

Bachelor's thesis

Degree programme in Film and Media | Animation

2018

Sonja Yrjölä

# DO YOUR CHOICES MATTER?

– Designing a system responding to character creation and interaction for a narrative computer game.

BACHELOR'S THESIS | ABSTRACT

TURKU UNIVERSITY OF APPLIED SCIENCES

Degree programme in Film and Media | Animation

April 2018 | 20 pages

Sonja Yrjölä

## DO YOUR CHOICES MATTER?

- Designing a system responding to character creation and interaction for a narrative computer game.

My thesis discusses interactive storytelling in computer games. I present aspects that I think add to the strength of games as a narrative medium, with many examples from existing games. Such aspects include: player agency, choices leading to consequences and communication with compelling characters.

I then go on to present my personal game project and explain ways in which I have decided to implement said aspects. Following that, I discuss concerns and possible issues regarding my game and ways in which I will attempt to resolve or mitigate them. I defend the decisions I have made while staying aware of their possible negative effects on the game.

I come to terms with the fact that my game is probably not going to be to everyone's liking because it lacks many key elements of player motivation, for example. However, I conclude that, even if my game fails in some regards, it can still be a valuable and interesting attempt to create something new.

### KEYWORDS:

Interactive storytelling, game design, game writing, character interaction, player agency

OPINNÄYTETYÖ (AMK) | TIIVISTELMÄ

TURUN AMMATTIKORKEAKOULU

Media-alan koulutusohjelma | Animaatio

Huhtikuu 2018 | 20 sivua

Sonja Yrjölä

## ONKO VALINNOILLASI MERKITYSTÄ?

- Hahmonluontiin ja vuorovaikutukseen reagoivan järjestelmän suunnittelu kerronnalliseen tietokonepeliin.

Opinnäytetyöni käsittelee tietokonepelien interaktiivista tarinankerrontaa. Esittelen erilaisia ominaisuuksia, jotka mielestäni lisäävät pelien kerronnallista voimaa, käyttäen olemassa olevia peli-esimerkkejä. Ominaisuuksiin kuuluu: pelaajan vaikutusmahdollisuus, seuraamukselliset valinnat ja vuorovaikutus kiinnostavien hahmojen kanssa.

Seuraavaksi esittelen oman peliprojektini ja perustelen tapoja, joilla olen päättänyt lisätä yllä mainittuja ominaisuuksia siihen. Sen jälkeen käsittelen pelini mahdollisia ongelmia ja huolenaiheita, sekä tapoja, joilla voin ratkaista tai vähentää niitä. Puolustan tekemiäni valintoja, vaikka tiedostan niiden mahdolliset kielteiset vaikutukset peliini.

Hyväksyn sen, että pelini ei todennäköisesti tule olemaan kaikkien makuun, muun muassa, koska siitä puuttuu monta keskeistä pelaajaa motivoivaa tekijää. Tulen kuitenkin siihen lopputulokseen, että vaikka pelini epäonnistuisi joissain kohdin, se voi silti olla arvokas ja kiinnostava yritys luoda jotain ennennäkemätöntä.

### ASIASANAT:

Interaktiivinen tarinankerronta, pelisuunnittelu, pelikäsi kirjoittaminen, pelaajan vaikutusmahdollisuus

# TABLE OF CONTENTS

<b>1 INTRODUCTION</b>	<b>2</b>
<b>2 GAMES AS INTERACTIVE STORYTELLING</b>	<b>3</b>
2.1 Agency and motivation	4
2.2 Communication and dialogue	5
2.3 Keeping track of the consequences of a player's choices	6
2.4 Influencing the ending	8
<b>3 MY GAME</b>	<b>10</b>
3.1 Synopsis	10
3.2 The status system	11
3.3 Looks matter too!	12
3.4 It's still very complicated	13
<b>4 CONCERNS</b>	<b>14</b>
4.1 Motivation	14
4.2 Restricting the player's agency.	15
4.3 Technical limitations	16
4.4 Does a story driven game need a message?	17
<b>5 CONCLUSION</b>	<b>18</b>
<b>LIST OF PICTURES</b>	<b>19</b>
<b>REFERENCES</b>	<b>20</b>

# 1 INTRODUCTION

As a very young medium, video games are in a state of constant flux with new ideas and approaches constantly being developed, for example in the area of interactive storytelling. Inspired by the diverse ways a game can be used to tell a story, I have set out to design and create my own. In this text I will present and discuss several interactive key components essential to narratively inclined games, in order to better understand my own decision-making process when designing mechanics for my game. I will present some interesting solutions from existing games that have informed or inspired aspects of my game. Additionally, I take the reader behind the scenes of my game and explain the inner workings and thinking behind its design.

In doing this, I aim to become more aware of challenges and possible issues I might face throughout the game creation process, helping me to avoid some of them at least. Hopefully this endeavour will eventually lead to one small but meaningful addition to the world of narrative video games.

## 2 GAMES AS INTERACTIVE STORYTELLING

I have always experienced video games as an extremely effective way of conveying a story or idea. The reason they stand apart from other media, for example cinema and most forms of theatre and literature, is the interactive component that is, by definition, present in games. It gives the viewer or reader a chance to become an active agent rather than a mere viewer. This is not to say that the other mentioned art forms are unaffected by the viewer. An individual's experience regarding a piece of media is always subjective, influenced by the individual's history, culture, personality, and even arbitrary things like their current mood or the time of day.

Still, a book or a painting, or to a lesser extent even a play or a concert, exists differently in an objective sense than a game. The book always contains the same combination of words and the film the same images. A concert or play performance may differ from show to show, but every member of the audience is still seeing the exact same show with just slightly different points of view due to physical seating in the audience. On the other hand, different playthroughs of a game are likely to be objectively different due the various variables it contains. A game technically has a limited number of data and possibilities, but a player will never be able to see every single conceivable version of the game in a single playthrough. Therefore, provided the player makes different choices, or the game contains a random component, every single playthrough of a game is objectively different.

This, in no way, means that games are a superior way of telling stories in any way, they simply are different. In their book *Interactive Storytelling for Video Games* (2012) Josiah Lebowitz and Chris Klug discuss the merits and challenges of games as a storytelling medium in great depth. Even within the medium of games there are a multitude of ways of conveying a story. Lebowitz and Klug compare different storytelling styles in games, the main styles essentially boiling down to how much agency over the story the player is given, and the ways in which the interactive component can affect the impact of the story. Lebowitz and Klug come to the conclusion that both systems have their merits and challenges, and whichever a creator chooses to use has more to do with what they want to achieve rather than one system being inherently better than the other.

## 2.1 Agency and motivation

The agency of the player, the interactivity, is essentially what makes a game a game. However, interactivity is a very broad definition of a game, and the ludologist (video game researcher) Jesper Juul (2015) presents a much more in depth definition for what a game is on his aptly named blog, The Ludologist (Fig 1.):

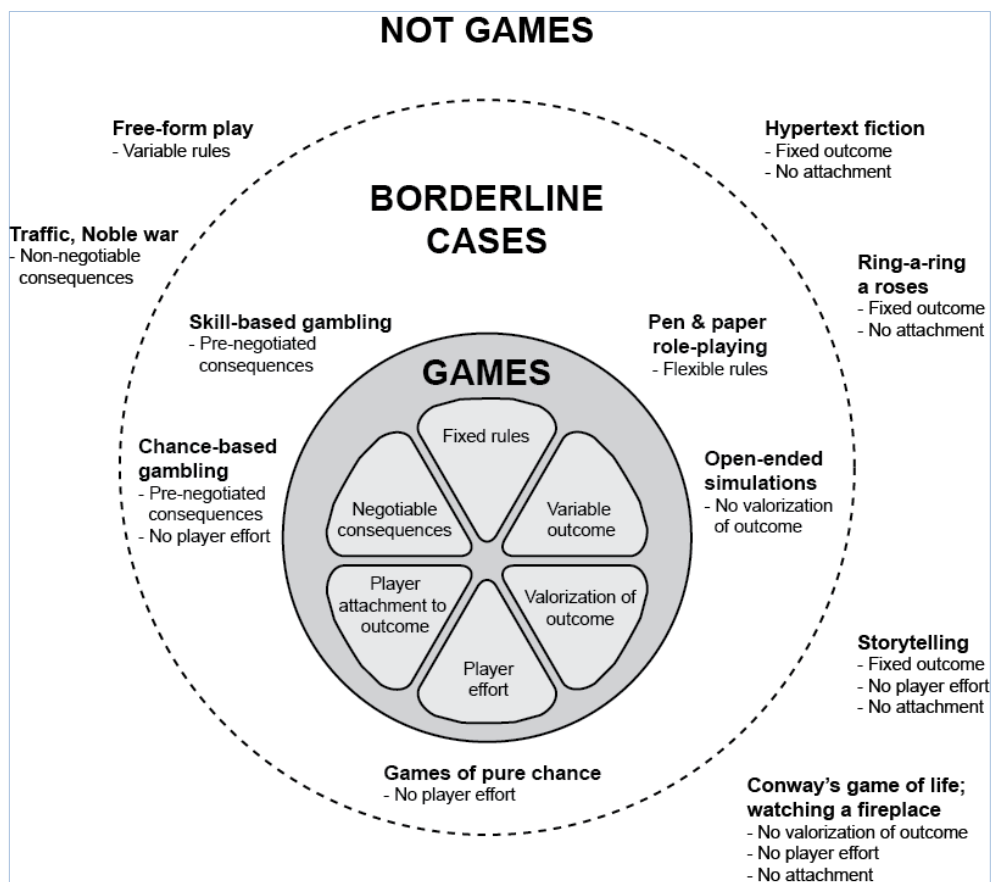


Fig 1: One way to categorize games, according to Juul (*The Ludologist*, 2015).

In this definition, “player effort”, “negotiable consequences” and “player attached to outcome” are in my opinion especially essential to why games are such a powerful tool for interactive storytelling. Since a player participates in, and often directly influences, a story in a game the chance of the player feeling invested and immersed in the story increases. Instead of following the main character’s story the player inhabits the main character, increasing the stakes of the situations the narrative requires the player to

solve. Of course, “variable outcome” and “valorization of outcome” can also influence a game’s appeal through adding replay value and rewarding the player.

In a game a complete story does not even have to exist in the traditional sense, but can rather be told through the experience of the player moving through the world of the game. Lebowitz and Klug (2012) mention throughout their book that many story focused games greatly limit the actual agency of the player in order to protect the intended narrative of the writer, since classical story structures easily fall apart if a player is given a lot of freedom. On the other hand, some very compelling stories can rise from this kind of random agent. I will further discuss this aspect of player agency regarding the story in the fourth section of this chapter.

Aside from simply offering a player control over a story, the game must motivate the player in some way to make it worth their while. Who would want to play a game that does not feel fun or interesting or compelling in any way? Many stories can be told without a single line of dialogue or even without interaction between sapient characters, but for me, many of the most memorable stories that spring to mind are inhabited by interesting characters I enjoyed spending time with. In games, we do not need to settle with reading about these characters or watching them do things in a movie. We are able to directly interact with them.

## **2.2 Communication and dialogue**

Communication is a vital part of human existence, and ever present in our interactions with other living creatures. Through the interactive nature inherent in its medium a game can present an opportunity to partake in simulated communication with fictional characters. However, as Heidi Hyvönen discusses in her thesis *Human or Humane? Replacing Perfect Performance with Simplification and Interpretation in Interactive Storytelling* (2016), most games rely almost solely on text and speech for this interaction, when a lot of human communication is nonverbal. As Hyvönen points out, a running problem for realistic games is that humans are so fine-tuned to human faces that the uncanny valley phenomenon is ever looming when trying to animate realistic faces, and the player is seldom able to use body language as a communication tool. She proposes



trying to tone down the realism and utilize readiness of the human mind to anthropomorphize everything, in order to use abstract forms as characters to more easily focus on body language. The ideas Hyvönen brings to the table are something to keep in mind, but due to technical limitations and my original vision of the game I had not even considered not using text for communication in my game. I do, however use very simple graphics, since I have found that simple drawings tend to make the viewer more ready to identify with what they see.

Conveying social interaction in all its complexity is very difficult as the variables and different outcomes result in an endless combination of possibilities, forcing games to restrict the players agency through different means, for example giving limited options for ways to act or speak. Still, even a limited selection of choices will eventually lead to the next thing a game has to consider – consequence.

### **2.3 Keeping track of the consequences of a player's choices**

Choices in games do not amount to much if they change nothing about the game. Choice and consequence in a game vary as much as games themselves, ranging from simple yes or no questions to extremely elaborate moral dilemmas. In simpler systems a choice always leads to certain consequences that branch off to different ones and so forth. If a game needs the world around the player to react to the player's choices it needs a framework or system that can keep track on the required information.

One of the easiest and most frequently used systems for this is a simple moral indicator. A player's choices rack them up to be either good, neutral or evil. The problem with a system like this is that it tends to boil down moral decisions to very simple transparent choices. In certain cases the game mechanic itself also encourages the player to pick sides and stick with their decision, as they might be rewarded special powers for playing either a complete saint or a personification of the devil.

The games in the Fallout series have some of the more complicated systems I have encountered thus far. Marcus Schulzke analyses the decision making in these games, Fallout 3 in particular, in his article Moral Decision Making in Fallout (2009) for the journal

Game studies. The Fallout series, omitting the most recent title Fallout 4 as I am not familiar with it (Bethesda, 2010, 2008; Interplay, 1997, 1998), are post-apocalyptic role playing games that take place in a world after the destruction of civilization by nuclear war. In addition to a general good-evil slider, known as Karma in the game, some of these games have area-, or even faction-specific reputations. For example, the player character can be liked in one town but hated in another due to their actions to the inhabitants in the respective places. If they join or become loved by one faction they might automatically become hated by a rival faction. In addition to these, some of the games contain some world-wide reputations that might affect how certain types of *npc* view the player character. *Npc* stands for *non-player character*, meaning any character controlled by the game, rather than the player. The choices within the game can be very convoluted and a player usually has several separate ways to solve problems. Additionally, the world is open, meaning that the player is free to explore and tackle situations in their own time. As Schulzke (2009) points out, the Fallout games make the player's actions have consequences that can affect their whole experience of the game, which makes the choices feel like they should actually be given some thought.

The Dragon Age games (Bioware 2014, 2011, 2009) are a dark fantasy roleplaying series where a central part of the game are followers, characters who will join the player character on their quest. The games do not track the morals of the player's actions through a global scale, but rather through these followers they choose to adventure with. When the player makes a choice in the game they get immediate feedback from the followers they have with them at the moment. The player will see points either added (the followers agree with the player's decision) or subtracted (they disagree) from the player character's relationship with them. Sometimes a follower does not react, indicating they are neutral. Followers can also comment on the player's actions. The reactions of the followers tell the player about their world view, personality and moral compass. Sometimes a follower might react differently than the player would expect, which lets them learn something new about the follower's view of the world. I think the system works well, as it creates another way through which characters in a game can be fleshed out in addition to direct interaction with them. It also gives choices more weight, especially if the player cares about a certain follower. To stay on their good side the player might make decisions based on a follower's opinions, or alternatively try to resolve a with the follower afterwards, if the player gets the chance.

In addition to moral compasses and how the game chooses to categorise the player character, the agency of the player can be measured through how big of an impact they are ultimately allowed to make.

## **2.4 Influencing the ending**

As almost any game has its limits, excluding games that can perpetually generate more content as the player progresses, it will eventually end, drawing the story to a conclusion. In some story-driven games the interactive choices allow the player to alter the outcome of the game in major ways. In others, the choices merely influence their road to the end, but the ending itself is going to be similar no matter the path taken. Lebowitz and Klug (2012) discuss this at great length in their book, as it is one of the central themes. According to them there is disparity in the world of game creation regarding whether a satisfying and good story can possibly be told through an open-ended game. Usually there is a certain balance to strike between true player agency and linear narrative, according to what the creators deem best for the type of game they are making. For example, in the aforementioned Fallout games the player is allowed to change the game drastically, as they can essentially kill any npc in the game if they would so choose. The fact that one can approach the different areas and plot points in the game in a non-linear way gives the player great agency regarding the story. One may even, through choosing to have extremely low intelligence, alter the whole game experience, as the player character will be unable to speak coherent sentences. In the end, to reflect on the choices made, the game gives a small epilogue for every place visited and explains what the player's actions led to, so they will know the long range consequences of their actions as well.

On the other end of the spectrum, an example of an extremely linear game would be the old school adventure game Monkey Island (Lucasfilm Games, 1990). It has one ending, and one just has to solve all the puzzles to get to it. There are different dialogue options and some small, optional secrets and activities to find, but there is only one solution to each puzzle and any playthrough eventually leads to the same ending.

As Lebowitz and Klug (2012) point out, games are an interesting ever-evolving medium as people are coming up with novel solutions all the time. Therefore there are new ways of solving issues related to interactive narratives being tried out all the time. Especially smaller, independent game projects lacking the rigidity of big studios are known to try out new things.

## 3 MY GAME

I had had the vague idea for this particular game in my head for a couple years when I saw the opportunity to start working on it as my graduation project. It has since transformed into a very different game than I had originally envisioned, as I became more interested in making a shorter game more as an experiment for certain mechanics I designed rather than for telling a big story such as originally intended. As it looks now, I want the game to give the player agency to make choices with consequences and a chance to communicate with interesting npcs who change their behaviour to reflect the player's choices. The game is going to be very short and supposed to be played through several times to eventually unlock the final ending. My biggest concern with the game is that I will not be able to motivate and reward the player sufficiently. The game is designed for someone with a rather inquisitive mind as it offers none of the traditional motivators found within games, such as score, quests, combat or competition. As the game is so simple I must make all the individual parts work extremely well together to manage to produce a compelling experience.

### 3.1 Synopsis

In the beginning of the game the player wakes up as a skull in a pile of bones and proceeds to assemble a body. Moving forward, they will have a chance to meet and interact with a number of npcs. In the end the player always end up on a stage. There, their looks, conduct and choices will affect their performance, if they choose to perform. However, no matter what happens on the stage, the player will always fall through the floor and fall apart in the same pile of bones they started from and will be prompted to try again. After a few playthroughs the "true" ending is unlocked in which the player chooses to remain a skull, and through that decision is allowed a way out.

### 3.2 The status system

The game mechanic mainly relies on three different sets of variables. Two of them are something the player can actively influence through playing the game, the third one is picked at the beginning and cannot be changed afterwards. All the variables are hidden from the player, except for the body. The variables that change according to playstyle are called “kindness” and “confidence”, because they are something someone can influence through their conduct, and sometimes also through their experiences. I wanted to add an element of unintended consequence, because it gives the game a dash of realism. Together, the combination of the kindness and confidence values create what I call the *status* system.

The variables work like sliders, the kindness slider has jerk – neutral – kind and the confidence slider has timid – average – confident. Each area on a slider correspond to certain numeric values, and interaction with npcs and other in-game choices and events either add or subtracts these values. There are in total nine different combinations, or nine different statuses which are as follows:

1. jerk timid	2. neutral timid	3. kind timid
4. jerk average	5. neutral average	6. kind average
7. jerk confident	8. neutral confident	9. kind confident

The player starts in the middle as *neutral average* and moves on to different statuses through dialogue choices and actions in the world of the game. The status number essentially tells the game which version of a specific npc to use, which determines both the player’s dialogue choices and the npc’s responses. Not every npc will respond to every single status type in remarkably separate ways, but every single npc will have at least one certain status type they will more easily connect deeply with.

### 3.3 Looks matter too!

In some games the player character's "looks" affect the way they are treated in certain situations, for example in the aforementioned Dragon Age series the player's race has significance in the world within the game. Picking a certain race can trigger unique dialogue and influence how a follower or npc feels about the player character from the get go. I find it a very interesting mechanic, and it helps the player to get immersed into the politics of the world.

So, to mix things up further I added a third variable, looks, since in real life a person's appearance also tends to influence people. So, in addition to the status, there is a mechanic dubbed *bodystate* (to keep it apart from status), in which there are four options, plus the unlockable fifth for the final ending (fig 2.)

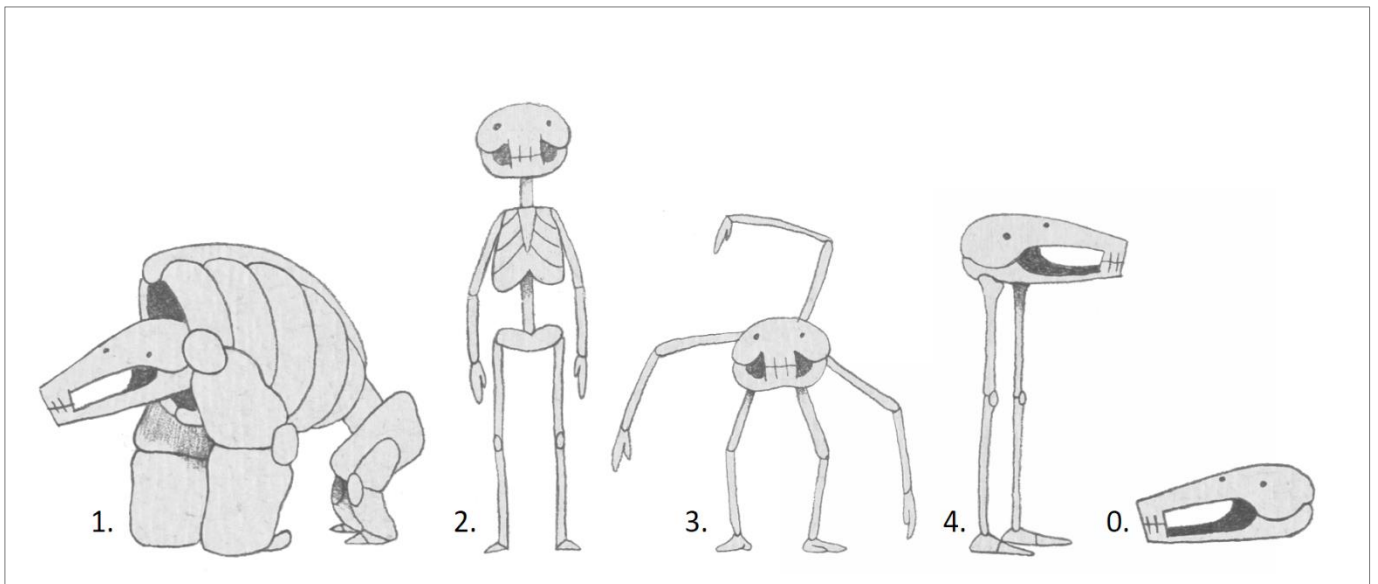


Fig 2. From left to right: 1. Big, 2. Regular, 3. Hands, 4. Legs, and 0. Skull

Certain, not all, npc's in my game are especially influenced by the bodystate. It might delight them, it might make them vary, it might trigger some unique dialogue, but in most

cases the status overrides the bodystate after talking for a bit if the player makes a good enough impression, as it tends to work in real life.

At first the character creation system was going to be much more complicated, but as I had decided on how the status system was going to work I realized that having a character creation system with many variable outcomes would make the too game complicated for me to manage on my own.

### **3.4 It's still very complicated**

So, in addition to the nine different statuses a player character can have, the bodystate variable essentially multiplies them. As the system is so complicated the game need to be short in order for me to be able to try it out without becoming overwhelmed. If I would like to have every single npc react to every single I would need 36 different versions of each, and that is only to reflect on the status number and bodystate of the player character, not certain in-game decisions unrelated to appearance, kindness or confidence the player can make. It is a bit much, which has led me to limit the different versions a particular npc can have, so that every single possibility will be reflected in some dialogue here and there in the game rather than everywhere through every single npc dialogue.

Still, the game was never intended to be simple. Part of the point of making it in the first place is to try making a system that is more complicated than a simple good-evil slider, so I seem to be on the right track in that sense at least.



## 4 CONCERNS

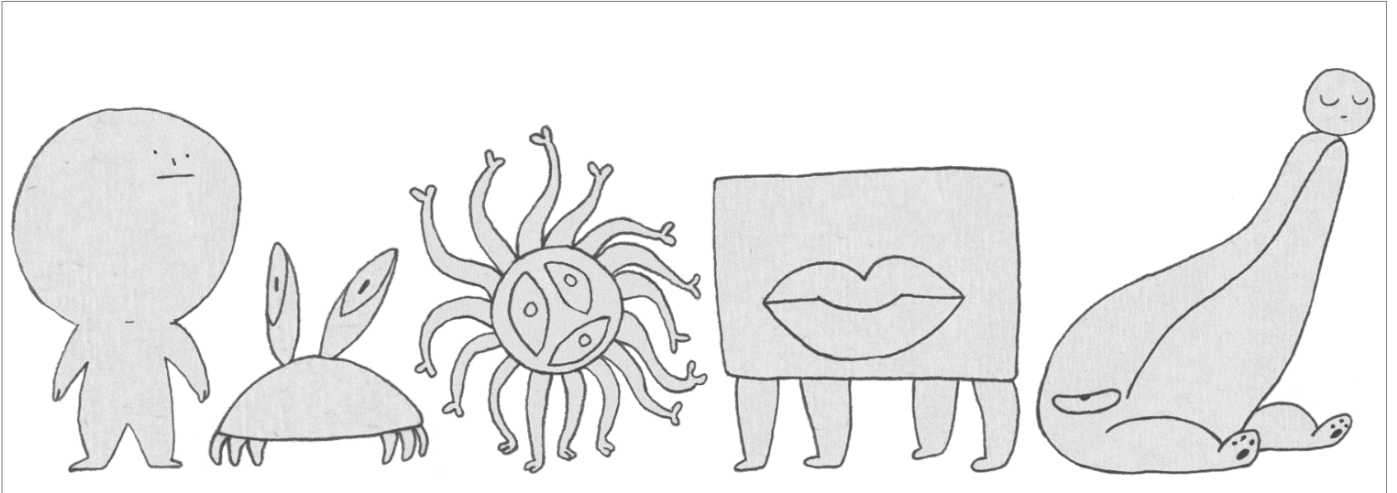
My game is quite passive and even ungamelike, so there is a very real risk that I might end up with a rather dull game unless I am careful with how I make it. The areas of concern are specifically motivation, issues with hidden mechanics being perceived as illogical or annoying by players, and perhaps most importantly what the message is. The game is mostly about interaction and finding yourself in an absurd situation, but if the interactions feel pointless and hollow the game does not amount to much as the interactions for the bulk of the game.

### 4.1 Motivation

I have been asked what I want to say with my game, and I guess a rather significant concern is that I am not quite sure. My intention is not to make a game that says something clearly, and it is, in a way, a story driven game without a story. The situation the player is thrown into in the game is the framework, and the player explores the story through their actions and gives it form through their own thoughts on their experience.

The game relies on expected curiosity. There are no instructions or quests to spur the player forward, nor are there any clear in-game rewards or achievements for playing. There are no puzzles to solve, and the player does not even have to interact with anyone to progress through the world. The only things spurring the player forward are curiosity and a desire to experience the game. The reward is the interactions and the atmosphere. To make a game like this worthwhile for the player, the few components it contains have to be very well thought out.

Captivating characters, essentially good writing, is the single most important bit. The graphics could be almost anything if the writing is stellar. The potential of the writing can be amplified through creating a compelling atmosphere through graphics and sound, but they cannot save bad writing in a game like this. I decided to go with a very simplified visual style, to reflect on the very simple nature of the game itself. I wanted to fill the game with odd npcs of all shapes and sizes (fig 3.), so that the player character, no matter which body chosen, would not look that out of place.



*Fig 3: a selection of compelling npcs that can't help but spur the player to interact with them.*

If there would be a well known recipe for creating good writing bad writing would not be much of a problem. I try to draw inspiration from the npcs I have created while mixing in ideas that have accumulated through the years, as well as some real-life experiences, and hope I will be able to create text that resonates with the player.

#### **4.2 Restricting the player's agency.**

The player's status affects the options within the game through restricting them. This is something I cannot recall seeing in a game before. At least not in the way I am trying to do it. Many games give the player character attributes. For example, a certain skill level in strength is required for the player to be able to lift a heavy object. However, what I am trying to do in my game is removing the player's agency in certain situations as an (for the player) unintended side effect. The player's options transform to reflect their body and perceived personality. For example, a timid character might not dare to climb a ladder, or a good character might refuse to do something forbidden.

Usually games let a player make decisions that conflict with the general image of their character. A player who has played a game like a saint, helping everyone and never killing innocent people, can suddenly just murder anyone. The game might give the action consequences but will seldom react to the fact that the deed was completely out of character for the player.

In my game options open and close depending on the player's status and bodystate. This system is innately flawed, since people can be timid or good in so many different ways and restricting or changing things up according to an arbitrary number does not reflect on the reality and complexity of the world in any way. Still, I find it an intriguing experiment to go forth with, as I find a game that actually changes the tone and personality of the player character to reflect their choices in the game an interesting concept. This removal of the player's agency might come as a shock the first time the player runs into something the game has closed off, but as it is a short game I think it might motivate the player to try the game again with a different approach.

### **4.3 Technical limitations**

As chapter 2 suggests, the mechanics I created for my game are rather convoluted and writing every single possibility into the game would take ages, so I have to devise a smart system to keep track on the systems within my game in order to make the different playstyle options balanced. In short, I need to be very organized in a way that I am not entirely used to. I am also very new to coding, so my solutions to technical problems are often needlessly heavy handed and a result of a lot of blood, sweat and tears. Still, I hope the system will have its merits and will, at least, be interesting to try out in this small-scale way. If the system works well in this game I could try to hone it to in order to use it in something else. Ideally, I would manage to refine it into a lighter version, something with a slightly more sophisticated code to make it less arduous to write for.

#### **4.4 Does a story driven game need a message?**

One could argue that, by definition, a story driven game really needs a story to base it on. For my own game, I am seeking to create interesting interactions and investigate ways in which both dialogue choices, looks, and reputation affect the outcomes of an interaction with an npc. The player's interactions with the world and npcs shapes the player character and their agency going forward. The player's looks may enforce or debunk the initial image an npc gets from the status score.

Although the mechanic of status and bodystate are a central part of the game and something I, as the creator, am interested in, the game itself could be seen to be more about being caught in a strange situation, and how the player chooses to deal with it. Or, how the player reacts in a situation where they are able to take on a new identity again and again. As it is a very brief game all the interactions with any given npc are going to be rather short, so every npc is kind of like a facet or an idea of something. There is usually something that makes them tick, and if the player says the right things they might share it with them. I did not want every npc to spew out all their information just like that, but rather be something the player might stumble upon just because they picked a certain dialogue option. There is also the fact that the player always returns to the beginning no matter their choices, so although there is, in a way, a lot of agency on the player's part, the end result is always the same, until the final round. I want to give the player the feeling that none of their choices matter, until they suddenly do.

## 5 CONCLUSION

The beauty of games as a medium is that the definition of the medium is so broad the possibilities seem almost endless. In essence, there are no right or wrong ways of doing a game, and there is much room for experimentation when making a small game with no expectation of financial gain. That is not to say that are not high stakes involved, as with any creative endeavour. Still, when attempting something I have quite not seen in any game before, at least in the exact shape I myself are doing it, there is no way to know for sure if something will work until extensive testing, and I find a strange comfort in that. I also think my game is going to be one of those games that require a rather specific personality type for someone to really enjoy it. I am not trying to make a game that will blow everyone's minds, rather a fun little experiment that might bring joy for people who have the curiosity and patience for it.

Like my game will eventually be, this text has also been a very brief look into the subject of interactive storytelling. While writing the text I had to continuously keep myself from delving too deep into any particular section due to restrictions in length. If I were to write a more comprehensive follow up to this piece I would elaborate on different scenarios in which the player agency affects the storytelling, delve deeper into the discussion of whether linear or open narratives have greater impact, and bring up more recent examples of games with inventive solutions to the issues presented in this text, to name a few.

Come what may, I have certainly given my game a lot of thought and am itching to finish it in order to see if all my efforts will pay off, and a brief but interesting game will be born.

## LIST OF PICTURES

Fig 1: Juul, J. (2015), The Classic Game Model [ONLINE]. Available at: <https://www.jesperjuul.net/ludologist/wp-content/uploads/2015/06/2-10-border-of-games-04.png> [Accessed 22 April 2018].

Fig 2: Yrjölä, S. (2018), Skull lineup [digital file]. (Sonja Yrjölä's own private collection)

Fig 3: Yrjölä, S. (2018), NPC lineup [digital file]. (Sonja Yrjölä's own private collection)

## REFERENCES

### Text:

Hyvönen H. (2016). Ihmisyys vai inhimillisyys? – Täydellisen suorituksen korvaaminen pelkistämällä ja tulkinnalla interaktiivisessa tarinankerronnassa. Opinnäytetyö (AMK), Turun Ammattikorkeakoulu, Viestinnän koulutusohjelma, Animaatio. Turku. 23 s.

Juul, J. (2015). What is a Game redux. [blog] The Ludologist. Available at <https://www.jesperjuul.net/ludologist/2015/06/10/what-is-a-game-redux/> [Accessed 16.4.2018].

Lebowitz, J. and Klug, C. (2012). Interactive Storytelling for Video Games. Independence: CRC Press.

Schulzke, M. (2009). Moral Decision Making in Fallout. *Game Studies*, Volume 9(2). [online] Available at <http://gamestudies.org/0902/articles/schulzke> [Accessed 16.4.2018].

### Games:

Bethesda. (2008). *Fallout 3*: Bethesda Softworks.

Bethesda. (2010). *Fallout: New Vegas*: Bethesda Softworks.

BioWare. (2009) *Dragon Age: Origins*: Electronic Arts.

BioWare. (2009) *Dragon Age II*: Electronic Arts.

BioWare Edmonton. (2014) *Dragon age: Inquisition*: Electronic Arts.

Interplay. (1997). *Fallout*. Interplay Entertainment Corp.

Interplay. (1998). *Fallout 2*: Interplay Entertainment Corp.

Lucasfilm Games. (1990) *The Secret of Monkey Island*: Lucasfilm Games.