instance, to enter the city proper of Columbia after we have landed, we need to accept a baptism. Here the only possible action we can perform is to accept, if we do not there is no way to proceed with the game and the narrative —made famous by Breen Malmberg, a Christian gamer, who publicly refused this, as it went against his faith, and who eventually got a full refund on the game. By using the same mechanics in both the instance of these prompt-to-proceed events and the choice-events, the game makes them equal in meaning and function. Thus no-choice is shown as the same as choice, and indeed has the same function; it demands minimal interaction and offers no agency. Later on the same mechanic is used when we reach the Blue Ribbon restaurant as we move from one combat area to the next; Rosalinda Lutece stops our progress by standing in front of the only door that we can go through to progress and we have to press the button prompt to drink the tonic that she is offering to us, with no option to go another path around this event.

Presenting these two event categories in the same fashion makes them equal, and it presents a theme in the game mechanics that what we do is only to progress and is ultimately

of no consequence since the actions that we perform are negated, inconsequential, and we cannot change their outcome; we play the game to get to the end, what we do to get to the end is of no consequence. Thus we have two very different themes and stories at work at the same time. On one hand, the narrative tells us that our choices are important and has far reaching consequences, after all, one of our character's choices, albeit one made before we take upon us that role, creates a situation that reverberates across multiple possible worlds. On the other hand we have the mechanics that shows us that not having a choice and having a choice is of equal importance, and that in the few moments that we have a choice to make it is inconsequential and does not affect the situation in any meaningful way.

Why are these choice-events and the mechanic that is involved with them so central to the themes and the meaning that *Bioshock Infinite's* gameplay delivers? The prevalent game-mechanic is the violent combat, which is in fact the only challenge that is present throughout the game in its entirety. It is a simple system where the difference between weapons lies in where they fall on the Big Gun-scale (the bigger the gun, the bigger the damage and/or the bigger the affected area), which is also true for all but a few of the Vigors, i.e. magical weapons, that are available. Every weapon is efficient in every situation, leading to no situation where one gun holds an advantage over another beyond how they fall on the Big Gun-scale, and no required difference in playstyle.

The only agency we truly have in the game is when it comes to choosing which weapon that we wish to make use of, and how we wish to upgrade a specific weapon, but even this is controlled by the game through the kinds, and amounts of resources for specific weapons that are available. Which overall leads to a game of interactivity, but with little agency, as we simply shoot whatever stands in our way with whatever we have available. We could have spent the entire game upgrading a single tool to its ultimate form as the Death Shooter of Ultimate Shootings, but never get a chance to use it in a meaningful way, due to the current area not having the resources we need. The mechanics of combat is depicted as violent, and thus violence becomes the meaning behind progress in the game, it becomes the core aspect of the gameplay and the meaning it conveys. The violence is there for the sake of being violent or, at best, as a side note to show the path of wrong choices that we as Booker DeWitt have taken, but it is something we are forced to do, not something we can choose to do. We cannot choose to not do violence, except for in two cases, where the game does not differentiate between doing violence or not. In one case, the game does not acknowledge at all that you engage characters in your vicinity with violence, and in the other, the scene we are

involved with will ultimately end in violence nonetheless, not doing violence only postpones it. It is also worth noting that in the latter example, we find the only side example of the game acknowledging our actions in the game; as we enter the area of the game known as Soldier's Field, where characters in the game will turn hostile against you if you steal items, it tells us that "Stealing will have consequences". This is also the only area of the game in which this mechanic is implemented; stealing does not have consequences before or after this section.

To proceed in the game we must use violence to overcome the challenges presented before us. We might need a special "key" or some other MacGuffin[18] to open a door or to travel to a different area, but to acquire the key we must use violence; there is no challenge in the game that does not rely upon violence or to which violence is not a part. But ultimately there is never an acknowledgement of this violence beyond simple success or failure, i.e. our death, neither in the gameplay nor the narrative, and there is never a consequence to our actions. Granted, a few civilians can be spared, but their demise has no significance and neither does their survival, they are not involved in the story of the game nor are they a part of the game's mechanics beyond the fact that you can attack them if you so desire. They are merely there, to be killed like ants by a child using a digital magnifying glass and the glare of the computer screen. What can we then learn from the gameplay about the meaning it is trying to deliver? The gameplay is about action and intensity, about conquering enemies, but there is also a meaning to and inherent in the gameplay, meaning which colors the narrative and therefore must be considered. It tells us that there are no real choices to be made, that we are only able to perform token choice-actions that carry with them no agency and no significance, and that the only option we have, if we wish to proceed, is to employ violence. Even the non-violent mechanics of the game, such as picking locks, upgrading the weapons and vigors, or regaining health, are all connected to the combat and the violence, as it is through violence and combat that we can gain the resources we need to perform either of these tasks.

The gameplay tells us that our actions have no consequences and that we are free to do as we see fit, while the narrative of the game tells us that all actions, all choices, have consequences. The narrative presents us with acts of violence, performed by both Booker and other people, and we are shown the consequences of those actions. The choices that led to these actions, on the other hand, lies in the past and the gameplay resides in the present; it is what we do now in this moment, as we play the game, that is most important to the player, as

[18] A MacGuffin/McGuffin is a term popularized by Alfred Hitchcock, who describes it as an object that is ultimately unimportant in and of itself, but which motivates the plot. The Maltese Falcon, from the book and films by the same name, is a great example of a MacGuffin. (Howard, 2008)

this is where we possess our avatar and character in the game. Our actions have no significance to the narrative beyond overcoming challenges in order to proceed and the significance of overcoming a challenge is gone as soon as the next challenge appears before us.

The mechanics of the game are presented clearly and distinct from each other; where the combat is fast action and the choice-events are slowed down to make us consider the available choices and the possible outcomes. We're shown the act of choosing and we're shown that it is important enough to break away from the combat, the majority of the game, and to slow the pace of the game; we're shown that violence is the way to go if we want to succeed and to overcome challenges.

Illusion of choice, as a concept, is an important part of video games and is as easy a concept as it sounds; it is to make the player believe that you have a choice, where actually there is no choice. While this might sound simple enough, it is also a concept and game design tool that is hard to master as it only works as intended when you do not realize what has happened. The illusion of choice has received some rather harsh critique from players and critics around the world, but this has been in incidents where it has been implemented in a non-successful manner, where the player has become aware of the illusion. But this harshness is relatively undeserved, as the success of illusion of choice lies in the manner of illusion itself; when the audience does not realize that it is an illusion, when you think you've made a choice that carries with it meaning, while in actuality there is no choice.

The use of illusion of choice is one of the important parts of allowing a player to feel like she has agency within the game, even if the game is linear and has no actual choices for the player to make; this is important for both narrative and gameplay portions of a game, something which should not be surprising as narrative and gameplay are what makes up the game, they are both the game, two sides of a coin. By not utilizing choices and the illusion of choice properly, by blatantly showing us that the choices we get to make are unimportant and forgettable, as happens in this case, the rest of the game suffers in other areas, which here, in the case of *Bioshock Infinite,* is in the thematic side. The lack of agency within the game strengthens the sensation that there are no consequences to our actions as players and as participants within this story, working contrary with the narrative themes and creating the ludonarrative dissonance, breaking all immersion with the game disrupting the message that the game is trying to convey.

"By throwing the narrative and ludic elements of the work into opposition, the game seems to openly mock the player for having believed in the fiction of the game at all. The leveraging of the game's narrative structure against its ludic structure all but destroys the player's ability to feel connected to either, forcing the player to either abandon the game in protest (which I almost did) or simply accept the game cannot be enjoyed as both a game and a story, and then to finish it for the mere sake of finishing it."

(Hocking, 2007)

The game does not give us the freedom to make the choices that the narrative tells us are important. We are presented with actions that are meaningless, failures at illusion of choice, both for us as an audience and for the game. We plow through the forces of the enemies because they are enemies and we have to do so if we want to proceed, the few choices we are allowed to make are forgotten in a moment, never referenced and have no genuine effect upon any part of the story. Gameplay and narrative in *Bioshock Infinite* tell us different stories, stories that are at odds with each other. Gameplay is, as a concept, loaded with meaning and there are many choices that can be made there that are influential upon the narrative, through the challenges that the player need to overcome, without allowing the player to directly steer the narrative in a different direction than what the designer initially decided upon, these are choices that allow the player to explore the game's theme, not control it. The challenges that the player must overcome in *Bioshock Infinite* does not reflect the themes of the narrative; the gameplay metaphors are not connected with the context they are situated within, the context that is supposed to give the gameplay a sense of direction and meaning.

What the game tells us is that violence is the only answer to our challenges and that there are no consequences to our actions; any challenge we face is met with inflicted death, all the tools we have available are for implementing death and beyond clearing a checkpoint, we are neither scorned nor praised for doing so, our only choice is with which tool we will kill our enemy. Even the player losing a challenge and subsequently dying is immaterial, as the player will just be revived again with partial health a bit away from the combat, and loses a small amount of resources (money), ready to continue the violence.

Contracts

If we now take a step back to Hockings theory of ludonarrative dissonance and the narrative and ludic contracts of a game, we can surmise that the narrative contract of *Bioshock Infinite* is *every choice is important and has consequences with cascading effects* while the ludic contract is that *there are no real choices, and the only solution is violence.*

These are the themes of the game condensed into promises that is delivered to the player as she traverses through the game, presented through gameplay and narrative. Can we say that these two themes are resonating with each other? That they are supporting each other? No, they are clearly opposing forces in the game and the narrative meaning that it is trying to deliver, they're even opposing each other in the non-narrative meaning that it is trying to deliver. This opposition creates the dissonance that runs rampant throughout the game, but there is also the trouble of whether this dissonance is intentional or not. Using internal conflict is not an uncommon feature in film or literature, for a multitude of reasons, but the problem with video games arises from the interactive ability of the recipient of the work. The player changes the game by playing it; she is in control of the action of the game, and responds to the cues that are delivered by the game as a state machine. This is something we do not have in film or literature; the reader or viewer cannot directly change parts of the work, only interpret it. What this means is that how the player interacts and the meaning that this interaction provides us must be considered, obviously enough. It has to be said that in this case, I will state that the ludonarrative dissonance is not intended, as the conflict that arises suggest that this dissonance is accidental due to poor understanding of the narrative meaning of game mechanics. The game mechanics follow the conventions of the FPS genre to a T, giving the impression that neither the game's narrative or game-mechanics were created with each other in mind.

Why are these contracts important? It is because they refer to the internal consistency of the game, they are part of the reality that makes up the world in which the game, both gameplay and story, take place. Artistic license is of course allowed within games as much as it is in any other medium, but the consistency of contracts such as these is important so that players do not feel cheated. While this is an element that is mainly of concern when we consider the rules of a game, the nature of games leaves the players, as an audience, with low tolerance for any sensation of cheating on part of the game, which stretches into the narrative part of the game as well. A game that cheats is a lousy game. Thematic and narrative

consistency is just as required of a game as the rules are, if the narrative breaks the rules of the game, it is just as bad as if the game-mechanics and the game-play break the rules.

Thus we can see that the gameplay and the narrative of *Bioshock Infinite* are at opposing ends, thematic and narrative-wise at least, directly in conflict with each other and thus create a distance from the game and what it wants to convey. What is the game about? The narrative is about the notion of choices and how they can have effects that reach further than we could ever consider, portrayed through the Many-Worlds interpretation. It shows us a journey through a multitude of potential worlds, all resonating with the different outcomes of choices and events. The game-mechanics show us that there are choices but that none of them have any impact and meaning, it also shows violence is the answer to every problem and that there is never a consequence to it, other than being faced with violence. It shows us that we have to follow the prescribed path; there is no maze, there is only a path from entrance to exit. In short, they tell us different stories. We cannot make our choices in the game matter, as there are no real choices to be made, save for that important choice proposed by Hocking; accept that the game cannot be enjoyed as both a game and a story, or abandon it.

Conclusions

Narrative and gameplay work within a game as opposing forces, one which attempts to move the game forward, in its entirety as game and story, and one which attempts to slow the game, through challenges that must be overcome. This can be seen to make the same use of opposing forces as how irony is used in literature, and can also work in the same fashion, to intentionally create a contrasted message between the two forces, being subject to the same pitfalls that the use of literary irony faces.

The resonance that Hocking desires in his critical approach to ludonarrative can be compared to the invulnerability to irony described by Cleanth Brooks, "*Invulnerability to irony is the stability of a context in which the internal pressures balance and mutually support each other."* [My translation] (Brooks, 1971) Though the purely negative view upon ludonarrative dissonance that Hocking present is not one that I will subscribe to; it is both a symptom of a lack of insight and a tool to be used for games. One game that makes a reference to this dissonance actively is *Gunpoint* (Suspicious Developments, 2013), where the player can perform actions that will break the resonance between gameplay and story, but will

be immediately reminded of this, through an achievement[19] pop-up referencing ludonarrative dissonance. Thus we see that these opposing forces of fiction/narrative and gameplay can be actively set against each other for an ironic effect.

Seeing the relationship between narrative/fiction and gameplay in this vein, can also be seen in Helene Madsen and Troels Degn Johansson's work *Gameplay Rhetoric*(2002), where they explore games as non-narrative artistic expressions, in particular when it comes to satire. Games used as satire is a common sight, mostly in the form of simple, "homemade" games uploaded on the internet. Madsen and Johansson reference *The Mujaffa Game* (2000), but we can find such games elsewhere, like *Phone Story* (2011) and *Thai Fight* (2013); games where the creators focus their attention on social and political issues, making use of satire, the internet and their preferred medium to make a statement. Madsen and Johansson also explore the value of metaphor in games, *"It is our idea that a computer game – like the language in a poem – may evoke these kinds of mappings in the mind of the player by serving as a source and a target domain of a metaphor."*(Madsen, 2002). To this end they created a game to explore just this potential within games as an artistic expression, called *Vanitas Game*, to explore metaphors using the theme of vanity.

The relationship between these two opposing forces, narrative and challenge, that we find in games is elemental to understanding videogames as a medium for narrative delivery. Fiction and narrative give the gameplay context; it gives reason to performing actions, actions that carry meaning in their performance, beyond that of simple enjoyment, they are metaphors in aid of the fiction and narrative. Ludonarrative dissonance as a theoretical concept is not just the dissonance that we receive when the two aspects of a game are in conflict, but rather the focus upon the natures of these two opposing forces and the need to understand how these work in conjunction, both for resonance and dissonance. This focus allows us, as game creators, receivers, critics, academics et.al. to focus upon a part of videogame storytelling that we have to a large degree never properly studied or even given much thought to, how these elements influence each other and how they can both strengthen and oppose each other.

The player does not see the game as story and play separate; they are part of a holistic whole, though the importance of either part and to what degree they contribute to the whole can vary between different games and what the focus of each given game. The narrative

[19] Achievements are virtual trophies and awards for performing certain actions under certain conditions within the game, where the value of the achievement lies outside the frame of the game itself. It is an acknowledgement that you have performed an action or overcome a meta-challenge, which can be likened to a dare. For example; defeat the Boss using only the weakest weapon, or jump from the tallest point in the game and survive.

potential of game mechanics is necessary to be reminded of, the potential for metaphor and meaning in action. The player will interpret the actions she performs in a game on the same level as the directly delivered narrative; she will make choices based upon both her own action and on the information delivered to her. She will see that her actions in the game carry meaning within them, and thus she will interpret both the story and the play together as they are presented together.

> *Play doesn't just come from the game itself, but from the way that players interact with the game in order to play it. […] Meaningful play emerges from the interaction between players and the system of the game, as well as from the context in which the game is played. […] When the player makes a choice within the game, the action that results from the choice has an outcome."* (Salen, 2004, p. 33)

Ludonarrative dissonance, as it broke into the discourse of video game theory and criticism from 2007 and afterwards, is a symptom that the hermeneutic understanding that we see with literature has not reached videogames; it is a symptom that the understanding of game mechanics and narrative has not yet reached a point in the development and reception of games where we see them as a whole made up from different parts. This again reflects the intrinsic nature between the two opposing forces in videogames, how the whole reflects each individual part, both the play and the narrative. *"A person who is trying to understand a text is always projecting. He projects a meaning for the text as a whole as soon as some initial meaning emerges from the text."* (Gadamer, 2004, p. 269)

The lack of such a hermeneutic understanding is also something that I would point out as the weak point of Juul's approach to video games and their potential as a storytelling medium, as he claims that there is *"no long tradition for interpreting video games, and hence no conventions or community for upholding a specific interpretation"* (Juul, 2011), making reference to Stanley Fish's work concerning interpretive communities (Fish, 1980). Understanding video games and interpreting them is contingent of our exposure to other storytelling mediums and artistic expressive mediums, the way in which we understand them, extrapolating from these to begin our interpretive community of video games. Storytelling originated in the oral tradition, then moved on to the written medium, film, comics and so forth, each with its own unique way of telling stories; we understand what a story is through what we learn of stories, as a whole and as separate instances, by our interaction with stories in various formats and of different kinds. We build the tradition of interpreting video games as storytelling mediums, on the foundations that is laid by the traditions of other narrative mediums.

Games tell stories, both through their directly delivered narrative and through their game mechanics and how we play it. Actions are what make up a narrative and in stories such as those we partake in with in games, the players are the ones that perform such actions; the players are the ones that save the princess, that validate the Kolechian immigrant's paper and give the collect all the pocket monsters. Therefor it is necessary to understand the narrative potential that lies in the play of a game and not just see narrative as something that is in addition to the play or that has been inserted on top of it. These two opposing forces of progress in a game must be understood so that they will not unintentionally work against each other. Hocking presented this for us in 2007, but that was merely an acknowledgement of the problem and giving it a name. If not understood and examined, the intrinsic dynamics of forces in games will be difficult to utilize, both for producers, consumers and academics.

To say that the game mechanics are a narrative on their own might be to stretch the concept of narrative too far, but to say that game mechanics tell stories of their own is spot on. Actions carry meaning and even more so in a game, where actions are simplified signifiers of real life actions. To press a button in a game in order to fire a gun, steal a car or heal a fallen comrade is a symbolic deed, both in-game and to us as players. Difficulty in a game becomes a metaphor for the difficulty of the signified action in real life. A difficult action in a game is the Labours of Hercules; symbolic and meaningful actions that carry with them their own values and interpretations, deeds that belong to a context and carry meaning to that context as they are given themselves meaning from the context.

Opposing forces within an artistic statement, such as we have here with video games, which both confront the work and what the work is about, creates a complexity where they both have to be seen as a whole, with each single part able to convey meaning, and how they work together and against each other.

In this chapter I've tried to give an analysis of the 2013 game *Bioshock Infinite* to examine the ways that these two opposing forces create the ludonarrative dissonance that breaks the game as a unified whole, rendering it as two separate experiences that just happen to embody a single work, and to examine the necessity of an academic and theoretical understanding of the concept and the forces within a game to which it refers.

Chapter 3:
Agency

Agency is one of the most important aspects of games in general and video games in particular, and also one of the most interesting aspects of games when we consider the narrative potential of games. It can easily be summarized as this: *"Agency is the satisfying power to take meaningful action and see the results of our decisions and choices."* (Murray, 1997, p. 126) It is the feeling that our choices actually matter, that they have an impact upon the context and narrative setting of the game in question. But just like Chess has a set of simple rules, but is complex in its potential deployment and strategies, so is agency. This complexity comes from the fact that agency as a subject touches upon both games as game-mechanics, rules and state-machines on one side, and games as narrative on the other side; both on a purely mechanical level and on the level of content, story and narrative. This is of great importance for games as a narrative medium as it puts the unique quality that video games bring to narrative, namely agency and interactivity, square in the center of scrutiny. I will also note that, this is about the potential of agency and not directly in concordance with any specific game, unless specifically stated. The full potential of agency in games has yet to be exploited or even discovered.

Agency is a subject known from, amongst others, social studies and while there is an overlap of the use of works and authors that are used by both games studies and social studies, there are certain differences in how these theoretical tools are implemented and used by the different fields. Thus it is important that we see these two uses of agency as both similar and different, as to not confuse ourselves. While social studies deals with agency as a theoretical concept for a human being's involvement in the social order of the world and how human beings, as agents, are able to act within and interact with the world and the structures of human society[20], in video games it denotes the possibilities of action and configurative possibility in a constructed world, where the only parameters are those that are put in place by the creators of the game[21]. Video games are a constructed reality, where the possibilities are intentionally limited, as opposed to the reality in which humanity resides where possibilities

[20] Judith Butler's *Performative Agency* (2010) and Anthony Giddens' *The Constitution of Society* (1984) are good examples of the way Agency is used in Social Sciences.
[21] Gonzalo Frasca's *Rethinking Agency and Immersion: videogames as a means of consciousness-raising* (2001) and Marcus Schulzke's *Critical Essay – Models of Agency in Games Studies* (2013)

are culturally, historically, biological and geographically limited. But in the end both of these uses of agency as a concept is centered on the ability and the freedom of individuals to act and make choices.

When we discuss agency in games and its importance, it is also necessary to take a closer look into interactivity and what it means for games and the way games tell stories. Murray describes agency as something more than mere interactivity, but this is selling interactivity short and she does not understand the importance that interactivity has. Interactivity is essential for agency in games, even for games to exist at all, as games. But agency is a descriptive of the depth and meaning of interactivity, it is ideally the gray area where story and play come together, this is most relevant when we consider games with a narrative focus.

So, to examine what interactivity is, I would propose a few choice definitions. Brenda Laurel describes interactivity as *"when people can participate as agents within a representational context (an agent is 'one who initiates action')"* (Salen, 2004, p. 58) and Andy Cameron describes it as "*the ability to intervene in a meaningful way within the representation itself, not to read it differently."* (Salen, 2004, p. 58) These two definitions could just as well describe agency, for all intents and purposes. To interact in a meaningful way within a representation (game) and the context we work in within the representation. Interactivity is, at its simplest "an active relationship between two things." (Salen, 2004, p.58); in other words, it is something that you can interact with. But it becomes more complex, especially when we consider elements native to games, such as interesting choices (as described by Sid Meyer) and narrative. Every interaction in a game is designed into the system/experience; though there are possibilities of deviant emergent gameplay that allow for interactions that break the design parameters of the interaction (see Juul, 2011, p.76, for examples and further study of this phenomenon.) While deviant emergent gameplay is an interesting topic, it falls out of bounds for what we are looking into here, as we are looking at the specifically designed choices and interactions present in a game and how that connects to agency within games.

Salen and Zimmerman describe four modes of interactivity:

1) **Cognitive interactivity:** psychological, emotional, and intellectual participation between a person and a system.
2) **Functional interactivity; or utilitarian participation:** Functional, structural interactions with the material components of the system (whether real or virtual).

3) **Explicit interactivity; or participation with designed choices and procedures:** Overt participation like clicking the non-linear links of a hypertext novel, following the rules of a board game, rearranging the clothing on a set of paper dolls, using the joystick to maneuver Ms. Pac-Man.
4) **Beyond-the-object-interactivity; or participation with in the culture of the object:** Interaction outside the experience of a single designed system. F.ex. various forms of fan-culture. Cosplay, fanfiction, etc.

(Salen, 2004, p.59)

These modes describe both the simple act of interaction and the deeper meanings of interaction that give rise to agency. It is in mode 3 that we can see similarities with agency as Murray, and also Daniel Floyd and James Portnow from Extra Credits, describe it.

Salen and Zimmerman's description of the third mode of interactivity is as follows:

This is 'interaction' in the obvious sense of the word: overt participation like clicking the non-linear links of a hypertext novel, following the rules of a board game, rearranging the clothing on a set of paper dolls, using the joystick to maneuver Ms. Pac-Man. Included here: choices, random events, dynamic simulations, and other procedures programed into the interactive experience. (Salen, 2004, p.60)

Interactivity is, at its simplest "an active relationship between two things." (Salen, 2004, p.58); in other words, it is something that you can interact with. Mode 3 especially focuses upon choices and meaningful interactions and meaningful play, as a consequence of the interactions. Salen and Zimmerman describe explicit interactivity as when the player can make a choice that is designed and integrated into the gaming experience. This borders onto the description of agency as making a meaningful choice and seeing the consequences of your actions, which of course has to be integrated into the gaming situation, just as they describe it. They make it clear that interaction comes in many forms, but that what is relevant to the gaming situation is the designed interaction, i.e. the rules of the game and the pieces or what and how you can interact in a digital game. This element of "designed interaction" is the most important thing we can gleam from their study on interaction, especially when it comes to agency as we look at it here, and they touch upon many important things with it, such as an interaction's context within a game. They view designed interactions as important to meaningful play, yet again an aspect of agency, and urge us to consider the relationship between an interaction between player and game system and the depth and meaning of the interaction itself.

It is when we begin to consider interactions as meaningful that we come into the territory of agency, which I will say is just another way to describe meaningful interactions. It is when we have gone beyond simply interacting with something to where the interactions have a meaning, something which is easiest seen in the narrative of a game. When we can make a choice in the narrative of the game, we expect that choice to have an impact on the narrative and an acknowledgement that we have made that choice, i.e. that we are active agents within the representation.

How then is interactivity different from agency? Interactivity is a word that, at its basest level, means "a two-way flow of information between a computer and a computer-user; responding to a user's input" (Oxford Online Dictionary), agency on the other hand requires that the input and the response is meaningful in the context that it takes place, and it can, at its basest level, be defined as "action or intervention producing a particular effect" (Oxford Online Dictionary). It is both relevant for the gameplay and the narrative of games. Therefore, we can conclude that the descriptions of agency and interactivity as given by both Salen & Zimmerman and Murray must be seen as describing aspects of the same object, albeit from different points of view. Like the story of the blind men describing an elephant; each one touching but a part of the whole.

Agency in games both is and is not interactivity, or, I should rather say, it is a consequence of interactivity, of the fact that we're able to interact with something. It is giving tools to the receiver of the work, i.e. the player, and allowing her to proceed in the challenges based upon her interpretation of the game, both when it comes to the strategies to utilize to overcome challenges and the interpretation of the narrative of the game and the choices she can or needs to make in that sense. But it is still necessary to see that there is a difference between agency and interactivity.

"*Because of the vague and pervasive use of the term **interactivity**, the pleasure of interactivity in electronic environments is often confused with the mere ability to move a joystick or click on a mouse. But interactivity alone is not agency."* (Murray, 1997, p.128)

Murray describes the relationship between the two with looking at chess, a game that can have few but monumental actions, which leads it to give the player high agency, but little interactivity. Whereas a game with a high number of interactions can have little agency; we can see this in many adventure games from the Golden Age of Adventure, f.ex. *The Secret of Monkey Island* (Lucasfilm Games, 1990) and *Broken Sword: The Shadow of the Templar* (Revolution Software, 1996), and the later game *The Longest Journey* (Funcom, 1999). These

games have a high number of interactions, but very little agency as you through trial and error attempts try to solve the -often not too logical- puzzles of the game that have only one outcome and one possibility for resolution. Essentially these games can be boiled down to collecting various items and rubbing them against each other to see which ones stick together and then try to use them in various circumstances in the game, simple trial and error as you try to make sense of the twisted logic of the game designers. It is not simply the fact that you can interact with a story in a game that makes it unique as a narrative medium, but the fact that you can interact in ways that have meaning, both for you as the player and within the game itself, and that you can choose between different interactions which leads to different outcomes/results.

One point that I have to make before we properly get down and dirty with agency as a theoretical topic, is that the amount of agency within a game and what amount is necessary, varies from game to game, the same goes for how much focus a game gives to the player as a participating factor in the game's narrative. A game can be heavily focused upon a narrative while giving the player little to no agency within the narrative and a great deal when it comes to the gameplay, a trend that can be described as "railroading" and is often seen in the adventure games I mentioned earlier; a term often used in pen & paper roleplaying games. This kind of narrative utilization in a game means that events will follow the game designer's plan, no matter what the player/players does during play, which is something we could see in *Bioshock Infinite*. The term is largely used as a pejorative, but this is only true when it is not handled with care, something that I will get back to when we talk about the illusion of choice, later on in this chapter.

One important aspect of Agency is that when we see it in conjunction with narrative, it clearly places games (i.e. narrative focused games and/or games containing a narrative element) in the category of ergodic literature and the cybertext:

> *The concept of cybertext focuses on the mechanical organization of the text, by positing the intricacies of the medium as the integral part of the literary exchange. However, it also centers attention on the consumer, or user, of the text, as a more integrated figure than even reader-response theorists would claim.* (Aarseth, 1997, p.1)

Ergodic literature is, as described by Espen Aarseth, literature where *"nontrivial effort is required to allow the reader to traverse the text."* (1997, p.1) and where *"you are constantly reminded of inaccessible strategies and paths not taken, voices not heard. Each decision will make some parts of the text more, and others less, accessible, and you may never know the exact results of your choices; that is, exactly what you missed."*(1997, p. 3)

This is a good description of the nature and outcome of agency in a game when we come to its narrative element, and while it does not incorporate challenge as we see it in games, it is still relevant here as we consider agency in games.

This way of viewing narrative games as ergodic literature, requires that we re-think how we structure ergodic literature, as it is necessary for games to be composed of both challenges and interesting choices, i.e. paths in the text. An example of this can be found in the *Mass Effect* series (Bioware, 2007-2012) and in *Dragon Age 2* (Bioware, 2011), as choices available to you in dialogue are based upon challenges overcome, customization on the Player Character (PC), and the choices you've made earlier. It is not just non-trivial effort that is required to navigate the game and its story as a cybertext, but the navigation depends on challenges and choices, both those connected with the challenges and those not connected with the challenges. For instance, if you have made a certain series of choices in Dragon Age 2, you will suddenly come upon a dialogue choice/challenge that you cannot make/overcome, as you have followed a different path than what is required to overcome this particular challenge. You've locked yourself out of a path, by the choices that you've made, and must find a different approach to overcoming this challenge, an example of how both narrative choice and interactivity is fused with gameplay and obstacles to overcome in games. This is how Aarseth has described ergodic literature.

Fig. 3.1: *The dialogue wheel in Dragon Age 2 (lower part of the image), where the tone of each response is represented by a color and a symbol. In this example there is only a choice of tone available, but other choices open up for more agency. (Dragon Age 2, Bioware)*

The most important difference between what Aarseth describes and what I describe is that where he describes a structure where you are free to choose and the need to choice being the non-trivial aspect, I describe a structure where non-trivial means you have to overcome challenges as well as make choices, often the two being merged into a single event in a game; How you fare in the challenges of the game reflects the choices that you can make and the choices that you make reflect the challenges that you meet. Challenges in a game work against you as you try to traverse the game, they are not simply the cut-off from other paths that Aarseth describes being central to cybertexts and ergodic literature.

One of the most important aspects when it comes to pleasure derived from playing games is the feeling of agency; that what you do within the situation of the game has a significant effect upon the game situation, even if your choice results in failure. You are not just along for the ride; you are an active part of the progress, an agent within the representation. It is giving you control over your situation and it allows you to see the consequences of your actions. *"Agency is the satisfying power to take meaningful action and see the results of our decisions and choices."* (Murray, 1997, p.126) We have agency when we can interpret the situation in the representation and make choices based on our

interpretations and in the end see the outcome and consequences of our actions and interpretations. It is in some way the ideal representation of Reader-Response theory; not only do we make our own interpretations as individuals[22], based on previous experiences and the interpretive communities we are aligned with; we have to act on them and face the consequences of our interpretations within the representation, we get to see the validity of our interpretations both in real time and in the long term.

Agency is a product of interactivity and it can be difficult to see the two as separate, though Murray reminds us that agency is not just "mere interactivity", but while she is correct in this, in my opinion she is also wrong and doing interactivity a great disservice. Games are dependent upon interactivity; we need to be able to interact with the state-machine that compromises the game to engage with it. Thus, we can also conclude that agency is dependent upon interactivity and is actually just another way of thinking about interactivity, in a larger scale.

That agency is important for games is easily seen when we consider gameplay; faced with a challenge you attempt a strategy to overcome it and then you see the results, either you made it or you did not, with the possibility of various tones of gray in-between the black and white binary extremes of WIN/LOSE. It is also something beyond simple interactivity with the game; being able to move a character and interact with the digital environment can be all kinds of fun, but the actions have to be meaningful for them to be considered a part of agency. It is when we are able to use interactive elements in a game in a meaningful way that they can be described as part of agency.

[22] Individuals that are taught interpretive strategies through the interpretive communities that we are part of, on both a larger and smaller scale, which we either accept or denounce.

One way of describing storytelling like this is a concept called beads-on-a-string, which can be mapped out like this:

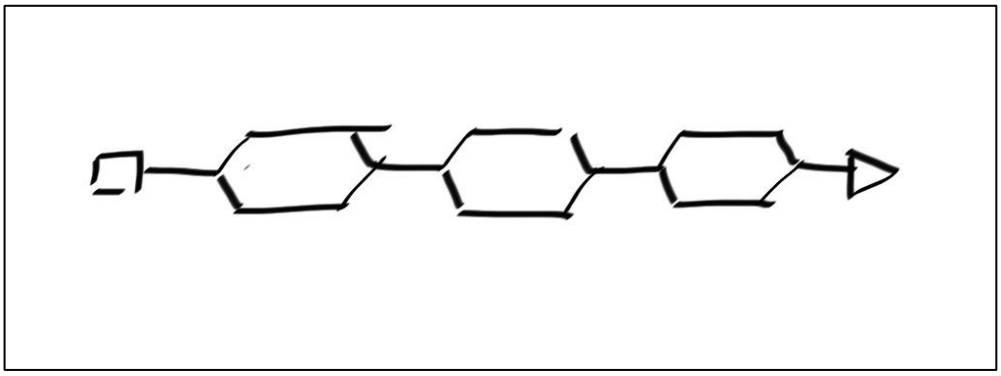

Fig. 3.2: *A simple beads-on-a-string configuration, where the path diverges but ultimately comes back together.*

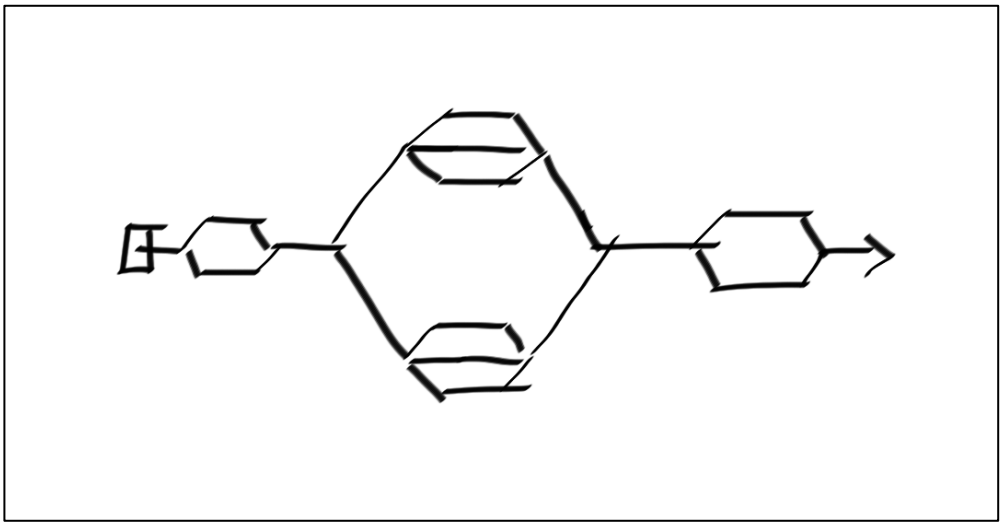

Fig. 3.3: *A more complex configuration, where there are two mutually exclusive paths that ultimately come back together.*

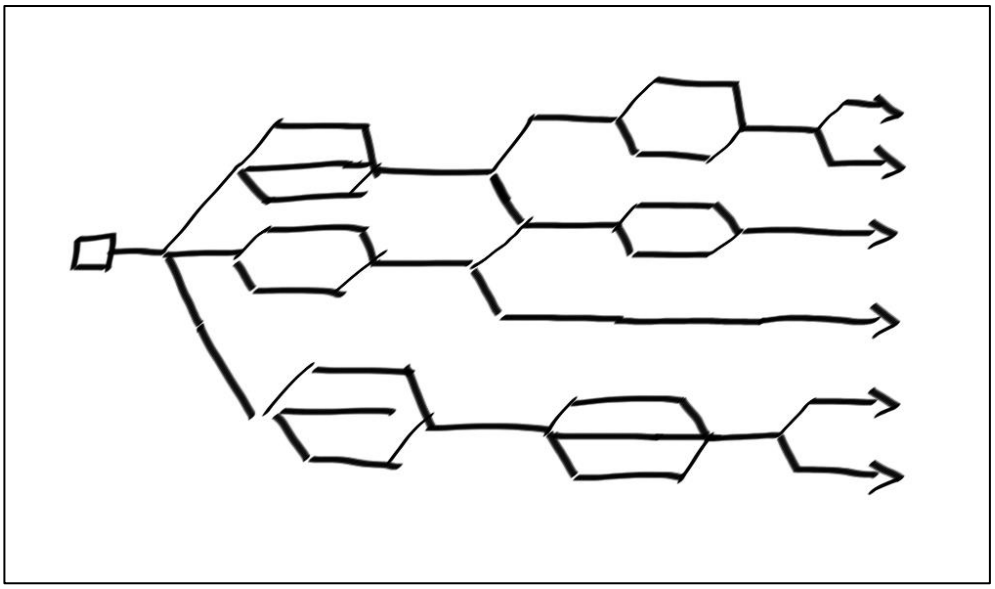

Fig. 3.4: *A very complex configuration, where there are several mutually exclusive paths and with several different potential endings.*

The reason for the name should be obvious. The first image is the simplest form, while the second one describes a more complex path through the content, and the third describes an even more complex path with several different endings to the story, coming close to resembling an actual maze, the variations and possible levels of intricacy are in theory endless, only restrained by the creators of the work. It shows us potential paths and choices that the player can make, though this is a gross simplification of the paths through a video game, concerning both narrative and gameplay, as the paths can overlap at several places and certain forks in the path can in some cases be arranged at different points all together within the game, according to what order the player performs actions in, which also opens questions about how video games as narrative function sequentially. It can become infinitely complex as the number of factor that play into progress increases, i.e. which actions and choices become relevant in the large picture. The maze itself has been built by the developers of the game and agency is the power we have to choose our own path through it, but the paths are dependent upon several factors that are spread out throughout the whole of the game, which can be accessed by the player in the order that she prefers. We see this clearly in RPGs like *Dragon Age: Origins* (Bioware, 2009), *The Elder Scrolls V: Skyrim* (Bethesda Game Studios, 2011) and *The Witcher* (CD Project RED, 2007), the last one which we will look further into later on.

This way of looking at storytelling falls close to the way the Russian formalists described and made use of fabula and sjuzet: the main, grand overarching story is set in stone,

while the presentation of it can be changed, based upon player choice. This is how I want us to primarily think of video game narrative in conjunction with agency. The developers allow us control over the sjuzet of the narrative, to delve into the content presented to us in the manner that we want to delve into it and at the time of our choosing, while they control the fabula itself, the overall story. The terms are not entirely precise for this use, but they serve well to describe the situation at hand, to translate concepts from one study to another and to make sense of them.

Also relevant is the concept of kernels and satellites; kernels are those events (and, in some cases, characters) of a story that are necessary for that story to be recognized as that particular story, while satellites are those events that can be replaced or removed altogether while still keeping the story recognizable (Lothe, 2003, and Aarseth, 2012).

One criticism that has been levied at games as narrative mediums is that traditional stories are fully formed and finalized stories, while games happen in this moment, but this is to dismiss that while the action of the game happens in the now, the story itself has already been firmly finalized, even though we play through it and the action is happening now, it is no different than watching a movie or reading a novel; the only difference is that we can interact with the "now" of the content. Games have a fully formed fabula, but with a sjuzet that is open for configuration by the player, to a greater and lesser degree, depending on the game in question. It merely requires more from the developer to structure the fabula and the potential configurations into a coherent whole that can withstand the potential configurations the player will perform, and as I said in an earlier chapter, players will attempt to break the game in order to see where the boundaries are and how much freedom they have, which often leads to emergent gameplay, which Juul describes as: *"Emergent gameplay is usually taken to be situations where a game is played in a way that the game designer did not predict."* (Juul, 2011, p.76) Predicting the various configurations can be a challenge for the developers, and it can lead to the story being broken and becoming nonsense, but this is part of the danger of the maze, part of the danger of agency and of having freedom to choose for yourself. Here be dragons, beware.

Meaningful Choices

One of the most crucial aspects of choice in games, and in choice's conjunction with agency, is that it is meaningful and interesting. A meaningful choice is a situation where the two (or

more) options available are balanced and where there is no clear "better" choice. If a game presents you with a number of choices where one choice is clearly better then there is no real choice. This thought was first introduced by Sid Meier, one of the most legendary game designers of all time[23], who positioned that "a game is a series of interesting choices." While his statement was predominantly concerned with game design and -mechanics, it is also relevant for us as we look at agency. A situation where the better option is clear is a situation where there is no true choice and it pulls gameplay towards the more efficient path. While games are narrative vehicles, they are also contests where the goal is to overcome a challenge; if there is one alternative that is numerically and mechanically better in order to overcome the challenge, it is the better choice and then we lose the connection between narrative and gameplay, creating an instance of ludonarrative dissonance in addition to poor implementation and understanding of agency.

If there is one obviously superior path to take through the game then the choices are not interesting choices and therefor fail at what they set out to, namely deliver us an interesting act of agency. This amounts to both balance in the game-mechanics, and balance in the narrative; a clearly better option for the play that leads a player down one particular path of the story, stands in the way of the player's chance to interpret content on her own and also distances the play and story from each other. Not only that, but it also establishes a canonical reading.

This should also be seen in conjunction with Walter Benjamin's concept of Wahl and Entscheidung, meaning respectively routine, practical choices and crucial and important choices (Lothe, 2003). These two categories are useful for both gameplay and narrative analysis, especially when we consider an interactive, agency-rich medium as video games. Concerning gameplay we can for instance see this in the choice of what to do with in-game equipment that has become obsolete, a common feature in many MMORPGs, where we have a limited amount of storage space for equipment, but several options of what we can do with the obsolete gear beyond storing it. In WoW and The Secret World for instance we can sell it, turn it into various amounts of resources, upgrade it or simply destroy it. This choice gives us a large amount of agency, but it falls under Benjamin's category of Wahl, being a routine and mundane choice. On the other hand, choice of what reward we desire at the end of a long

[23] Sid Meier is responsible for some of the most influential and important games ever made, such as *Sid Meier's Pirates!* (Microprose, 1987), *Sid Meier's Civilization* (Microprose, 1991), and *Sid Meier's Alpha Centauri* (Firaxis Games, 1999).

chain of quests falls into the category of Entscheidung, as it is an important choice in the context of how effective we will be further on in the game.

If a game fails to deliver interesting choices it also fails to deliver content that is open for interpretation and experimentation. If we, throughout the game, are presented with a series of choices where there is always one clear option that is superior to the other options, we will be presented with a canonical "right" reading, in which this is the way the game is supposed to play out, thereby cutting away the potential readings that could have emerged had the choices (both narrative and game mechanical) been balanced in a way that rendered the making of the choice non-arbitrary.

But there is also a problem when there is no difference to discern between the two choices; if there is no difference in the consequences/rewards from making a choice, then the making the choice becomes arbitrary and pointless. It is not something we as players will invest ourselves in. It is merely performance for performance sake. The choices and outcomes must be balanced, but that does not mean that they have to be equal or deliver the same exact level of return, but interesting choices must be balanced and different in kind, not in scope. An interesting choice is where we have to consider what we should do, what is the best way for us, as both player and a character in the game context, not where we choose the Axe of Slay All Enemies instead of the Wand of Bunnies, because in the gameplay it is more useful to slay all enemies than it is to summon bunnies, while in the story context it might be more interesting to see what the Wand of Bunnies does. If there is a right choice or if the choice is arbitrary, we are not given an interesting or meaningful choice.

This again points out the difference between games and traditional mediums of narratives, where game developers have to consider gameplay and -mechanics in addition to the narrative. They have to consider the game as a challenge as well as a story. Concerning agency this has to be considered for both gameplay and for narrative, but in this context we will mainly deal with agency in terms of narrative and narrative-in-conjunction-with-gameplay.

The Witcher; Analysis

The Witcher, by Cd Project RED, follows the story of Geralt of Rivia, a Witcher and monster hunter for hire, based upon the similar named series of books by Andrzej Sapkowski. This game is interesting for us when we look into Agency, as it contains both local and global

agency, focusing both upon choice and upon consequence, and it also shows us this fairly early in the game, to a certain degree catching the player unaware as she traverses the game. Like in most games that I've discussed so far, *The Witcher* allows the player to take divergent paths through the game, fairly common in the fantasy RPG genre that the game is firmly placed within, what with the pointy eared elves and heavily bearded dwarves running around, but the interesting thing here is that we're shown Consequences of our actions on a level that few other games achieve.

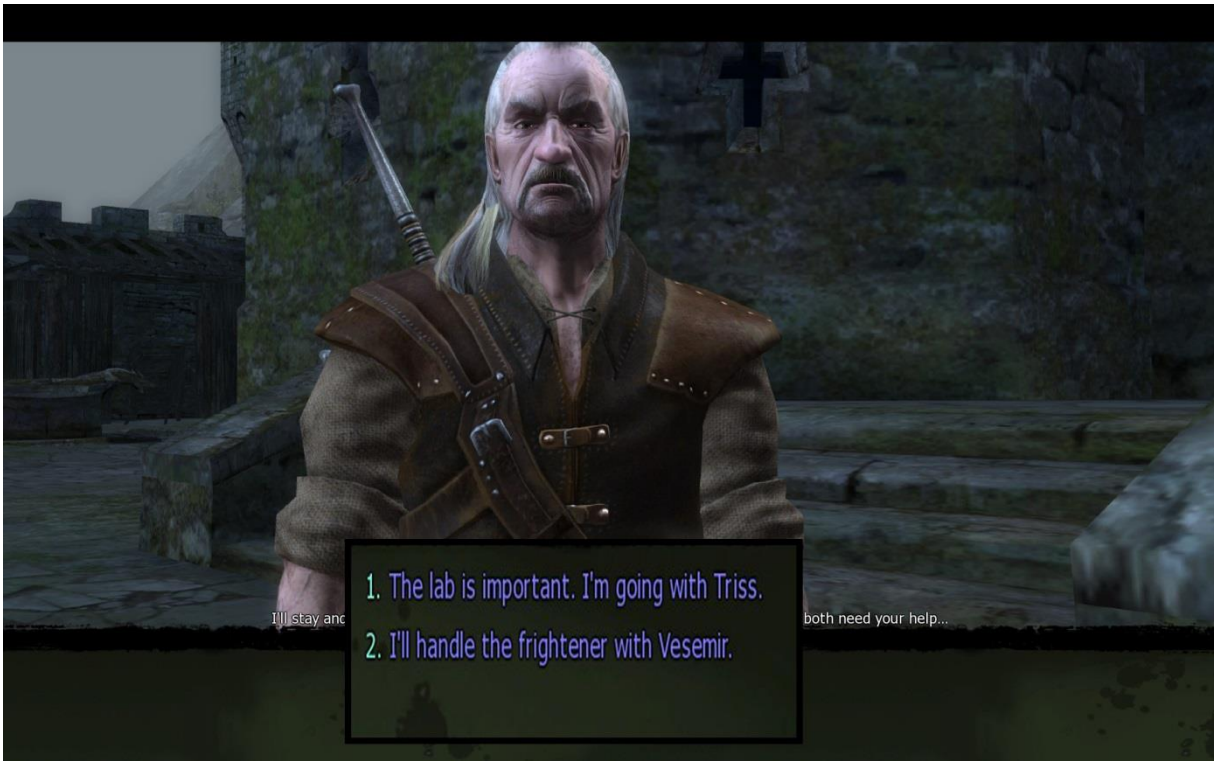

Fig. 3.5: *The choice-event where the player can choose between which fight she deems most important.(The Witcher, CD Project Red)*

Early on in the prologue of the game, we're faced with a choice; either we can a) fight a Frightener, the gigantic beast that is attacking Kaer Morhen, the ancient Witcher keep and base of operations, or we can b) run after the thieves that are sneaking into steal the secrets of the Witchers while they are distracted by the foul beast. The player has to make up her own mind as to which matter is the most urgent; we're given no hints as to possible rewards or gameplay effects either choice will provide. Just a few minutes into the game and we're given one of the best and clearest examples of Agency in a game.

Fig. 3.6: *The Frigthener, the magical beast that we can fight against. (The Witcher, CD Project Red)*

If we chose to do a) fight the beast, as heroes are wont to do, we will slay the beast and aid the men of the keep and, in the aftermath, be rewarded by our fellow Witchers. But later on, in the first chapter, we will be faced with the villains who have made use of the secrets of the Witchers and have bred a monstrous mutant hound to further their plots. Had we seen b) the thieves as the most imminent threat and gone after them, we would have stopped them before they could make off with all the secrets and they will not be immediately able to make use of the knowledge they have stolen, and we would be faced with only the villains, not their mutant hound.

Fig. 3.7: *The fight against the thieves raiding the Witchers' secrets. (The Witcher, CD Project Red)*

Fig. 3.8: *Armored mutant hound that the player must fight against, should she choose to fight the Frightener. (The Witcher, CD Project Red)*

The consequence of our action early on in the game can thus lead us to a situation where gameplay is drastically more difficult later on, based on what choice we made; thus we see the incorporation of both immediate local agency and long term global agency. The most important aspect of this example is that it merges both story and gameplay seamlessly into one; the choice we make as players is at the time of the choosing the firmly in the realm of narrative, but the consequences of those choices lead to differences in the gameplay later on.

It means that this choice has effects upon both story and gameplay, showing how the two can be intertwined in a game and the potential that this kind of storytelling gives the creators of such narratives.

It is interesting to see how the developers have hidden this in plain sight and are able to catch the player off guard. This difference in the experience will only be apparent if and when the player explores the various potential paths through the narrative and the game over multiple playthroughs. We are shown that we have a choice, but we are not explicitly told that there are consequences or what potential consequences can be; we must interpret the situation at hand and make choices based upon this, for better or worse. In games we have become used to clear consequence and reaction, we do this one thing and then this other thing happens, in a manner that is reminiscent of how traditional storytelling works, save for the fact that we have to perform the task for it to happen.

Another example of this use of agency, which might even be more interesting, can be found later on in chapter one and has effects that reach well into chapter two of the game. Geralt is charged with investigating some cargo that is stored on a river bank and to protect it from monsters that supposedly ransack it during the night, after which he is approached by a group of elven rebels that were supposed to broker a deal for the cargo (which turns out to be weapons to fuel their rebellion) with the man who sent Geralt on his quest. The rebels confuse Geralt with the man they are supposed to meet and we are then left with the choice of either giving them the weapons or killing the lot of them, before heading back to the man who sent us out to investigate what was going on with the cargo. All in all, a fairly common example of traditional quest structure.

The interesting part here is that this choice in a mission that is relatively minor at the time, has consequences for several other missions of both greater and lesser importance in the next chapter, but what we choose has no impact upon the mission where the choice take place, that ending plays out the same no matter what. In the next chapter, one man we must interrogate during a mission, to learn more about the villains that attacked the Witcher keep and stole the Witchers' secrets, has been assassinated by the elven rebels, something which is only possible if we allow them to leave with the weapons in the earlier quest. This means that if we gave the elven rebels their weapons, it will make it impossible to conclude this mission, as the man we need to talk to is killed just before we can talk to him. We've effectively created a challenge for ourselves, in that we now have to find a way around this problem, and we can directly see how our choice has affected the world.

If we do not surrender the weapons to the rebels, it will lead to one of the secondary characters, a dwarven banker, being arrested because of his sympathies with the rebels, leaving us unable to buy a set of books we need from him, unless we go out of our way to get him out of jail, lest we pay an extortionate amount of money for the set of books from another source. A dwarven blacksmith will also refuse to do business with us, unless we work to gain his favor, potentially banning us from his merchandize and services for the rest of the game.

These consequences are not something that we could see from the situation that we were in at the time of the choice, nor is it something that we could extrapolate from our experiences thus far in the game the situations around the later missions had yet to be touched upon and the context wherein they take place was something we were not aware of. But it shows us that what we do in the game, and the choices we make, have firm and irrevocable consequences, even if we do not know that our actions have any importance at all beyond the immediate situation.

Again, we see this coupling of narrative and gameplay, where we depending on our choices see consequences for both. The story will play out differently and the challenges we are faced with will also be different. The amount of time between the act of choice (local agency) and when we see the consequences (global agency) is also so great that it is not easy to regret and go back to redo the choice. (Local and global agency; Mateas, 2003)

While the story in *The Witcher* does not present us with different endings or major differences in outcomes, we are able to change major events and progressions within the frame of the story that we are presented with. With the rebellion escalating it becomes a bigger part of the story and we are given the choice to take sides in this conflict, either side with the humans or the non-humans (i.e. elves, dwarves, goblins, gnomes etc.) or we can refuse both sides and take no part in the conflict. This choice and the choices that follow them all have effects upon the story and the gameplay, what challenges we will face, what missions are available to us and what parts of the story that we are able to further investigate and delve into. It is the labyrinth which we traverse and that closes off paths according to where we go, it is malleable and yet rigid, sending us as players down the branches of the story, and at the same time keeping us within the story's bounds, but still allowing us the freedom to explore and to condemn ourselves by making choices that lead to our demise. Though this labyrinth has but one exit and the story has but one ending, the outcomes of our choices and actions deliver us differences during our traversal of the game content, differences that point back to our choices. What we say to one character in one part of the game, f.ex. the child Alvin, will

be referenced by a different character later in the game, in this case by Jacques de Aldersberg, thus reaffirming our sense of agency and involvement with the game, and creating depths that would be hard to achieve unless the game gave us agency in this fashion.

In this way, both dialogue- and action-based choices will be referenced by the game and our immersion and the sense that our choices carry a meaning within in the game. Pointing back at what we have previously done in a game, to the choices we made, is part of the joy a gamer receives from agency and part of what makes agency such an interesting topic for games studies.

These are examples of how agency work in the local and global scale, how the game uses agency to give us as players a sense of freedom and immersion and also further complicating our progression through the game, adding depth and complexity to both gameplay and story in a manner that no other medium can provide us. Games are the only medium that allows us direct participation in the events that are presented to us, and the agency that is given to the player encourages exploration of the work, to find the different meaning-possibilities and the ways in which the story can be put together. It encourages exploration and interpretation of the work in a manner that we do not see in any other medium.

If we play through the game a second time and make different choices than we made the first time, we will see both obvious and subtle differences in the experience we have. Even more so if we look to the second game in the series, *The Witcher 2: Assassins of Kings* (CD Project Red, 2011), where we are forced to make a choice in the very first chapter that diverges the story for the rest of the game, not coming together until the very end, if it can be said to converge even then. In essence, you are left with two different stories and experiences, where you delve into separate sides of a conflict, to a greater degree than what we experienced in the first game in the series, and are told different interpretations of a greater story and the context of the events. There are major cases of knowledge about characters in the game and the lore of the game that you will not learn unless you play the game a second time and explore the other side of that particular choice. Unlike the first game, you are not able to choose the middle path and not join up with either side of the rebellion, but are forced to pick a side in this story, as the story revolves around your interaction with either of these factions in order to come closer to your final goal.

This tapestry of choices all add to the formation of individual paths through the game. The game shows us early on both the fact that the player has agency within the game, both through the use of consequences for the player's action which also leads to acknowledgments of the player's past actions later on. But we have to remember that there is also a difference between choice and consequence; *"Games about choice are about making you reflect on what you are about to do as you do it, about thinking it through as you go in. Games about consequences instead are about making you realize the impact of something you did."* (Extra Credits: Choices vs Consequences) Choice is an informed action where we weigh the pros and cons at the time of the choice, whereas consequence is where the player is forced to consider her past actions. This distinction is rather important when we consider agency.

The situation I examined earlier on where you can either fight the monster or stop the thieves, is clearly a choice-event that focuses upon consequence, but it is effective in turning the player's focus towards the act of choice itself, where for the rest of the game you are aware of the fact that your actions have consequences and thus begin to evaluate the different possibilities of the choices that you make. This is a successful way of letting the player become aware of core concepts of the narrative and how it works in conjunction with the game mechanics; that the player has to make choices that have an impact upon the world, both as a story and as a game. After this situation, the player becomes aware that when she is faced with a decision, go left or go right, save the princess or kill the Strigoi, all of this will impact the story and not just in the most obvious paths. It is still firmly in the realm of consequence, but it puts the pressure on the concept of choice and the decisions the player makes to influence the game. It makes you want to learn as much as you can about the story, the characters and the context, as well as the game-mechanics, so that you can make informed choices.

Choice vs. consequence brings further depth to the concept of agency. It shows the distinction between awareness of an instance of agency and the consequence of an instance of agency. Whereas we should ideally carefully consider choices and their outcomes, consequences we contemplate over as we reflect upon our earlier actions after the fact.

The Illusion of Choice

Sometimes players are led to believe that they have agency in a situation where there actually is none, a concept called the illusion of choice. This is a smoke and mirrors way to bring the

player the feeling that we expect from agency in a situation where the developer either cannot or does not want us to have agency. This is a tool often used in games that feature heavy dialogue: the player will for instance have the ability to choose from several different responses according to what she sees as the most fitting in the given situation and for her interpretation of the character she embodies, yet the actual outcome of the situation is always the same no matter what she chooses. The game can and will often give references back to such situations at a later time to further increase the player's feeling of having agency, but these are superficial changes that always play out in the same way and there is no actual agency in the specific situation, no actual and meaningful choice.

The illusion of choice can give the impression that the player has agency and the ability to affect the narrative, while still keeping control over the situation in the hands of the developers of the game. It adds a sense of scope to a game and increases the sense of freedom for the player. It is a tool to manipulate the player and the player's experience of the game.

It is also a tool that has often been viewed negatively by players, but it is sufficient to say that this critique comes from situations where it has been handled poorly and the player becomes aware of the fact that there is no choice to be made. This is one of the aspects I mentioned in the previous chapter where I looked towards *Bioshock Infinite* and ludonarrative dissonance. Poorly handled or implemented illusion of choice can break the connection between gameplay/-mechanics and narrative in different ways, most notably by showing that there is no agency in a situation where the game implies that you have agency. The player's reception is one of the core aspects of agency and it will create a distance and break of immersion if the feeling of agency is proved to be false, casting a dim light on the whole of the game as a whole. It can also work to undermine the actual situations where the player has agency, leading the player to just plow forward never realizing that there are instances of actual agency, which in turn can lead to situation where the player has chosen arbitrary and led the narrative to a breaking point and reducing it to either an experience the player does not desire or reducing the narrative to complete nonsense. Therefore the illusion of choice is just as important as actual agency in games, simply because it has such long reaching effects.

While this is not an actual part of agency, it makes use of the effects that players experience in a situation where there are instances of agency, by simulating on the surface the function of a true choice-event. It affects the player with the same sensations that they experience, but none of the actual configurative power that agency is capable of delivering. It is faux agency, but it instills the same sensation in the player as the real thing. A lot of the

ways to use the illusion of choice are ways that are used to intensify and solidify the experience of actual agency. It is also not just in the case of story elements that we see the use of the illusion of choice. We can also see this in gameplay elements. A game can make it seem like it has agency for the player, when it in actuality is controlling the player's movement and actions throughout the game. A player walking down a street can come upon enemies that force the player down another street, or she can see something interesting down that other street that encourages exploration, leading the player where the developers want her to go. Thus the player is left with the sensation that she has the power to choose, while the path is in actuality blocked as the enemies (or whatever other challenge the developers might have placed) is too difficult for the player to overcome. She might try to overcome the challenge, but will ultimately fail and seeing that there is a better route, she will try a different strategy and take the other path, which the developers had intended her to go down all along.

The reverse can also be used to lead the player down the desired path, by placing challenges like breadcrumbs to mark the route they want her to take. The player is allowed the freedom to roam about and explore, and then returns to the developer's specified route, fulfilling sensations of agency along with following a carefully scripted scene, where there is no true agency. It also makes heavy use of interpretive strategies to control player actions in a game. Playing heavily on expectations, conventions and interpretations that have developed in conjunction with video games over the years, they can use both subtle and not so subtle cues to direct player behavior and still give the player the sensation of freedom that comes with agency. Red barrels in the gaming environment explode when shot, medical kits restore health, a vast lexicon of symbols and signs have developed in the medium over the years. It is an employment of the ideas of Stanley Fish: *"For isn't this an admission that there is after all a formal encoding, not perhaps of meanings, but of the directions for making them, for executing interpretive strategies? The answer is that they will only be directions to those who already have the interpretive strategies in the first place."* (Fish, p. 173) This also shows the importance of tutorials in games, as they introduce fresh players to the conventions that lie at the core of gaming and that game development is based upon, and introduces the particulars that are unique to that game and its game-mechanics. These conventions, of course, vary between different genres of games, but some are cross genre conventions.

Conclusions

Now then, why is agency so important for storytelling in video games then? It is mainly for the sole reason that it allows the receiver an active part in the tale, a chance to partake and take action according to the interpretations the player makes in her meeting with the content, both story and play. It adds a dimension of immersion to the content, where the player becomes an active part of the story and the interpretations that arise from the player's meeting with the content carry with them a risk and a weight. Is it the right choice? Is it the correct choice? What will happen when I do this? Why am I doing this? Why did I do this? This becomes the core of the experience when we're given agency to act within the game and its context, both for play and for story. Here is the "transferring of responsibility from the text to its readers" that Fish describes. (Fish, p. 151) We open up the path for several different approaches and interpretations to navigate the maze that is the content of this "text", if we could be so bold to call the game such. The player carries the weight of the validity of the interpretation in conjunction with the developers. *"Or to put it in another way, what my analyses amount to are descriptions of a succession of decisions made by readers about an author's intention- decisions that are not limited to the specifying of purpose but include the specifying of every aspect of successively intended worlds, decisions that are precisely that shape, because they are the content of the reader's activities."* (Fish, p. 161)

The ability to act is the central part of what sets games apart from other mediums, the feeling that what we do in the context of a game matters, both as play and as story. As players, we can see the validity of an interpretation; we have the ability to see through where we are being tricked, to decide for ourselves what the truth is and to resolve a situation as we see fit. It also allows us to follow the different paths of the game to explore content and to see different sides of it throughout different playthroughs. This potential was used in the game *Fahrenheit* (Quantic Dream, 2005) where at pivotal points in the story, you could choose which character that you wanted to play (Lucas Kane, the fugitive, or Carla Valenti, the cop on the case) and thus explore different sides of the story as it unfolds. This is similar to what we can see in *The Witcher 2*, discussed earlier; where our choice in the conflict dictates what information is available to us as players, information that can change our interpretations. When we have the freedom to choose, we are also aware that we close off paths by choosing and that there is information that is no longer available to us. *"In a cybertext, however, the distinction is crucial- and rather different; when you read from a cybertext, you are constantly reminded of inaccessible strategies and paths not taken, voices not heard. Each*

decision will make some parts of the text more, and others less, accessible, and you may never know the exact result of your choices; that is, exactly what you missed." (Aarseth, p.3) The danger of the game is also the danger of the story. We can get lost in the maze and never reach our goal, but we are free to choose where we go. Agency is thus both a blessing and a risk that is added to narratives.

It also gives us the opportunity to see how different interpretive communities perform, in real time and with actual statistics to further develop studies upon. With the advent of games with online portions, developers gather statistics on the way the players play the game and we can further analyze the paths that the receivers of the content make through it, thus studying their different interpretations. One game that serves as a good example of this is *Life is Strange* (Dontnod Entertainment, 2014), a narrative focused adventure game, where the player has great agency within the narrative and the central game-mechanic is the ability to turn back time to a certain degree, in order to solve puzzles and redo choices, and where we are shown statistics after each chapter of the game about how many percentages of total players that have chosen which possibility. This sort of gathering of raw data, often in real time, can show both progress and paths taken through the story. In essence, developers can collect virtually all information on the players' interactions with the game. We can follow the players every step through the path of the work, and thus gain insight into the ways they make use of agency, even if we can only extrapolate towards their interpretations and the reasoning behind the choice.

The amount of agency given to the player is a subject that must be carefully considered, both from a developers point of view and from an analytic point of view, because the ability to affect the narrative and its progression can drastically change the interpretations of a game and the meaning that people will find in it. It demands a lateral approach to constructing narratives, unlike what is found in other mediums, and it demands the same when we analyze the game. We must always consider that it is one of several paths that can be taken and also look at these different paths in relation to each other. But we must not just focus upon the agency that a player has in conjunction with the narrative itself, but also at the amount of agency that the player has in conjunction with the game-mechanics as well, as these carry with them their own metaphoric and symbolic meanings. As we discussed in the previous chapter; games have several channels of conveying meaning and these channels can be at odds with each other.

Player participation is essential to games, both its weakness and its strength. The developers of a game hand over part of their editorial power to the recipient, opening up their work for many different possibilities and interpretations. Is the main character a hero or a villain? Is she a caring parent or a distant presence in the family? It opens up for many potential stories, all within the framework of a single story. The cues that the developers leave in their work are interpreted by the player, just as the cues left by an author in her work are interpreted by the reader. The difference is the player has an active part to play in the work and can steer the work in both subtle and direct ways through her interpretations and actions.

One game that makes use of this is *Home*, by Benjamin Rivers (2012), where you walk through a scene, solving mysteries and challenges to further proceed along the path, discovering what happened in the story before this point, but where every piece of information is open for interpretation and where at the end, you yourself has to decide what the actual events are. Did you murder your wife and best friend as they were eloping? Was it a murderer hiding in the woods? Is it all a conspiracy where you are being framed? The game has no definite ending; in fact, the game is all about interpreting the events of the game and the information that you receive. You decide where to go and what to explore, thus constraining the information that is available to you. The path out of this maze is one you construct yourself when you decide that you have enough information to be sure of your interpretation.

Agency in conjunction with narrative is interpretation taken to the extreme and it leaves us, as recipients of the work, in a dangerous place. Every path that we take can lead to a premature end or to an endless journey from which there is no escape. It pushes the focus toward the journey, rather than the destination. It is not necessarily the answer that is the central part of such a narrative, but how you get to the answer. We are aware that for every choice we make, for every interpretation, there are other potential choices and interpretations. We must consider the choice that is presented and its meaning, both for us as individuals and in the context of the game. We must reflect upon the choice and its meaning as we see the consequences of our actions and choices. We are not only interpreting external information as we do in traditional mediums, but also internal information as we are part of the creative process of the journey through this maze.

Chapter 4:
Game mechanics and narrative

One of the most defining elements of a video game is the mechanics, influencing the narrative in both direct and subtle ways. The mechanics of a game define it; if you change the mechanics you change the game, therefore it is important to remember that narrative is just not something that is added to any old game mechanic. Mechanics are just as important to video game narrative as the choice of words is for narrative in literature; the plot might be the same, but different presentations will lead to different interpretations and receptions of the text. Even with games using similar mechanics, the fine tuning and performance of these mechanics will lead to different results. Game mechanics are the implementations of the theme for the narrative and the characterization of the avatar that we inhabit in the story.

Game mechanics are operational and constitutive rules manifested in the play of the game. They are what we can and cannot do in a game, enforcing both freedoms and limitations placed upon the player in her meeting with the work. They are also the simulated reality which is delivered to the audience through the representations of the game and its content, and furthermore, as Kristine Jørgensen puts it:

> *"Gameplay is not a feature designed into the game alone, but an emergent aspect of interaction between the game system and the player's strategies and problem solving processes. In short, gameplay is how the game is played, delimited by the game rules, and defined by the dynamic relationship that comes into being when the player interacts with these rules. The gameplay* of *a specific game can therefore not be fully understood without playing the game and becoming familiar with the game system and its dynamics"* (Jørgensen, 2008)

Miguel Sicart uses the definition of game mechanics as *"methods invoked by agents, designed for interaction with the game state"* (Sicart, 2008) and this is the definition that I will base this work upon. He also states that:

> *Game mechanics are concerned with the actual interaction with the game state, while rules provide the possibility space where that interaction is possible, regulating as well the transition between states. In this sense, rules are modeled after agency, while mechanics are modeled for agency.* (Sicart, 2008)

In other words; rules are theoretical and game mechanics are practical, the manifestation of and interaction with a game's rules. *"Game mechanics would be low-level descriptions of game rules or clusters of game rules."* (Sicart, 2008)

Where other traditional mediums deliver their themes and emotions through traditional information channels, i.e. text, sound or image, video games rely heavily upon interactive action, though we must not forget that games are presented visually and aurally. Game mechanics is portrayal of the player's role put into potential action, a reflection of a character; therefore the choice and tuning of game mechanics are essential for portrayal of any kind in a game. Changes in game mechanics will deliver a radically different story; an intense and terrifying horror game like Red Barrel's *Outlast* (2014) where you play a reporter investigating strange events at a psychiatric hospital in which the inmates have gotten loose would be a radical different game if the player had the ability to fight back against, or even kill, the deranged and murderous inmates, instead of having to sneak past or run away from danger. In other horror games like *Silent Hill* (Konami, 1999), where you can, and in several instances must, fight the horrible creatures that walks in the fog, the sense of horror is delivered through the scarcity of resources that make you able to fight back and survive. Ammunition is scarce and melee weapons like bats or golf clubs deteriorate with use and you are eventually left defenseless if you use a weapon too much. An abundance of resources to combat the creatures would radically change the nature of the game and its narrative.

We must consider two things when we deal with mechanics in video games: context and representation. Mechanics must always be seen in the context which they take place in; the same mechanic can be received differently depending on the context of different games. They are the vocabulary in which we create our interactive stories and experiences. As in real life, actions can have different meaning in different situations, and it is the same when it comes to the actions that game-mechanics allows us to do.

These examples show how game mechanics play an important part of delivering the narrative and its themes. This again leads us to elements that I discussed concerning ludo-narrative dissonance, where the mechanics of a game tells a different story than the narrative of a game. Since games are such interactive mediums, it is of utmost importance to not only tune game mechanics to deliver the intended experience and meaning, but it is also important to understand how they deliver narrative information and theme, and how it is received by the player. This places the focus of games, when it comes to the mechanical portion of them, squarely into territory of Reader-Response theory. The mechanics of any given game is rigorously play-tested during development, in order to make sure that they work in the intended fashion, relying on response from the players to tune and rework game mechanics, bot for functionality and for reception. No other narrative medium focuses this hard on the

reader's role, going so far as to involve readers in the development process of the work. This also shows us how important game mechanics are for games; something that we must take into consideration when we analyze games as narratives.

Mechanics in a game lies at the very core of it; it is the very game itself. The reality in which both narrative and action takes place. Mechanics form a constructed reality, in which a story is played out, where we have a role in this narrative as both actor and audience. To be short; mechanics is what lets you "do a thing", the way that you interact with the game's state engine. It is important to remember this, from a narrative perspective, that the reality of a video game is constructed out of the rules of the game and as much part of the fiction as anything else in the narrative. It creates the confinements that make up the boundaries for what is possible within the narrative-action and the boundaries of the player's realm of agency. It is important to note that there is a difference between, for instance, cut-scenes where the player is reduced to a passive participant and segments (both interactive cut-scenes and gameplay otherwise) where the player can interact and does have actual agency. Beyond simply providing the "reality" in which we play, it also gives us the actions we have available to us as players in the context, i.e. the actions that are possible within the simulated reality provided by the rules.

The mechanics of a game are the tools that we use to act out the story, much like the repertoire of the Italian commedia dell'arte or audience cues given in improv theatre, where actors have a set of actions and story hooks they can choose from to form their stories. It is not enough to just remember that action and game mechanics shape and influence the story as much as it shapes and influences the play of the game itself. We also must remember the metaphorical and symbolic value of the actions of a game; these actions are the actions that we read about in a novel or watch as they are performed in a movie. We must therefore think of these actions, even though they are actions in potential and not necessarily utilized in every given player's experience with the game, for their metaphorical and symbolical meaning. Not only must the actions be interesting in their own, for the sake of play, but they have to be considered for their own meaning. We cannot diminish the impact and meaning that actions in a game has; the trials of Hercules, Sherlock's chase after Moriarty and the Fellowship's journey into Mordor, all of these are actions that carry with them meaning, actions that are symbolic as well as performative.

Mechanics as a narrative vehicle demands that we start looking further into the symbolical and metaphorical meanings of the actions that we make use of in a game and how

actions are designed to enhance sensations and moods that are imparted into the receiver. It can slow down or speed up the pace of the action, depending on how and in what context an action is placed within. If desired, the actions a player has to perform can be dreary and slow in a gray kafkaesque office workplace, or fast paced and hectic in a World War II setting. We can see examples of this in, amongst others, games like *Papers, Please* (Lucas Pope, 2013), where you play an immigration inspector at the border checkpoint of a fictive Eastern European country during the Cold War era. The gameplay here is repetitive and dreary, bringing about shortcuts to escape the mundane, in the form of taking bribes, or paranoia, through the fact that every person you let through the borders might be a spy or an insurgent, but you still cannot take too much time to screen everyone properly because you've got a quota to meet by the end of the day. If you do not meet the quota, you are fined and then you and your family suffers, if you meet you meet your quota or go above and beyond, then you are rewarded, either through better equipment or a higher salary. In this game, both the visuals and the mechanics add to the narrative of the game, boosting the sensations that are being conveyed. Boredom, repetition, what happens when you're not paying attention to your work, consequences for failing. The actions that you perform each day within the game are not interesting, nor are they very fun; they are actions that you have to perform to secure food on the table for your family.

Negative Space

The difficulty with mechanics in games lies in the fact that it is tiered in several ways. There are intended actions, possible actions, unintended actions and impossible actions, all of which has to be considered when we try to make sense of the narrative potential that they contain. Whereas we, in literature or film, do not have to consider what is impossible in a work of fiction, as it is placed with in a closed and finished reality, in games, due to the interactive part of the work, we must also look to what the game allows us to do. Games like *Fallout 3* (Bethesda Game Studios, 2008) and *The Elder Scrolls V: Skyrim* (Bethesda Game Studios, 2011), gives the player the chance and freedom to explore vast worlds, to become a hero or a villain, and to kill and murder everything and everyone, but where they draw the line at the murder of children. In either of the two games, the child-characters that inhabit the worlds cannot be killed or harmed in any way. The reasons for not allowing this are many; to not condone violence against children, to stay away from controversy and not be attacked for being "a child murder simulator" or just plainly because it is not part of the message that the

game wants to present or even allow. (Several player made modifications of both these games have added this feature, for various reasons, but mostly for realism) The children are there to create a sense of fidelity and further the presentation of a "living reality", much like what Roland Barthes describes in his article *L`effet de reel* (Barthes, 1968), where he describes a overuse of details to create a sense of real in the recipient of the work.

However, in video games where you can interact with just about anything in all manner of ways, this becomes a problem when you are faced with specific instances where you cannot interact in the manner that you are trying to, even have come to expect that you should be able to. The message behind this might be a morally good one, as in the above example, but it is a general problem and we must be equally clear about what message our restrictions are conveying as to what our allowances are conveying. The children in these examples become implementations of Chekhov's gun, serving no actual function in the game, but leading you to believe that they will serve a function according to and on the same level of everything else in the game.

We need to see the negative space of game design and the freedom that agency delivers us, to be able to critically understand the message of any given game, both concerning narrative and game mechanics. A high fidelity representation of our own world in a video game where we can do anything we want, except vote in the current election that is taking place in the game, for instance, can be seen as delivering a message that voting is not important. It could very well fall outside the scope of the game designers' idea or the technical/economical limits of the project, but as games create worlds that reach higher and more detailed levels of fidelity to reality in their representation, we must study these aspects of games further. The prerogative agency gives to players to change and interact with the fiction requires that we look closely at what we cannot do in the same manner that we look at what we can do, i.e. the negative space of video game mechanics and the message they are delivering. When we interact with possible meaning actions, as we do in a game, what we cannot do becomes just as wrought with meaning as what we can do in the context at hand.

Translations

Game actions that players perform are adaptations and translations of actions in the real world, and here I make use of the terms as Robert Stam proposes in *"Beyond Findelity: The Dialogics of Adaptation"* (Stam, 2000); the difficulty of the given action is thus a translation

of the real life difficulty carrying with it the symbolic weight of the action. Some these translations are gross simplifications, even bordering into the realm of abstraction, save for the fact that they are part of a representational context in the reality of the game as constituted by the rules. Real Time Strategy (RTS) games are a prime example of this as the action in these games are rather complex and abstract concepts from real life, primarily war and the conduction of it, translated to managing resources and troop movement across several fronts of the theatre of war. RTS games are computerized versions of board- and miniature games like *Warhammer 40.000*, *Risk* and *Chess*, focusing on strategy and asset management, rather than controlling a single character through obstacles.

The mechanics of a game are also mapped to the input device which the player uses to engage with it, with the complexity of the input command further being a translation of the difficulty and weight of a particular action. Thus, we have three levels through which an action is translated through, from real life action to game mechanic to input command.

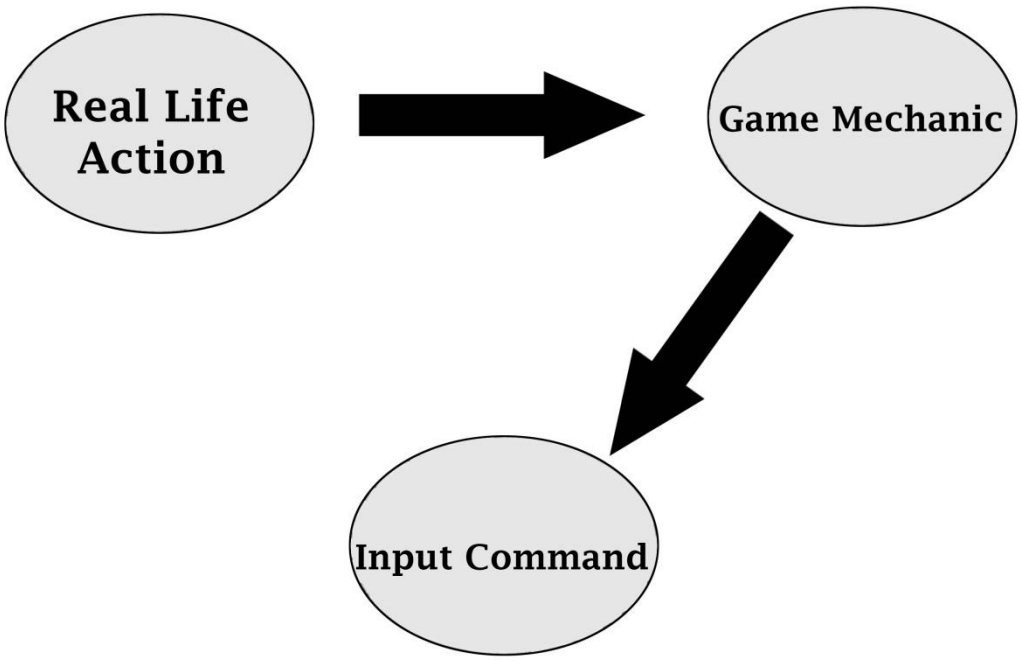

Fig. 4.1: *The three levels of translation that are involved when a real world action becomes something a player can perform in-game.*

Fighting games such as *Tekken* (Namco, 1995), *Street Fighter II* (Capcom, 1991), and later iterations of the two series are prime examples of how this translation works. Each character in these seriesgames has their own fighting style, which are simplified versions of real life martial arts styles such as Sumo, Kung Fu, Kick Boxing, Drunken Fist, Muay Thai, etc. The more powerful actions require more complex and carefully timed input commands to be executed, often in the right context, than the simpler and more straightforward actions. This requires a player to be skilled at the game in order to perform the best actions and most advanced techniques that the game mechanics allow, necessitating training, diligence, and mastering the basics of the art, just as in real life.

Game mechanics, no matter how abstract they are or if they are in a representational context, embody meaning and are open for interpretation, just as much as any other meaning bearing entity in human culture and society. Game mechanics have meaning, which we must remember when we are analyzing video games as cultural content. They have meaning by not only what they are, but also how and why they are performed, both inside and outside the magic circle of the game[24].

Thief: The Dark Project

Thief: The Dark Project (Looking Glass Studios, 1999) is the game that started a genre, namely the first person sneaker; sharing many familiar traits and mechanics with the FPS genre (which we know from the earlier discussion of *Bioshock: Infinite*), but with a focus upon stealth gameplay instead of combat and defeating enemies. *Thief* was monumental for both its gameplay and the A.I. (Artificial intelligence) that the NPC (non-player characters) employed which was at the time more advanced than what had previously implemented in games.

The play of the game works in conjunction with the narrative of the game, but it does not just assist the narrative in delivering a story; it also tells its own story, through the way that the gameplay has been tuned and put together, because actions have meaning in and of themselves. The mechanics are storytelling devices; they tell their own story. Even if we

[24] The magic circle is the border between the real world and the game activity. It is not always a clear cut distinction, but separates what is part of the game and what is not part of the game. The magic circle can be both physical and mental, meaning that there can be a physical component (a game board or a football field) or it can be a mental construct that emerges when two players decide to play.

removed the narrative, by which I here mean dialogue and text, the gameplay would still tell its story, through the way the mechanics operate as a whole.

In the narrative, the player takes on the role of Garrett, a former member of the Keepers, a shadowy organization guarding the balance of power within the City, as he turns away from the order to become a thief, using the skills of stealth he learned from the Keepers to fill his own pockets. Later on, Garrett is placed between a rock and a hard place as he is deceived and forced into a conflict between the two factions vying for control of the City, namely the Order of The Hammer and the Pagans, embodying respectively order and progress versus chaos and nature. You, as the player, are hired to steal a mystical object known as The Eye, which acts as the game's McGuffin, but are afterwards betrayed by your employer and drawn into the plays for power. As the player, you must make use of Garrett's skill in stealth to sneak past guards, steal valuables, distract witnesses or foes and obscure yourself, in order to survive the situation and come out on top.

Thief: The Dark Project (From now on *Thief*) has its gameplay designed to make waiting, patience, and short bursts of action engaging, in a tension and release cycle, as the player moves from situation to situation, it makes not taking action as interesting as actually taking action. The game also necessitates exploration of the game environment, as the player has been informed what her goal is, but not where she has to go, or how she is supposed to get there, to fulfill the goal, in addition to the fact that there are multiple paths through the environment that lead to the goal. The game plays out over several missions and areas where we are tasked with stealing either a certain monetary amount (either in the form of cash or valuable items) or a specific item, where we have to maneuver past guards and alarms. The NPC's in the game work on both aural and visual cues as Garrett makes his way around the game world, investigating strange sounds if you make too much noise and spotting you if you are not well enough hidden in the darkness.

The visual design of the game is firmly set in gothic steampunk aesthetics, stealing from both fantasy fiction and the 1800's industrialism. The areas that you can explore are all reminiscent of turn of the century London, mixed with magic, cults and impossible technology.

The core gameplay of Thief lies in the game's stealth-mechanic, making use of sound and light, in conjunction with the non-player characters' A.I., to make the player feel vulnerable, and to enforce the need to hide from enemies, through clever tuning of the game's

combat mechanics. Darkness will make it easier for the player to hide from non-player characters in the game, while loud noises will make it easier for guards or other enemies to discover her. Information about these states are delivered visually and aurally to the player; the quality of the light around her is displayed through a Light Gem-icon in the game's HUD (heads up display), which you can see illustrated in fig. 1, where the darker the icon gets the better she is hidden, and she can hear both the noises she herself, the guards, and other characters in the game produces, determining both how likely it is that she will be heard and the attentive state of the other characters. Different surfaces will produce different amounts of noise, which can force the player to take a different route unless she finds a different manner of overcoming this obstacle.

The game's stealth-mechanic is a core, compound game mechanic (where multiple mechanics come together, as a unified whole) that is influenced by, and in turn influences, several other game mechanics, and is the mechanics that the player will make the most use of in her interactions with the game. The player will spend a lot of time during play in hiding while figuring out the habits of and the routes that characters in the game will take and where she can hide, to find the gaps where she can sneak past. Doing this allows her to make her way around obstacles, to set up the environment to her benefit, or to find a way to make enemies deviate from their set pattern so that she can proceed.

Fig. 4.2: *#1: Light Gem, #2: Health, #3: Current weapon equipped, #4: Current tool/item equipped (Thief: The Dark Project, Looking Glass Studios)*

Non-Player Characters (Guards, creatures and non-combatants) in the game will respond to changes in the game state, such as spotting the player unless she hides in shadows or if they hear unfamiliar sounds. Should the characters in the game discover a change in the game state (i.e. discover the player's presence, or find a sign of her passing,) they will become alerted and investigate, either attacking her if they can confirm her presence or moving on if she has managed to hide well enough before they can confirm that she is there, but remaining in an alerted state for a time afterwards.

In addition: yes, while there are combat mechanics in the game, which in several ways are similar to those that we can expect to find in any given FPS-genre game, even here we can see the focus is shifted away from action-oriented combat, as we know it in the FPS-tradition, to exploitation and enforcement of the game's stealth mechanics. *"If you let players keep their gun, players will want to solve problems with their gun."* (Floyd & Portnow, 2013) However, in *Thief,* combat is tilted heavily against the player's favor, encouraging the player down different playstyles, with a focus on patience and waiting, while at the same time making use of the "guns". All the tools that are available to the player, are either working in conjunction with the stealth element or hindering it, adding further complexity to the stealth mechanics. The tools and weapons are *"Logical functions which can be applied to the problems at hand"* (Floyd & Portnow, 2013) and which the player uses to overcome the challenge presented before her. These mechanics deliver a different theme and story, in their own, than similar mechanics, which are not so focused upon the theme of stealth and the role of a thief, would do.

***Fig. 4.3**: Offensive Weapons*

Broadhead Arrow	1-6 points of damage (does five times more damage if used from stealth)
Fire Arrow	Explosive, 7-17 points of damage (No bonus from stealth, will increase visibility and explosion will attract attention)
Gas Arrow	Knocks out most characters in the game, can extinguish lights, such as torches.
Sword	Damages every enemy in the game to various degrees (does five times more damage from stealth)
Flash Bomb	Blinds characters for 6-7 seconds and deals damage to Undead.
Explosive Mine	Explosive, 7-23 damage, will attract attention.
Gas Mine	Knocks out most characters, extinguishes lights, such as torches.
Sunburst Device	Explosive, 10-24+ damage, will attract attention, can be used to break open locked doors.
Blackjack	Knocks out most characters, only works from behind, does insignificant amounts of damage.

***Fig. 4.4:** Utility Weapons*

Water Arrow	Extinguishes lights, cleans away blood traces, and damages fire-based enemies, damages Undead if upgraded to Holy Water Arrows.
Moss Arrows	Covers an area of horizontal surface with Moss, which decreases the sound produced by that surface.
Noisemaker Arrow	Produces sounds, which will distract nearby enemies.
Rope Arrow	Shoots an arrow with a rope attached, which the player can then climb to reach different areas, it can only be shot into wood or grass surfaces.

If we look to the three primary weapons of the game, which are the only ones that are consistently present, namely the blackjack, the sword, and the bow, we can see that only two of these are lethal weapons, namely the sword and bow, with the blackjack employed for non-lethal takedowns. The two lethal weapons deliver a modest amount of damage in a straight up

confrontation with guards and other characters in the game. In conjunction with the large amounts of damage most enemies can deliver to the player -a mechanical manifestation of the fact that Garret as a narrative-character is a thief and not a warrior- it becomes inadvisable to engage more than one enemy at a time; which often becomes a problem, since most enemies will shout and attract other enemies to your position. The effectiveness of the weapons will on the other hand increase if employed from a state of stealth, delivering more damage than a given weapon is capable of otherwise, meaning that it is both contextual and situational.

This shows us that the player and her role in the game is that of an underdog, weaker than other characters in the game, relying on wit rather than brawn. It paints the character of Garret as the unlikely hero, the thief that must save the world. He is more antihero than anything else, as the play requires us to adopt characteristics from criminals rather than traditional heroes.

Many games feature mechanics similar to this for the same narrative purpose; in every iteration of Wizards of the Coast's *Dungeons & Dragons* pen-and-paper roleplaying games, rogue class characters have the potential to backstab and attack from stealth for increased damage potential. *Dungeons & Dragon*s is also a marvelous example of narrating a character through mechanics, as every different class can employ unique game mechanics that are relevant to the narrative role that they are envisioned to fit, but at the same time leaving room for players to act out their own vision of a character.

The sword is further connected to the stealth mechanic in that it not only works at its best when in stealth, but it also increases her visibility and makes it easier for non-player characters to spot the player when she has this tool equipped. The same is also true for when the player equips and uses Fire Arrows, one of the most potent weapons she has available, which will drastically increase her visibility. This connected nature of improved functionality if employed in stealth with at the same time decreasing the effectiveness of stealth, further strengthens the bond between themes and gameplay, giving us a tangible effect of the narrative characterization of the avatar that the player embodies.

The stealth mechanic and the Light Gem are the defining elements of *Thief: The Dark Project*, being integral to both the gameplay and the narrative portrayal of the player's avatar and the narrative itself. Every aspect of the game is connected to this primary mechanic, in some form or other.

In fact, the narrative is so closely linked to this game mechanic, and the sensations that it produces and themes that it evokes, that it could not be told without it. Changes in this game mechanic would result in a vastly different story. The dangers that even a single guard poses to the player, describes how vulnerable and fragile Garret as a character is, tapping into a vast lexica of both literature, film and games, for tropes and stereotypes that are familiar to the player concerning the idea of the medieval and fantasy thief. By tapping into these tropes, in conjunction with the game mechanic, the developers strengthen both the narrative and the game mechanic, making the role the player inhabits both familiar and understandable. The mechanics become the manifestation of characterization for the narrative protagonist, in conjunction with animated cutscenes in between missions and voiced monologues delivered by Garret during play. This shows that Garret as a character is not just an empty shell to be filled by the player, but is portrayed more like an actual individual with strengths and weaknesses, giving us the depiction of a round character. The way that we can play the character and what we can do with the mechanics available to us through the character are all part of the characterization and narrative process. We've taken control of a specific character in a story, a character relevant to it and who is involved in it on a personal level, not just given an empty shell to wear for the duration of the play.

This way of characterization can be put in contrast with the game mechanic characterization of the character of Dr. Gordon Freeman, from *Half-Life* (Valve Corporation, 1998), who is a silent protagonist and where the game mechanics have little to no value of expanding upon the character, both in the narrative and the gameplay. The game mechanics of *Half-Life* are those typical of the FPS genre –at its basest; run, jump, and shoot- and the character could have been a bulking Space Marine, rather than the theoretical physicist that he is, and nothing would have changed in conjunction with the game mechanics, as they have no part in the characterization. This is clear when we look at the expansions to *Half-Life*, namely *Opposing Force* (Valve Corporation, 1999) and *Blue Shift* (Valve Corporation, 2001) where you play as a U.S. Marine and a security guard, respectively; the game mechanics are the same in all the iterations, but the character that you employ in the narrative is vastly different. They perform in the same manner across the board, meaning that there is no difference between the characters as they are presented through the gameplay. There is no unique element of the game mechanics that tell us something more about the character of Dr. Gordon Freeman; the theoretical physicist is interchangeable with the Marine.

What is most important here is the question: What is the game about? Not just where it concerns the story, but where it concerns the gameplay. What is the identity of the game? What is the one thing that the game cannot be without lest the game become a different game? In the case of Thief it is the stealth mechanic and the way that other mechanics are tied together with it, how the pieces are made to fit together. This interconnectivity between the different elements and the way that the developers balance them towards each other form the core of what the game is. Looking at a game that employs similar mechanics and a similar setting, *Dishonored* (Arkane Studios, 2012) –which is a spiritual successor to the Thief games- we can see that it is a vastly different game, just from the tuning of the mechanics. The game is tuned more towards combat, yet is at the same time open for a pure stealth experience like what we see in Thief, but in that case, many of the tools and abilities of the game become useless as they are purely tuned towards violence. Opening up for additional forms of gameplay, they lose the focus that makes *Thief* the game that it is. They have not added more gameplay and agency within the framework of what makes *Thief* what it is, but has widened the frames to include different forms of gameplay.

In *Dishonored* the abilities available to the player open up for a more fast paced and action oriented experience; you can teleport over short distances and you can stop time. Both of these abilities are immensely useful if the player wants to play the game stealthily and it allows her to traverse the world in a manner that is unlike anything that we saw in Thief. In addition to variations upon the weapons and tools that we can find in Thief, the player has six active "supernatural" abilities and six passive abilities at her disposal (which are unlocked by player choice throughout the game).

The active abilities are Blink (Short-range teleport), Dark Vision (Allows the player to see through walls and solid objects and to see other in-game characters highlighted), Possession (The player can possess animals and characters in the game for a short time), Bend Time (The ability to slow and eventually stop time for a short while), Devouring Swarm (The player summons a swarm of rats which attacks everything except the player) and lastly, Wind Blast (where the player can summon a gust of wind to knock down and damage characters in the game.)

Fig. 4.5: *Using the Blink ability in Dishonored, which allows the player to teleport to the area she highlights, allowing versatility in maneuvering through the game-world and sneaking past and/or attacking enemies. (Dishonored, Arkane Studios)*

These abilities all have functionality when it comes to performing violence in the game, but only three of them have functionality when it comes to a stealth approach to the game. Furthermore, none of these abilities are connected directly to the stealth mechanic, unlike what we can see with, for instance, the sword in *Thief*, where it becomes more efficient in a stealth state, but then again decreases the efficiency of stealth. There are of course weapons that break stealth and give away the player's presence, like the very loud pistol, as well as there are weapons that will not interrupt stealth, like the crossbow, but their performance is not connected to the stealth mechanic of the game, simply being a binary choice between Yes/No when it concerns breaking stealth. The abilities, weapons and tools of the game are in other words separate from the stealth portion of the mechanics. They are neighbors acknowledging each other when they pass on the street, but no more than that.

Other changes between *Dishonored* and *Thief* are visual clues towards the alertness level of the characters in the game; concerning how aware or suspicious they are of the player's presence. Where you in *Thief* only had aural and behavioral clues to go by, in *Dishonored* you will see a symbol above the characters in the game, which describes the level of awareness they have, on a scale from one to three. This mechanic change makes it easier

for the player to gauge how close she is to discovery and allows her to take more chances in breaking stealth, know precisely what her situation is. Add this together with the active ability of Dark Vision, and the player will know perfectly where the other characters in the game are, and how away they are of her presence, and it makes the role that the player embodies and portray, through the mechanics, an altogether different one. There is no need to be afraid of mistakes, and even the worst enemies pose little threat as you can easily escape from them. The narrative has been changed from an underdog stuck between the fighting of society's giants to a contender amongst them, all through the way similar mechanics are tuned and fit together. The difficulty of each challenge carries with it meaning, both thematically and symbolically, and the ways around the challenge carry with them their own set of meanings, themes and symbols. Changing how the player can overcome the challenge changes the meaning of both the challenge and how the player overcomes the challenge. In other words, we go from experiencing a thriller to experiencing an 80's action movie starring Arnold Schwarzenegger.

This efficiently reduces the stealth mechanic in *Dishonored* from a core mechanic, as it was in *Thief,* to a secondary mechanic. It is not an essential gameplay activity, but is merely one of several ways to overcome challenges, and it is not required for playing the game. It also changes the meaning that we get from the game mechanics, and the meaning of the game. Whereas *Thief* was the story of a thief, skulking in the shadows out of necessity to make his way through a dangerous world, trying to find riches to steal not only for glory, but to stand a better chance to survive the next day, *Dishonored* holds several different *potential* stories, where the protagonist can be anything from a bloody assassin murdering his way through a city, to a shadow and a whisper passing by unnoticed. But while the game mechanics are open for several stories, the story that lies closest to the themes that the mechanics present are that of the warrior, rather than of the thief, as the common feature of the mechanics lies in violence, rather than stealth.

Going back to *Thief*, we'll look further into the way that audio is integrated into the gameplay and how it affects theme, narrative, and gameplay, by borrowing a leaf from Kristine Jørgensen's work on audio and gameplay in *World of Warcraft* (Blizzard Entertainment, 2004). She states that "*Game system information is baked into the virtual environment, creating a situation where the usability information of elements such as audio becomes integrated with the sense of presence in the virtual world,"* (Jørgensen, 2008) meaning that audio acts as both a delivery channel for information concerning the game state

and as a way of supporting the fictional reality of the game and the narrative, theme, and mood of the game.

I'll state that audio has a dual function as a channel for gameplay information, and as a channel for information concerning narrative, mood and theme. As mentioned earlier, the player can hear the sounds that she herself produces during play, as well as the sounds produces by the characters in the game. This ties the audio directly together with the core stealth-mechanic of the game, delivering information that is necessary for that mechanic, but also ties it together with the themes and narrative of the game, as it integrates the game mechanic with the game world and the game's theme/narrative, and influences player action on both of these levels. *"Audio remains true to the perceived reality of the game world at the same time as it supports gameplay"* (Jørgensen, 2008). The player hears the fictional world around her during play, gaining both insight into the gameplay mechanics and the fiction of the narrative, which both are involved in shaping the player's action, both those that are forced upon her and those that she is able to choose of her own volition. The audio is equally parts warning to the player as it is story; it is making use of auditory icons to convey both gameplay and narrative information. *"Using sound signals that have a connection to real world environments while being stylized to fit the game situation creates the unique opportunity to make auditory usability signals seem natural to the gameworld."* (Jørgensen, 2008.)

The game mechanics, including the audio, feed the narrative of the story, which in turn feed the mechanics of the game; neither living in a vacuum, but rather a symbiotic relationship that creates the work as a whole. Both the game's mechanics and the narrative produce thematic and narrative information on their own, as well as in conjunction with each other.

Conclusions

What we see so far then is that the mechanics of the game, what we do and how we do it, not only work together with the narrative to convey information, but conveys information on their own. They give the player agency to shape the story, through the play, as they see fit in order to overcome the challenges presented. This furthers what we know about the relationship between play and narrative from what we've discussed earlier about ludo-narrative

dissonance; how the two can be at odds with each other, but now we also see clearer how mechanics on their own can convey themes and narrative meaning.

Garret, the nominal thief of the game, is portrayed both by what we learn of him through the directly delivered narrative and the subtly delivered narrative, namely the play of the game. In fact, we learn more of the character through the play than we learn through what is delivered to us through monologue, dialogue, and text. The dialogue and the text show us a competent man who is secure in his own abilities, but the gameplay shows us at the same that he is the underdog, who has to hide and skulk around in the shadows. The gameplay employs and makes use of tropes and symbols from film and literature; it turns them into mechanics in the game and produces challenges that suit these mechanics, as well as the themes of the game. We have the bank heist, the skulking in the shadows and the steampunk setting. Garret is parts Robin Hood, parts Arsène Lupin[25] and the Order of the Hammer relies heavily upon traits familiar from portrayals of the Knights Templar as keepers of the sacred mysteries and defenders of the faith. All of this is familiar to fantasy fiction going back years to the very roots of the genre. The mood of the game borrows heavily from works such as *The Castle of Otranto*, by Horace Walpole (1764), and *Bram Stoker's Dracula,* by Francis Ford Coppola (1991), making use of magic realism in the representation of an analogue of London at the turn of the century, with a medieval twist, both in gameplay and in the told narrative.

If the game had been made with different mechanics, it would also have produced different themes and a different story. Had Garret been able to take more damage, the game would have been less about an underdog skulking around in the shadows and more about a fantasy commando soldier, removing the requirement for hiding and careful observation of the enemy and their behaviors. It becomes the story of one man's war against the world, instead of the story of a man desperately trying to survive the place that the world has placed him in. It is a relatively small change in the mechanics of the game, but it has substantial effects upon the work and how the player interacts with it.

The fact that the player interacts with the work in such a fashion is the reason why we must analyze the game mechanics in conjunction with the narrative, not as separate entities. The actions that we perform in the context of the game carry with them their own meaning and as such must be considered for their meaning both in the context of the narrative of the game and in the intertextual and cultural context that they are placed. Video games borrow

[25] Arsène Lupin is a gentleman thief, known from Maurice Leblanc's works.

from a vast cultural and historical library, translating elements from traditional mediums to interactive storytelling and game mechanics, but not losing their meaning and symbolical value, though there is of course some changes brought on due to translating them, as no translation is 1:1.

The mechanics of a game are inherently linked to the story that it delivers, relying on the mechanics to tell the story, in conjunction with traditional narrative channels. While the plot might be the same, the story is not, as it is told in a different way, has different pacing, different mood and shows us different themes. It is the same with film; while the plot might be the same, *The Shining* (Stanley Kubrik, 1980) would be a different movie if the soundtrack had been replaced with 70's era disco music and the lines were delivered in the style of Robin Williams' and Jim Carrey's slapstick comedy, even if nothing else had been changed. The themes and mood of the work would be something altogether completely different from the psychological horror that it is. This is how integral game mechanics are to videogames as a narrative medium, and it shows how much we must pay attention to the actual play of the game when we analyze video games as narrative mediums.

It necessitates that the play and the narrative work together, as both influence each other, for better or worse. It also necessitates that we understand mechanics if we are to understand narrative in video games, if we do not we are ill prepared to understand how we can tell stories through interactive mediums such as games. Mechanics set both the tone and the mood of a work, which in all mediums drastically impact and affect the work as a whole. In our look into the mechanics of *Thief*, we can see that the mood of the game is tense and suspenseful, all depicted through the play of the game and not through the narrative, but it colors the narrative and gives depth to it.

Mechanics are part of the vocabulary of video games in particular and interactive mediums in general. This is not only when we deal with games as narrative vehicles, but with games as pure play, i.e. abstract games. Games and their mechanics carry meaning in and of themselves, this is obvious. But as we deal with more abstract games and mechanics, the necessity of interpreting these mechanics increases and also becomes increasingly difficult. But it has to be mentioned that there has been few attempts at analyzing the meaning of mechanics in abstract games and the academic and consumer culture of analyzing video game mechanics in this fashion is in its infancy as of now, with previous attempts sadly having been met with ridicule from the public and game studies academics —like how Janet H. Murray's analysis of Tetris as *"a perfect enactment of the overtasked lives of Americans in the 1990s-of*

the constant bombardment of tasks that demand our attention and that we must somehow fit into our overcrowded schedules and clear off our desk in order to make room for the next onslaught" (Murray, 1997) was met with ridicule and bile by Markku Eskelinen (Eskelinen, 2001)— something which will hopefully change in the not too distant future and the academic and gamer culture will be more open to, admittedly farfetched, analyses like this.

Abstract games are difficult to interpret as there is no fiction, no icons, no context nor a narrative to hook the elements of an interpretation on to for them to make sense, thus we can only begin to analyze and interpret such games by looking at the way which we analyze and interpret abstract paintings, like for instance Piet Mondrian's *Tableau I* (1921). *"An abstract game is a game that does not in its entirety or in its individual pieces represent something else."* (Juul, 2011, p.131) This means the game has no meaning beyond its meaning as a game and as play. The best example of such a game is *Tetris* (Alexey Pajitnov, 1984), which is known to most people, where there is no fiction or narrative, no character or setting in which to base our interpretations. There is no representational reality, only pure game mechanics. Most games are not as extreme as this, but it is a difficulty which we must be aware of as we begin to work with the meaning of games and how they convey it. I am not sure that we should actually say that an abstract game such as Tetris is meaning bearing, due to its lack of representational reality, but this does not stop the game from having potential readings and for the audience to gain meaning from it, albeit this will be, as Eskelinen says, largely through projecting onto the material.

Fig. 4.5: *The abstracted and minimalistic Loneliness, where the player controls the lower black square, trying to approach the groups of other black squares, only for them to run away as the player approaches. (Loneliness, Jordan Magnuson)*

We need the context of a representational reality to give the mechanics of a game their meaning, but this reality can be very abstracted, I admit, as is the case of *Loneliness* (Jordan Magnuson, 2011), where human beings have been reduced to nothing more than black squares moving across a flat, grey/white background, and where we have no context or representational reality save what is established through the game's title and the afterword by the creator, as the human beings represented in the game are abstracted icons with no resemblance to their real world counterparts. The context is necessary for games as meaning bearing constructs through which we can communicate, but it is not necessary for play, only the rules are. The rules are clear and concise structures that frame the play and which must be clear and unambiguous, but they are not necessary meaning bearing constructs, they simply establish a win/lose scenario, but should we place this within a context the rules open up for meaningful play, beyond the act of play itself.

Here we need to make use of Juul's classifications of Abstract/Representational games, referenced in Chapter 1. While *Loneliness* is abstracted it is more in line with what Juul calls Iconic Games, meaning games where

individual parts have iconic meaning: The king of hearts in the standard deck of cards suggests a king; it is not clear what relation this king has to other kings in the deck of cards or to other cards in the same suit. Presumably, the king and queen of hearts are married and the jack is somehow part of the court, but it is hard to take this any further. (Juul, 2011, p.131)

The line between abstract and iconic games is fluid and depends to a large degree upon interpretation, context and our willingness to see symbolism in mechanics.

As we can see with the game mechanics for *Thief*; without the context of the setting and the narrative, the game mechanics in and of themselves would be rules, but not meaning bearing, as it would be impossible to discern the meaning of the rules without a context, beyond providing challenges with win/lose conditions. Without the context the game would be, according to Juul's classifications, abstract instead of a representational and Coherent World Game.

Chapter 5:
Quests & Conclusions

What we've seen so far are four areas that are important for video games as a storytelling medium; namely rules, agency, ludonarrative dissonance, and how game-mechanics deliver meaning. I will now first apply them to the traditional quest structure and show how they complement this narrative structure, then I will further embellish on where we should continue forward from there. These are areas, as we've seen, where play and story can work together and also against each other. The reason why quest structures are so prevalent in video games is because of the way that challenges are a part of the tradition of quest-literature, but it is also because it plays on many of the strengths of video games. Quests are ideal for games, because of how they combine play and story, giving the play a context and opening up for interpretations; we need only look to allegorical interpretations of Chrétien de Troyes' *Perceval, the Story of the Grail* for examples of this. It gives the challenge that the player has to overcome a deeper meaning than just clearing the level; it becomes meaningful play.

Jeff Howard describes quests as the bridge between games/play and narrative (Howard, 2008, p.1). It is the marriage between explicit and unambiguous rules and interpretative story; in short it is inherently structuralist, and the reason why this formalist/structuralist approach lends itself so well to games is because of the structural element of the game mechanics and the way that it makes use of and requires functions to its elements. Indeed, Tosca describes quests as "*A quest, as we said earlier, brings some or all the storytelling elements (characters, plot, causality, world) together with the interaction, so that we can define it as the array of soft rules that describe what the player has to do in a particular storytelling situation."* (Aarseth, 2012) Aarseth also describes it as "*a game with a concrete and attainable goal, which supercedes performance or the accumulation of points. Such goals can be nested (hierarchic), concurrent, or serial, or a combination of the above"*

The word 'quest' connotes Arthurian legends, and in games we can trace its roots to the early days of *Dungeons & Dragons* (Gygax, 1974) and fantasy literature, but it could easily be exchanged with other words such as 'mission' or 'task', which often is the case in games with a sci-fi or present day setting. While the name changes, the structure is the same and it largely follows what we know from literature theory concerning kernels and satellites; indeed, kernels are an apt description for main-quests, while satellites describe side-quests,

subclasses used in most games to inform the player of the order of importance a quest has to the narrative. Indeed, side-quests/satellites are optional events that do not necessarily define the narrative of a game, but they are often a requirement for the player to power up the player-character and the player's skill enough that she can stand a chance to overcome the challenges that she is faced with in the main-quest/kernel events. Aarseth describes the importance of kernels and satellites in game-narrative in *A Narrative Theory of Games* (2012), and goes on to address the commonalities between games and stories, which according to him is world, objects, agents and events, which is part of every game and story. He also uses these to further explain four different game types, which are different configurations of fixed and flexible kernels/satellites:

1. The linear game: fixed kernels, flexible satellites.
2. The hypertext-like game: choice between kernels, fixed satellites.
3. The "creamy middle" quest games: choice between kernels, flexible satellites.
4. The non-narrative game: no kernels, flexible discourse: just a game.

(Aarseth, 2012)

The first three types are prime examples of agency rich narrative games, and tie together with how play and game-mechanics connect to create complex paths through the narrative/play-labyrinth, while the last type are pure play games (but this type can also contain emergent narratives, but it must be said that this kind of narrative is rather questionable.) (See fig. 3.1-3)

These analyses show that story-games display very different features along the four dimensions outlined above; in other words, there are many ways in which a game can be combined with a story, and so it does not make sense to look for one singular type of ludic story. (Aarseth, 2012)

These types are of high value to us as we analyze games from a narrative perspective, as they both describe how uni- and multicursal a game is and how much agency the player has towards the narrative of a game. While the mechanics of the quest can be simple, the narrative aspects tend to follow the theories of narrative functionality, proposed by Propp (2005) and Greimas (1983); especially Greimas' actant model is of great use here.

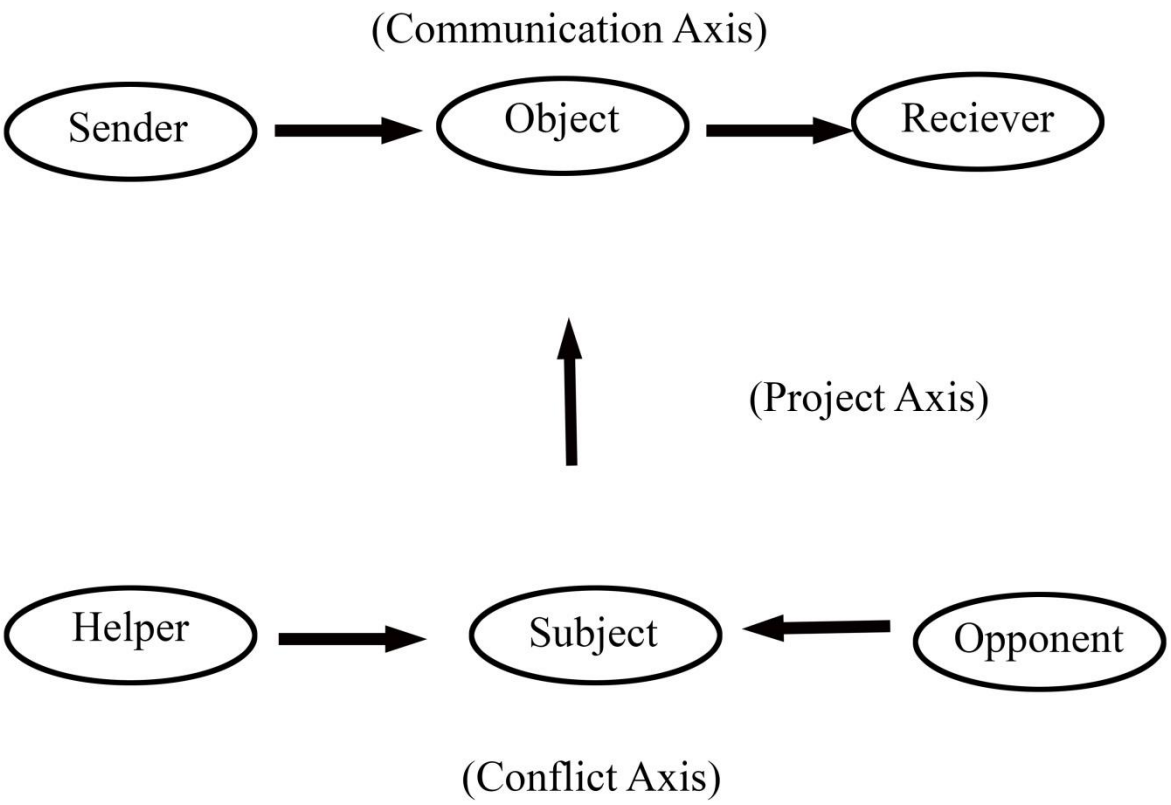

Fig. 5.1: *Greimas' actant model, based upon Propp's Morphology of the Folktale.*

Looking at Greimas' model we see that it covers the functions that we normally see in the traditional quest structure that is used in video games. Deconstructing *Dragon Rising*, an early kernel-quest from *The Elder Scrolls V: Skyrim*, we are tasked by Jarl Balgruuf with investigating a dragon sighting at a nearby outpost, and travel there with the Jarl's soldiers to battle the dragon in order to kill the dragon and gain its soul, after which we return to the Jarl and tell that we've completed our task and he tells us more of our place in the world, before he sends us to meet the a mystic order and learn magic from them. This is a simple explanation of the quest, and we can see the functions that Greimas describes in his model; the player is the subject, the dragon is the opponent, the Jarl's soldiers are the helpers, the Jarl is the sender, the dragon's soul is the object and the mystic order is the receiver. Looking at characters in this fashion, as functions, is extremely useful for games and is the reason why quest-structured narratives are so prevalent in games; the interactive nature of games and the fact that there are challenges that the player has to overcome, means that characters have to perform functions, mainly as either opponents, helpers, or senders/quest givers. We do need to add one segment to Greimas' model, namely Background Character, which are there to create a sense of realism and scale in a game. These are characters in games that are not covered by

any of these functions, but that despite this can, often, be interacted with at the basest level, both where it concerns narrative and game-mechanics, but as they have no connection to neither the narrative or any given quest, it is not necessary to consider them under these circumstances. They are simply interactive background characters.

We can also make use of *Dragon Rising* to examine the basic quest-types that Aarseth proposes, which are usually mixed together to form more complex tasks for the player to perform:

1. Place-oriented
2. Time-oriented
3. Objective-oriented

(Aarseth, 2005)

In *Dragon Rising* we're dealing with a combination of place- and objective-oriented quest-types; the player has to travel from A to B, to get an object, the dragon's soul, after which the player has to travel from B to A, and then to C. It could also easily have a time-oriented quest, in that the player has to perform the entirety of the task or parts of it within a specific amount of time. Especially the place-oriented quest is interesting from a narrative theory point of view, as it can be seen in conjunction with a narrative pause (Genette, 1983, p.99). Games such as *Fallout 3* (Bethesda Game Studios, 2008) and *The Elder Scrolls*-series (Bethesda Game Studios, 1994-2014) make heavy use of this, as quests often require the player to explore and travel through multicursal game-world to find her destination, and traversing the game-world can in itself be a challenge; either requiring defeating enemies stumbled upon, or simply the challenge of figuring out how to reach the place you need to go. The game-world of the latest iteration of *The Elder Scrolls*-series is about 40 square kilometers,[26] and *Fallout 3's* game-world is about 130 square kilometers[27], so navigating these game-worlds can present quite the challenge. Multicursal game-worlds like these open up for exploration can lead the player to come across quests and objects that will become central to either kernel- or satellite-quests later on, allowing the player to skip stages/requirements of the narrative that the player has not yet engaged.

Game-mechanics and interactivity open up for ways that the player can change the narrative, in ways that are already familiar to us from literature and film. Everything that

[26] http://www.wired.com/2011/06/skyrim-e3-hands-on/
[27] There have been no official figures on this, but 130 sq. kilometers is the estimate by the modding community, who produce fan-created content to the game.

Gérard Genette describes in *Narrative Discourse* (1980) can be utilized in videogames, in some way or another, both as a narrative feature and as an interactive feature; especially order, duration, and frequency can be utilized as game-mechanical features. I've already shown an example of this is in chapter 4, on how players can stretch narrative time[28], but events can also be repeated, i.e. so that a narrative event can be repeated x times. We can see this in, amongst others, daily quests[29] in *World of Warcraft* (WoW), by Blizzard Entertainment, and in the quest system of *The Secret World* (TSW), by Funcom, where almost every quest is repeatable after a varying cooldown period[30]. The only quests that are not repeatable in TSW are a few main story quests that contain narrative choices concerning the central conflict, i.e. the final quest in each main story chapter. Not only does this game-mechanically make these quests and their rewards unique compared to other quests, but it also makes these quests significant in the narrative, as they are only ones that are not repeatable. The value of this kind of repetition is utilized for the sake of play and conquering of challenges —repeating a quest gains the player experience and equipment that will help in future and more difficult challenges— but while the motivation for this kind of repetition lies in play, the narrative aspect of the repetition cannot be scoffed or overlooked.

That the same narrative tools that are used in literature and film, both can and is used in video games, is not a surprising fact, but the interesting fact here, is how these tools can be turned into game-mechanics that allow the player to interact with the game-world and the narrative. A game designer, contra an author, creates content that isn't necessary fixed in place, and that give the player control over these narrative tools through the player's agency. The player can decide when there are pauses, when events happen and to a certain degree how they happen, within the parameters put into place by the game's designer, as the game designer to a certain degree can only guide the player through the work. The possibilities are endless, so all we can do is either generalize or investigate particular instances in specific games.

Quests seem like the optimal strategy for game narratives, if only for the goal-oriented situation that is inherent in both games and quest-literature; quests are action towards a goal,

[28] Dishonored's Bend Time ability.
[29] Daily Quests in MMORPGs are quests that can be done once per day, in order to secure resources and/or experience points.
[30] Cooldown is a trait used for both quests and game-mechanics, where either the quest or ability is not available for a set amount of time after it has been used. Abilities are usually on cooldown for a few seconds, while quests usually are on cooldown for a few hours.

games are play towards a goal. Howard suggests that quests can be distilled into four strategies for use in video game narrative:

1. Create a dream-like, surreal space that both immerses players in a world of ideas and offers a sense of challenge and progression between the starting point and the goal of a quest.
2. Design symbolic objects that both function within the gameplay and reveal portions of a fragmented story, sometimes dispersed through the game world according to the principle of the "rod of seven parts."[31]
3. Develop characters who serve crucial functions in giving, helping, or impeding quests. Supply them with sparse but memorable dialogue that motivates the player to embark on quests but also offers some choice as to which tasks to accept and how to perform them.
4. Script meaningful interactions that allow players to overcome challenges through strategic gameplay that also conveys ideas, such as the magic system of *Eternal Darkness* or the virtue system of the *Ultima* games.

(Howard, 2008, p. 147)

These four strategies are valuable not only to creating and analyzing quest based games, but any kind of narrative focused game. They also cover all of the areas I've analyzed here so far and make us focus on both the rules, game-mechanical, and narrative aspect of a work. These four strategies allow us to see that play and story can work hand in hand, and that narrative is not just something that is added on top of a game's play.

Narrative theory is a valuable tool to analyzing video games as a storytelling medium, but as I've shown here, we are not capable to use them one-to-one scale, we need to translate them into a narrative theory that understands the inherent differences between interactive games and traditional narrative mediums. We need to understand the internal workings of games, what makes games unique as a medium, in order to understand and analyze them as narrative mediums.

How do games tell stories? They tell them through giving the player a way to interact with the material, and the chance to interpret and have the validity of their interpretation tested. Agency and interactivity are the most important aspects of games;

[31] The Rod of Seven Parts is a game object known from the early days of tabletop roleplaying games, where the aforementioned rod was the ultimate goal of the campaign and the players had to go on several quests to gather the seven parts of it, each with different symbolic meaning, in order to vanquish the evil foe.

without being able to interact with the work, we cannot play it. Therefore we must analyze how the player interacts with the work, the game-mechanics that constitutes the player's action in the work, and the meaning that this brings to the work.

These four aspects of importance that I've presented are not only valuable to us as we analyze games that make use of quest structures, but they are valuable for looking at games as narrative and meaning-bearing works altogether. They allow us to analyze experimental games such as *The Stanley Parable* (Galactic Café, 2013), where the main purpose of the game is to refuse to follow along with the directions given to the player by the game's narrator and where there are no quests, and *Dear Esther* (The Chinese Room, 2013), where the player is exploring a vast, dreamlike game-world and is given no clues or tasks concerning how to proceed. In these games the focus on player agency and game-mechanics are important analytical fields because they deconstruct and play with the conventions of games, even that of the quest structure.

My intention with this thesis has been to show what I believe to be the most crucial areas for analyzing video games from a narrative point of view. These areas are important in and of themselves, but it is when we see them as the more than the sum of their parts that we can begin to see games as a narrative medium. It is more than just interactive stories; it is how we are able to interact and the meaning behind the interaction. We need to understand and analyze potential meanings and the fact that games can open up for stories with diverging kernels where each player can experience the play from a unique way, not just from a subjective and interpretive standpoint, but in a way that is objectively different from each other, based on individual choices made by players. Games as a narrative medium open up for truly unique and subjective experiences, where the receiver of the work can see her interpretation affect the work during her experience of it. Not all games focus upon this, nor are all games narrative, but the potential is there and we need to be able to understand how the components work together if we are to analyze them, both alone and together.

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