
Exploring games to foster empathy

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Malmö 2017

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Examination: 29th of May 2017

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Keywords: empathy, games, interactive story game, to foster empathy

In this thesis I investigated empathy field in games and I explored how to create a game fostering empathy. In a first part I defined empathy, game and game mechanics and I analyzed four games fostering empathy through the prism of these definitions. I noticed these games used role-playing so then I focused my research on role-play games. In a second part I proposed an interactive story based on game mechanics fostering empathy. This interactive story is a mix of LARP and escape room. The player embodies a role and follows a goal. This game tries to foster empathy for the main character, a young woman who just found out that her mother had passed away. Through the iterations of testing I could improve the game and highlight some issues. Empathy is difficult to evaluate and puzzle solving prevents the player from being empathic. This thesis intends to contribute to the research areas in different ways. It outlines game mechanics fostering empathy and it suggests a new kind of game, the interactive story using these game mechanics.

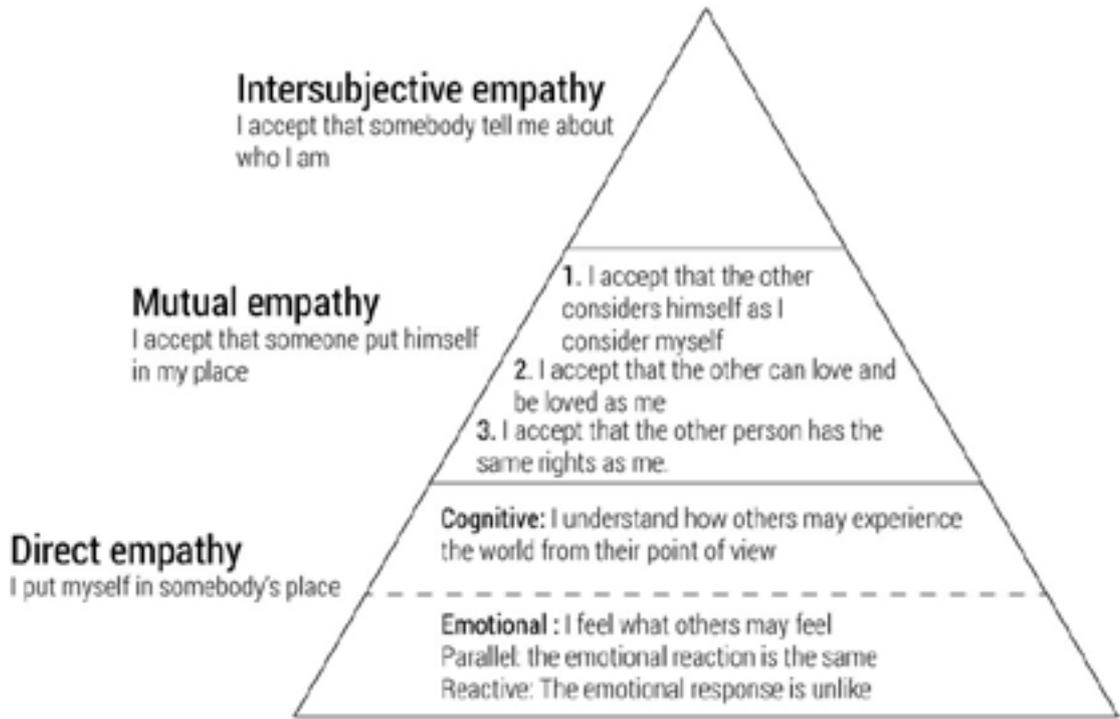
In the last decade, empathy has become a trendy discussion topic. Many books and documentaries address its benefits and most recently, empathy seems like a good antidote to the looming destruction of the planet and the rise of xenophobia and selfishness. Commonly, empathy is the ability to share and understand what another person is thinking and feeling (Oxford dictionary, 2017). Empathy allows us to foster understanding so that we can live together in harmony. Empathy also makes us more tolerant and altruistic. It is beneficial for our relationships and makes us less angry and afraid of people who do not look like us. Unfortunately, we are not the same with regard to our level of empathy; some people are naturally more empathic than others. Since empathy does not come naturally to many, it is interesting to note that, like most skills, empathy is something we can work on and a skill that can be honed. Serge Tisseron, a psychiatrist, demonstrates that empathy could be improved, or at least maintained, by games (Tisseron, 2015). In fact, games transform our brain. Daphne Bavelier, a professor of brain and cognitive sciences, studied the effect of video games on our brains. In fact, she showed that non-gamers exposed to first-person shooter games have improved visual skills such as contrast and the brain's ability to treat new information and multitask. (W.G. Dye, Green, and Bavelier, 2009) Even though improving these skills does not relate to empathy, this study proves that games could change our brain. Through the three figures game, Serge Tisseron proves that creating an empathy-generating game is possible. As a result, I wonder which game mechanics foster empathy in a game.

1. Empathy

What is empathy?

The field of empathy has been studied extensively and each researcher tends to add nuances to the basic definition resulting in diverse definitions of the word “empathy”. The most relevant definition of empathy is the ability to share and understand what another person is thinking and feeling. There are two categories of empathy: cognitive and emotional empathy. Cognitive empathy is the ability to understand how others may experience the world from their own point of view. Emotional empathy is divided in two. On one hand, “parallel empathy” or “emotional reciprocity” occurs when the emotional reaction is the same as the other’s and “reactive empathy” or “emotional complementarity” occurs when the emotional response is unlike what the other is experiencing (E. Spencer, 1881; Hoffman, 1987; Stephan & Finlay, 1999). However, empathy is not the ability to be concerned about the others and to have pro-social behaviours. Here there are two schools of thought to name what is stronger than empathy or when a person will act for the good of another. Some researchers, such as Matthieu Ricard, think that this corresponds to compassion (Ricard, 2013). Other researchers such as Serge Tisseron think that empathy has different levels and altruism is the third level of empathy (Tisseron, 2010).

As part of my research, I will use the definition of Serge Tisseron, a psychoanalyst and psychiatrist specialized in this field, because I believe his definition is the clearest and the most complete. He classified three levels of empathy. The first level is the most common definition, namely direct empathy, which is divided into cognitive and emotional empathy. Then, the second level is mutual empathy. It occurs when people treat others as themselves but it is also accepting that people put themselves in another person’s place. This mutual empathy is subdivided into three cases. For example, I accept that the other considers themselves as I consider myself, or I accept that the other can love and be loved as I do or finally, I accept that the other person has the same rights as I have. The third level is inter-subjectivity. It is when people accept that the others could enlighten them about something that they do not know. Inter-subjectivity goes beyond identification and recognition, as it involves letting oneself be transformed by other people. In my project, I will focus on the different types of direct empathy.



The three level of empathy of Serge Tisseron

I referred to the work of German psychologist Carsten Zoll when I added two other kinds of direct empathy: situation-mediated empathy and expression-mediated empathy (Zoll, 2003). The following table lists the three types of direct empathy along with an example:

Emotional empathy	It makes me sad to see a child who can't find anyone to play with
Cognitive empathy	When I see a man who is feeling upset, I think about why he might be feeling like that
Situation-mediated empathy	Kids who have no friends probably don't want any
Expression-mediated empathy	I can tell by my parents' facial expressions whether it is a good time to ask them for something

Why are we empathic?

Empathy is inherent to humans and some large mammals such as elephants and monkeys who are basically empathic. Ethologist Frans De Waal argues empathy is a part of natural selection (Waal, 2010). We are more intelligent because our parents nurture us for a long time. This nurture enables large mammals to survive and to reproduce. Time after time, our ability to empathize is strengthened and becomes more complex. This ability for increased empathy is explained by mirror neurons. In 1992, Giacomo Rizzolatti's team discovered mirror neurons by chance. During an experiment on a monkey's brain, they took a break to eat without removing the electrode from the monkey's head. Suddenly, they noticed a signal on their monitor when the monkey was looking at them when they were eating. The mirror-neurons emitted the same signal when the monkey was eating as when it was looking at someone eating. Actually, the ability to empathize is based on these mirror neurons. Their aim is to put themselves in the other's place, act for them, try to deduce their intentions, in short, try to understand them.

Empathy has many benefits because it enables us to share and understand other people's feelings; empathy also enables people to live together without killing each other. Empathy makes people more tolerant, attentive, sympathetic and open-minded and it makes cooperation easier. Cooperation requires a complex form of empathy that we gain through experience. Cooperating is doing something together considering others' feelings and needs.

Limits of empathy

Nevertheless, empathy has several limits (Bloom, 2017). In the first place, empathy is biased: we are more prone to feel empathy for attractive people and for those who look like us or share our ethnic or national background (Cikara, Bruneau and Saxe, 2011) and we feel empathy for one specific person and not for a group of people. Moreover, feeling empathy is exhausting and painful, it can cause distress and may lead to avoiding situations. Finally, empathy does not make one a good person: psychopaths have a good cognitive empathy. However, empathy is not enough. Many formal studies across various fields indicate that empathy is the ability to share and understand the feelings of the other and not the ability to be concerned about it. Therefore, empathy also requires humility and compassion (Bloom, 2017; Ricard, 2015; Ciechowska, 2015). According to the Cambridge dictionary, compassion is a sympathetic pity and concern for the sufferings or misfortunes of others without experiencing the other's feelings. In

religious thought, compassion is the will of everyone to get free of sufferings and its causes. Humility means to have a modest or low view of one's importance. Empathy is not enough because we also need humility and compassion to step back, listen to the others and to understand without being exhausted. Empathy along with compassion and humility are important skills in our daily lives. They help us to work as teams, to take care of others, and to feel concerned by ecology, poverty or others' sufferings. According to Tisseron, a lack of love during childhood and daily violence inhibit our ability to recognize feelings. We were all born with empathy, but empathy has to be maintained. Thus, teaching empathy is important in raising children (Tisseron, 2010).

2. Games

What is a game?

Before going deeper into the notion of empathy, it is important to define what a game is. In the game field, Caillois' definition is a good place to begin. According to him, a game has to include six parameters. Firstly, a game is free. The player is not forced to play, he has the choice to get involved within the game or not. Secondly, a game is separate, it has limits of space and time definite in advance. Thirdly, a game is uncertain. The outcome is not previously known or defined. Fourthly, a game is unproductive. No goods are created during the game. Fifthly, a game is governed by rules. Rules are set and practicable only within the game. And finally, a game is make-believe. It puts players in an imagined reality as opposed to real life with different logic and rules. In a nutshell, a game is free, separate, uncertain, unproductive, governed by rules and make-believe. Caillois also categorized types of play in four groups: *Agôn* for competitive games, *Alea* for games of chance, *Mimicry* for mimic games and *Ilinx* for games using sensations such as fear or vertigo. As reported by Caillois there are two kinds of playing. On one hand, "Ludus" when the game is based on rules and measured activities. On the other hand, "Paidia" when the game is just creation and improvisation. In his table, Caillois combined the four categories of game and the two kinds of playing to offer a wide range of games (Caillois, 2001). In addition to these definitions, Katie Salen makes a distinction between play and game. According to her, playing corresponds to any kind of playful activities more or less organized and mostly open to "free" actions and exploration whereas game is a part of playing and "A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome." (Salen, 2004)

	AGÓN (Competition)	ALEA (Chance)	MIMICRY (Simulation)	ILINX (Vertigo)
<p>PAIDIA</p> <p>Tumult Agitation Immoderate laughter</p>	<p>Racing Wrestling } not regulated Etc. Athletics</p>	<p>Counting-out rhymes Heads or tails</p>	<p>Children's imitations Games of illusion Tag, Arms Masks, Disguises</p>	<p>Children "whirling" Horseback riding Swinging Waltzing</p>
<p>Kite-flying Solitaire Patience Crossword puzzles</p> <p>LUDUS</p>	<p>Boxing, Billiards Fencing, Checkers Football, Chess</p> <p>Contests, Sports in general</p>	<p>Betting Roulette</p> <p>Simple, complex, and continuing lotteries*</p>	<p>Theater Spectacles in general</p>	<p>Volador Traveling carnivals Skiing Mountain climbing Tightrope walking</p>

Caillouis' categories of play table. (Caillouis, 2001)

Games for good

For several years, there have been an emergence of “games for good” or VAP (Values At Play). More and more organizations develop resources and provide support for game designers who want to make a “game for good”. VAP games aim to improve good qualities of the players such as cooperation, kindness, equity, justice, altruism, tolerance and empathy. Unlike regular games, VAP games offer complex stories that defy black-and-white thinking and resist demonizing opponents. The characters are more complex and not so strong. They have failures and a rich background (Belman and Flanagan, 2010). Some VAP games aim to improve empathy. In games and especially video games, players will put themselves in a character’s shoes to make decisions for him. Empathy can force or allow the player to feel emotion more personally and deeply either about the character and about a situation. For example, in Hush, the player will play the role of Liliane, a Rwandan Tutsi mother in a shack with her baby during the genocide of 1994 (Antonisse and Johnson, 2008). The Hutu are coming and Liliane has to hide her child. The player will have a variety of options as to which action to take. Reading about genocide is different from experiencing real-life problems. Hush allows players to inhabit the roles of these people in a very intense way.

Game mechanics

As reported by the MDA Framework (Hunicke, Zubek, LeBlanc, 2004), “mechanics are the various actions, behaviours, and control mechanisms afforded to the player within a game context” (p.3). However, this definition is overly broad. Mechanics could be both the player strategies and the operations that the game system does in the background to calculate the success of player actions. Miguel Sicart (Sicart, 2008) defines game mechanics as “methods invoked by agents,

designed for interacting with the game state.” He based his definition of method on Object-Oriented framework where methods are the mechanisms an object has for accessing data within another object. In other words, methods are the actions and conforming to Järvinen, the best way of understanding mechanics as methods is to formalize them as verbs (Järvinen, 2008). Sicart calls the player’s inputs from different devices (mouse, keyboard, etc.) “agents”. Then, the game state is the state of the game at the moment when the player does an action. In fact, game mechanics depend on the rules and the gameworld logic. Some mechanics can only be used in particular environments or with a particular item. Also, Sicart categorizes mechanics in two groups: primary and secondary mechanics. Primary mechanics are mechanics that can be directly applied to solving challenges that lead to the desired end state of the game. Secondary mechanics are mechanics that ease the actions towards reaching the end state. However, secondary mechanics can turn into primary mechanics and vice versa. It is important to be careful not to confuse rules with game mechanics. For Sicart, game mechanics are linked with the game state whereas rules are wider and concern every possible action and regulate the transition between game states (Sicart, 2008).

Role-play games: LARP and escape room

Role-play games are a kind of game based on a strong narration that involve role-play. LARP and escape room games can generate empathy because they allow players to inhabit the roles of other people in an immersive way. A Live Action Role-Playing Game (LARP) is a role-playing game where players physically play a character role within the set fiction in an invented world that, usually, is merged with our world (Stenros, 2013). The players pursue goals within a story by interacting in character. Gamemasters manage everything to keep the immersion safe and secure and facilitate playing. It can be described as theater without an audience or script. I will focus my study on nordicLARPs. Nordic LARP is a school of LARP game design that was born in the nordic countries. In Nordic LARP, immersion is reaching its height: both characters and settings are highly developed, for example, each object represents itself: a foam sword is a foam sword and not a knight’s metal sword. Players want to feel like they are “really there”, that is why their appearance is close to their character’s to generate empathy. Stenros & Montola called “360° illusion” this total immersion where the game environment is perfectly crafted. “*Dreaming in character at night is seen by some nordic larpers as a sign of an appropriate level of immersion.*” (Stenros and Montola, 2008; Stenros, 2013).

Escape rooms are live-action team-based games where players discover clues, solve puzzles, and accomplish tasks in one or more rooms in order to accomplish a specific goal (usually escaping from the room) in a limited amount of time (Nicholson, 2015).

How to evaluate empathy in games?

In psychology and game field, empathy is measured with two dimensions (Belman and Flanagan, 2010). The first dimension is about induced or situational empathy and dispositional empathy. Firstly, situational or induced empathy is about the empathic reaction in a specific situation such as an experimental manipulation; and secondly, dispositional empathy is about a person's stable character trait. Situational empathy can be evaluated by asking participants about their experiences immediately after the game or by studying the «facial, gestural, and vocal indices of empathy-related responding» (Zhou, Valiente, and Eisenberg, 2003). Dispositional empathy can be measured by administering various questionnaires associated with specific empathy scales. There are several questionnaires to evaluate dispositional empathy but Davis's Interpersonal Reactivity Index (Davis, 1994) is the only one that evaluates both cognitive and affective empathy. The second dimension of empathy studies in games is about involvement. A low-involvement study could be just a presentation of interviews of a target whereas a high-involvement study is when the participant experiences the feeling of the target. Empathy inductions in "low-involvement" studies are the most common, for example, in short activist games without community-oriented features. "High-involvement studies" are to be found more commonly in games that immerse players in an extended experience, particularly those that create relationships between players.

3. Empathy in games

Related works

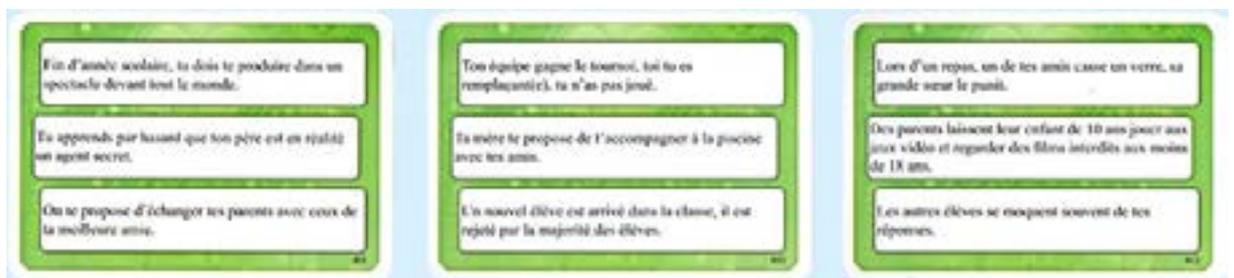
In this section, I will analyse different empathy games to define how to create empathy through games. I have chosen five games: a board game, a video game, a game created to improve children's empathy, and a LARP. For each of them I will consider four questions: Is empathy a mechanic or the goal of the game? For whom does the player feel empathy? Which kind of empathy? How is empathy generated?

A board game: *Feelings*

Feelings is a board game created in 2015 by Jean-Louis Roubira and Vincent Bidault. *Feelings* was designed as a mediation tool to broach the subject of emotions and feelings with teenagers. *Feelings* is now adapted to children, elderly people, adults and families. The game process is simple. First, players choose a reader who draws a situation card and reads it aloud. Then, everybody, including the reader, chooses which feeling they can feel in this situation. Afterwards, players randomly form teams of two. Each player guesses the feeling chosen by their teammate. When both players guess the right feeling, they earn three points. If just one of them guesses the right feeling, they earn one point and if neither of them guesses they have no point. In *Feelings*, empathy is the goal. The more empathic player is most likely to win. Players have to feel empathy for the other players. This is a case of mutual empathy because players accept that another player put themselves in their place. In this case form of empathy is more cognitive than emotional. In fact, the aim is more to understand which feeling the teammate may feel than feeling it for real. *Feelings* uses two game mechanics to generate empathy: naming which emotion is felt in a particular situation and guessing which feeling other people feel in the same situation. As in mutual empathy, there is a double process: introspection and decentering. Introspection is understanding which feeling I can feel in a particular situation and decentering means focusing my attention on another person. In some cases and in order to empathize better, an animator could help players identify their own feelings and their teammate's feelings by asking questions. *Feelings* can be used as a trigger to discuss feelings in specific situations. Distancing ourselves from our own feelings enables us to easily broach feelings in their globality. *Feelings* requires in-depth emotional knowledge. Players with a good understanding of themselves and the nuances of their own feelings will be better at guessing other players' feelings.



Feelings cards - "I am worried", "I am angry" (Roubira and Bidault, 2015)



Situation cards (Roubira and Bidault, 2015)

A digital game: Papers, please!

Papers, Please: A Dystopian Document Thriller is a video game created in 2013 by Lucas Pope. The story takes place in a fictional dystopian country called Arstotzka. The player plays the role of a border crossing immigration officer. The player, as the immigration officer, must determine who can enter the country based on the legitimacy of their immigration documents and an ever-increasing number of rules, including tools and guides. He has the discretion to accept or reject immigration requests and has the authority to detain people with falsified documents and he has the final say as to whether the immigrant is allowed to enter the country. In *Papers, please* empathy is just a game mechanic and not an end in itself. The aim is to survive and not to be empathic. Contrary to what one may think, the player is more empathic with the embodied character than with the immigrants because the player is entrusted with the well-being of the character: the player has to make sure the character has food, accommodation and is able to provide for his family. In effect, the player is tasked with ensuring the character's survival. Immigrants' issues are in the background and the player has to focus on the needs of his own character. In this game, role-playing enables the player to feel empathy for his character. During the game, player

and character are one. This is a case of direct empathy both cognitive and emotional. The player understands and may feel the feelings and the thoughts of the character. In *Papers, please*, there are two mechanics: examining immigrants' documents and deciding to let in or refuse this immigrant according to the rules of the country, the state of your bank account and your empathy for this immigrant.



Interface of "Papers, please" (Pope, 2013)

A game: The Three Figures Game

The Three Figures Game, is a game created in 2007 by Serge Tisseron to foster children's empathy at school. In this game, children will play three roles in a row: the aggressor, the victim and the third person. It includes several kind of activities: theatrical play, identification of facial expressions and empathy. The game is divided in 5 parts. Firstly, the teacher explains that the game is a theatrical play. Everything is fake and it is forbidden to hurt. Boys can play the role of girls and in return girls can play the role of boys. Secondly, children suggest a situation based on pictures they have seen on television, in a movie or in a book. Thirdly, the teacher decontextualizes the situation to invent a story with the children with the *three figures game*. Fourthly, children will play in a team of three, the three roles in a row. Finally, after the representation, children and the teacher applaud without commenting. In *the three figures* is both a game mechanic and an end. Based on Caillois' categories, this game more about "Paidia" than "Ludus". In fact rules are loose and the aim is more to play a role (mimicry) than to achieve a goal. Players feel more empathy for the three characters (victim, aggressor and witness) than for the other players. Proved by sociologic research

(Tisseron, 2015), this game generates empathy among children and reduces violence at school. They experience different roles: aggressor, victim and witness. By changing their points of view they learn to consider a situation with new eyes. As a result, they will know how to react if they face such a situation in the future. *The three figures game* uses direct empathy in both cognitive and emotional way and also mutual empathy. (Emotional empathy: Children learn to name and to mimic different attitudes, Cognitive empathy: Children understand why the aggressor is angry or bitter). Four mechanics occur in the game: inventing a story together, pretending to be another person, playing every roles in a row and applauding the others and yourself.

A Nordic LARP: Ground Zero

Ground Zero is a LARP created by Jami Jokinen and Jori Virtanen in Turku, Finland following a group of American families for 24 hours in a bomb shelter because of a nuclear war. The game is set in a basement for 50 players. Players can follow the nuclear strike via the radio. After 12 hours, a loud explosion turns the electricity off. For the next 12 hours, players use candlelight. After the game, players described a very strong and immersive experience. The debrief time demonstrates that even if the game was an intensive, very strong and distressing experience, players considered their experience positive (Stenros and Montola, 2008). More broadly, LARPs are an inter-immersion experience because players are immersed along with other people (Brown and Morrow, 2015). So, collaboration is really important in Nordic LARPs. Players build the world and the story together. There is no winning and many players choose to intentionally fail in order to spice the whole story. Finally, Nordic LARP are not just entertainment. They are generate strong emotional response and are similar to an artistic and political performance. The goal is to affect the players and change their way of thinking and the way they perceive the world. Frederik Berg, a Nordic LARPs game designer, suggested that there are four parameters to create games that change players' way of thinking: Empathy (Creating an understanding of an outside you), Emotional feedback (Driving the impetus of change), Experience (Sharing a communal event with others) and Leveraging the power of group dynamics. In *Ground Zero*, empathy is a way to survive. In fact, spending 24 hours in a basement with other people requires empathy between the characters. Empathy evaluation in LARPs is tricky because the aim is to improvise actions in the global story. Using empathy is not mandatory and yet many LARP players declare that empathy is essential to play. I deduce that mutual empathy is used with both cognitive and emotional empathy.

Summary table

	<i>Feelings</i>	<i>Papers, please</i>	<i>Three figures</i>	<i>Ground Zero</i>
Empathy as a game mechanic or as an end?	A game mechanic and an end	A game mechanic	A game mechanic and an end	A game mechanic
For whom?	Other players	Fictional character	Other characters	Other characters
Which kind of empathy?	Mutual empathy - Cognitive empathy	Direct empathy - Cognitive and emotional empathy	Mutual empathy - Cognitive and emotional empathy	Mutual empathy - Cognitive and emotional empathy
How?	- To name which emotion I feel in particular situation - To guess which feeling other people feel in the same situation	- To examine immigrant's papers - To decide to let in or refuse this immigrant	- To invent a story together - To pretend to be another person - To play every role in a row	- To play a role

An escape room: CAS9

CAS9 is an ethical escape room I made with three classmates. “Ethical” because the aim was to make the player reflect upon a tricky issue and to create a real immersive experience that will change the player’s way of thinking. Even if this escape room does not generate empathy, I can use the concept to do it. Through the playtests, we noticed that making a good ethical escape room requires: a good immersion (strong narration, puzzles linked with the story), a relevant dilemma (neutral enough to create debate) and a debriefing time (to talk about the dilemma). For one hour, players will solve puzzles giving them some information about a story. Some information will be positive and other information will be negative. When they solve all of the puzzles, and before escaping the room, a dilemma will be asked. Players will have to make a decision based on the discovered information and on their own morality. The dilemma has to be clear and based on a good balance of pros and cons. It is a way to involve the players in the story and forces them to understand the information of the puzzles. Over the course of a week, we did ten playtests. We noticed that

during the game, players do not really think about the ethical dilemma, they just want to finish the game as quickly as possible. The key of an escape room raising awareness is the debrief time. The debrief helps taking the players from where they are emotionally and mentally back into the real world and creates a transition between the game and the real world. During the escape room, players will live a strong experience, feeling tension, disgust, excitement and they may need to talk about their feelings, discuss the game and talk about the final dilemma with the other players and the gamemaster. Almost all the playtests finished by an interesting debate among the players. If an ethical escape room could be a tool to raise awareness, would it be possible to use it to enhance empathy?



CAS9 (Rauch, Tikkanen, Coria and Blot, 2017)

How to foster empathy in games?

Based on the previous part about the related games, I have listed four recurrent parameters. This list will help to understand how a game can generate empathy.

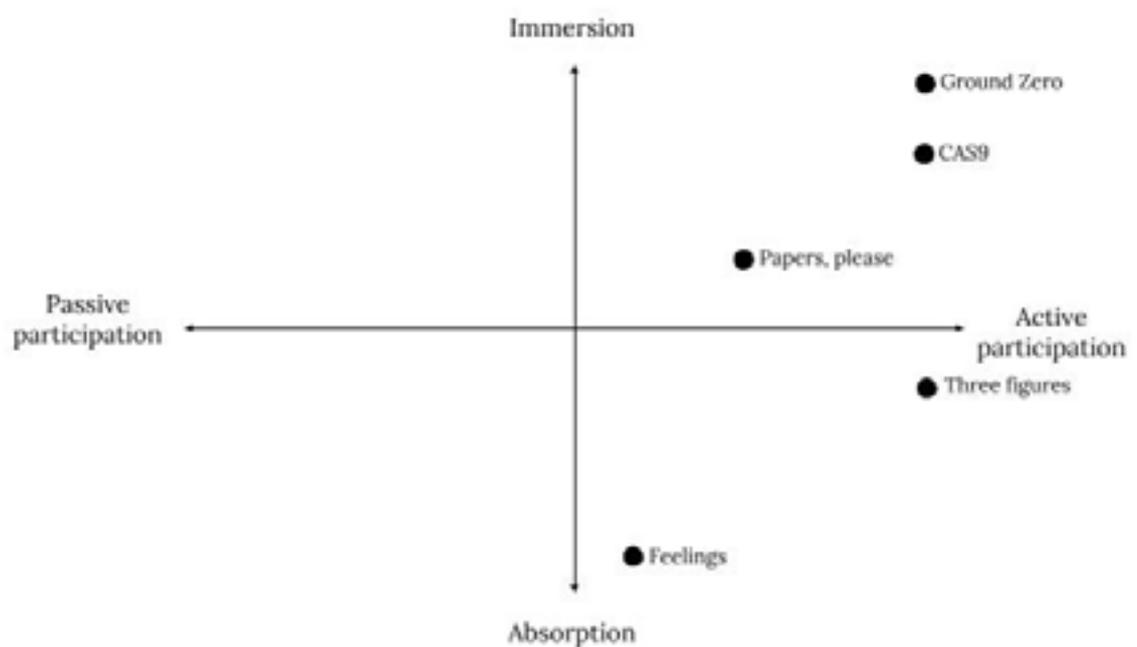
Role-play - Putting yourself in somebody's place

The first parameter I noticed is the role-play. Role-play is an activity in which people do and say things while pretending to be someone else or pretending to be in a particular situation to play a role in an improvised way. Empathy being the ability to understand and feel the feelings or the thoughts of somebody, role-play is a good way to put oneself in a character's shoes and acting accordingly. Role-play has different levels of involvement. In Three figures, children do not use costumes or props and the role play lasts just several minutes whereas in Ground Zero, players have costumes and props and the game lasts 24 hours. As seen previously, game is make-believe, it creates an invented reality with its own rules. In this new reality, one kind of games requires players to play a role. Caillois categorizes these games in the Mimicry group. Mimicry includes simulation games and performing art (Caillois, 2001). Empathy in role-playing is the ability to imagine what other people are thinking, predict their behavior and intentions, and speculate about their concerns and beliefs. In empathic games, the story emphasizes points of similarity between the player and people or groups with whom he is supposed to empathize. The character becomes a tool that allows empathy to occur on the player-to player level. However, creating a character who is too different from the player may cause defensive avoidance (Belman and Flanagan, 2010).

Immersion

The second parameter is immersion. Human experiences are made of sensations, thoughts, feelings, actions and meaning-making. Gameplay is based on the same parameters, which are part of immersion. In fact, immersion constantly surrounds us and affects our every move. We do not notice if it is present or not. Immersion is a tricky concept. Murray defines it as "*the sensation of being surrounded by a completely other reality [...] that takes over all of our attention, our whole perceptual apparatus.*" (Murray, 1997) A game creates spatial presence when the user starts to feel like he is "there", in the world that the game is creating. People experiencing immersion tend to only consider choices that make sense in the context of the imaginary world. In this way, immersion

enables the player to play a role more easily. Narration, the invented world and the role make the player immersed as much as possible in the game. Thus, they will act depending on their role, the world and the situation. Experiences can be categorized in two dimensions and immersion is part of one of them (Pine and Gillemore, 1999). The first dimension is about participation that can be active or passive. Participation is active when the player is acting and the participation is passive when the player is present without acting. The second dimension is about connection. On one hand, absorption is when the player is directing his attention to an experience that is brought to mind and, on the other hand, immersion is when the player becomes physically or virtually a part of the experience itself.



The two dimensions of experiences (Pine and Gillemore, 1999)

Even if Feelings and Three figures do not really use immersion, I notice that all analyzed games require active participation.

Narration

Reading a novel, watching a movie, playing a video-game-- all of these activities are immersive. According to Manney, narration is a key to empathy (Manney, 2008). The imaginative act of the reader translating the words on the page into thoughts and feelings, enables them to see the world through the characters' eyes and feel their feelings. The reader looks at the situation from a new point of view. Jane Smiley noticed that the more the character suffered from social immorality, the more successfully the novel changed the reader's perceptions of what was right and wrong in their society (Smiley, 2015). In

that way, empathy can be activated by an imaginative engagement (Brown and Morrow, 2015). Certainly, reading literary fiction improves empathy.

Magic circle

Immersion can be materialized by the concept of magic circle. The aim of immersion is to blur the magic circle and make the story real. The concept of the magic circle is a metaphor created by Johan Huizinga in his book *Homo Ludens* (Huizinga, 1955). He argues that any game takes place in alternate time and space called “the magic circle”. The magic circle’s boundary separates the game from the real world. According to Juul, “*in a common description, to play a game is to step inside a concrete or metaphorical magic circle where special rules apply.*” (Juul, 2008) However, the magic circle is not a clear boundary between the game and the real world. Actually, players bring their desires, hopes and previous experiences into the magic circle and they think about the experience in light of these considerations. In the case of escape rooms, the magic circle is physically delineated by the walls. When people enter the room, special rules apply but when they escape from it, the rules disappear. To create proper immersion, even if the rules seem to disappear, the story inside the room and the real world have to be close. Immersion enables players to consider that the story could be real and consequently to feel involved in it. In LARPs, the magic circle is blurred, the boundary between the game and the real world are intentionally invisible. For this reason, LARP seem to be relevant games to generate empathy. They are collaborative, co-created, interactive, communal storytelling experiences that enable players to experience cognitive and emotional empathy and to make decisions as a result.

Emotional knowledge

The third parameter relates to emotional knowledge. In-depth emotional knowledge is necessary for an empathic response. If people understand why they are angry or why they are sad they will better understand the other’s emotions. Having a wide range of emotions is important because it helps the player understand the details of a feeling and deduce why people are feeling it. In Feelings, having emotional awareness helps the player to understand the subtle changes of other players’ feelings.

Asking for empathy and easy challenges

In “Designing Games to Foster Empathy”, Mary Flanagan and Jonathan Belman came up with a non-exhaustive list of principles for the design of games to foster empathy. All of these principles have been tested on people through scientific methods. Firstly, they argue that players tend to empathize only when they make an intentional effort to do so as the game begins. Thus, the rules should explicitly ask players to empathize, or at least, subtly encourage them to adopt a focused empathetic stance. However, without any kind of affective empathy induction at the outset, most people will play “unempathetically” (Belman and Flanagan, 2010). In one of the studies proving this principle, participants had to listen to interviews with members of various marginalized groups. Participants were asked to empathize or not. Researchers found that instructions to empathize resulted in more positive attitudes towards people. When participants in one study were contacted two weeks after the empathy induction, their attitudes towards members of the marginalized group had become more positive. (Batson et al., 1997; Batson, Chang, Orr & Rowland, 2002) But, in the case of a game, I wonder if asking explicitly to the player to empathize will distort the results. And is it comfortable and “fun” to adopt this non-natural empathic position? There is not a clear answer at first glance. In CAS9, brief and debrief are required to explain and discuss the aim of the game and share the game experience and the players’ feelings. Secondly, Belman and Flanagan support giving players specific recommendations about how their actions can address the issues represented in the game. Without these recommendations, players will get frustrated and the game will be less enjoyable. In the same way, Jamie Madigan, a psychologist specialized in games, explains that empathic games should offer easy challenges to relieve the brain and focus its resources on emotional experiences (Madigan, 2015). Moreover, easy challenges promote short periods of reflection and ability to consider others’ motivations and/or circumstances. Thus, our perceptions of others become less reactive and we settle into a more mindful state, which is conducive to empathetic play.

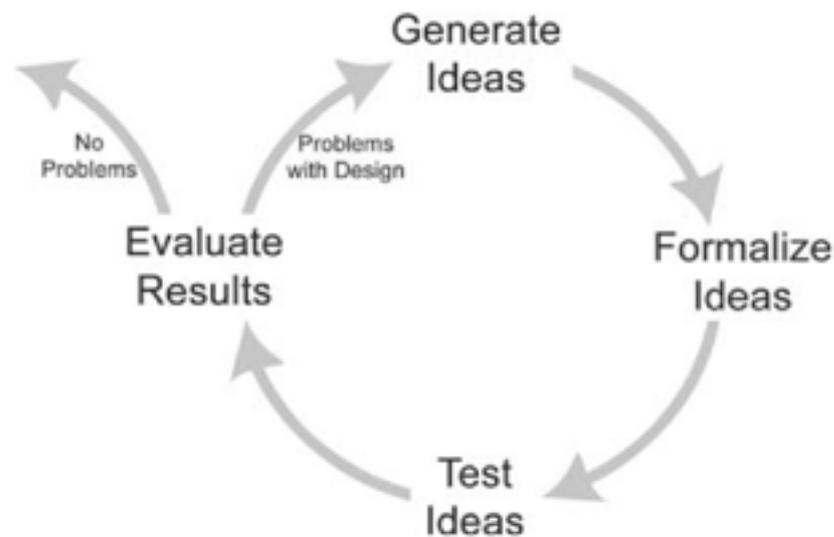
The goal of this study is to create a game generating empathy. As a result, this project will contribute to several fields: game design (game as transformative practice) and interaction design (How could I include empathy in a design process?). In this chapter I introduce the chosen approach based on research through design and game design process carried out in my study.

1. Research through design

Historically, the willing to use design through research originates from HCI (Human-Computer Interaction) field. As reported by Schön, research through design is flexible because design is a reflective practice where the designer thinks back on his research in order to improve his design methods (Schön, 1983). According to Löwgren, good research through design knowledge has to respond to four criteria: relevant, new, criticizable and grounded (Löwgren, 2013). That is to say, a good knowledge contribution has to be relevant for the design community and should not reinvent the wheel. A good knowledge contribution has to be based on existing theory and using different references. Finally, good knowledge contribution has to be transparent and well communicated. In the case of interaction design, Zimmerman et al. identified three beneficial contributions of design in the research method. Firstly, design does not take into account boundaries between the different fields. Therefore, design reduces constraints in the research process by gathering data from diverse fields. Secondly, design method brings ideas from art and design in order to produce functional and aesthetic artefacts. And thirdly, design uses empathy towards specific users to create efficient and relevant artifacts (Zimmerman et al., 2007). Indeed, research through design produces not just knowledge but also artifacts. In research through design, an artifact is a concretely designed result of the research process that provides specific knowledge from the topic studied (Gaver, 2012). As part of my project I will use research through design as a methodology to create different artifacts. These artifacts will help me to explore specific questions about empathy in games to contribute to the interaction design field (Löwgren, 2013).

2. Game design process

As there are many different game design processes I have chosen to use Fullerton's because his methodology is close to the design thinking method. Her methodology is an iterative process divided in 4 steps: generating ideas, formalizing ideas, testing ideas and evaluating results (Fullerton, 2004). If the evaluation is not satisfactory, the idea makes another loop in this iterative process. As a reflective designer, I have chosen to create my own process based on my needs. However, to remain criticizable and grounded I will use the research through design method and the Fullerton game design method. However, the iteration will not just be triggered by dissatisfaction, but it would be used if a question dealing with empathy highlighted through the playtesting would need more exploration.



Fullerton game process (2004)

To evaluate my prototypes, I will interview and discuss with the playtesters about their empathy after the playtest. Interview and discussion are common playtest evaluation (Fullerton, 2004). Interview is a face-to-face interrogation based on questions and discussion is more open. The designer can structure the conversation by asking specific questions. However, I keep in mind that these interviews might not indicate how they actually felt but rather reflect on how other people expect them to feel. They also might vary according to an individual's ability to verbalize his or her thoughts. The last part will help me to formulate and reflect on my results.

1. Foundations for a game fostering empathy

Based on my previous study, I have chosen to create a mix of escape room and LARP. On one hand a LARP uses role-playing and immersion and on the other hand escape room uses also immersion and is set in a room with fewer players. Thus, I would like to create an interactive story in a room. As I said, empathy can be generated by different parameters: role-playing, immersion, emotional knowledge and easy challenges. As a part of my project I would like to create a game generating empathy built on these parameters and on the ethical escape room, CAS9 (immersion, dilemma, brief and debrief). Thus I will create a game process divided in four steps: brief, discovering of a story, dilemma and debrief. The brief aims to explain the need to be empathic to achieve the game and the debrief aims to share the game experience and to speak about empathy.

2. Experiments

Prototype #1

Game process

I first chose to create an escape room whose aim was to solve a mystery. I should rather call it a mystery room because the aim was not to escape but to understand the characters' lives, however, the mechanics are the same as a regular escape room: discover clues, solve puzzles, complete tasks in order to accomplish a specific goal in a limited amount of time. Here, players are two detectives called by someone to investigate a mysterious apartment. Actually, the two people living there have disappeared and nobody knows what happened or where they are. The detectives have just one hour to investigate the room before the bailiff comes to empty the room.



Two players testing the prototype

To make the story real and create good immersion, I used pictures and emotional objects such as clothes, bags. By solving puzzles based on empathy mechanics players would understand the story. My aim was to make them put themselves in the character's place.



*On the left: puzzle based on a letter and drawers with feelings.
On the right: players organizing the clues.*

One of them was about a letter of one character. Players had to figure out which feeling this character felt. Depending on the answer they referred to the right feeling-drawer containing the right code to open the next lock. Another puzzle was about a poem and a diary page with memories about a scent. Players had to smell some boxes with codes to figure out which one is the right scent. I could playtest twice with different players.

Results and improvements

Unfortunately, the game didn't generate empathy. Even though I asked them to put themselves in the characters' shoes during the brief, after the playtest they said that they did not use empathy to solve the escape room challenge. In fact, their aim was just to finish the game. During the second playtest players were very objective and concrete, they maintained distance between themselves and the characters so that by the end of the game, they didn't really care about the characters. I suppose the reason is that they do not have the character's life in their hands. Whatever actions they took, the characters were away and the players could not change the characters' lives. My second prototype will have to put the character's life in the player's hands.

Prototype #2: Jane's room

Game process

For my second prototype, I made an interactive story, a mix of LARP and escape room. In the style of a LARP, the player plays a role and is immersed in a story. In the style of an escape room, the player operates within a room and the story concludes outside the room. I created this prototype for one player because I noticed that competition can be an immersion breaker. In fact, there often is a moment when a player does not know what to do and exits the story. I also noticed that other players' judgement inhibits creating empathy. This interactive story is about Jane Tenenbaum, a character personified by the player. Her mother has just died of cancer and she left a parcel with some reminders for her daughter along with her last will and testament. Unfortunately, the paper is ripped and the second part is locked in a box. In order to find the code, the player must find three objects that bonded Jane to her mother. A letter is attached to the box; the letter is from the doctor asking Jane for permission to do a post-mortem examination on her mother's corpse. This examination could save many people suffering from the same cancer. By solving easy puzzles, the player

will understand the bond between the character and her mother and find the second part of the last will and testament. On this paper, the mother wrote “My body shall not be subjected to any medical intervention after my death”. After that the player has to answer to the final dilemma: accept or decline a consent form to consent to the examination.

Playtests and improvements

I organised seven playtests in my room. Each playtest lasted around 50 minutes. The process was always the same: I welcomed the player in my apartment and briefed them (cf. Appendix). Then I led the blindfolded player on the bed, I played a music piece, sent a message from Kim and asked the player to open their eyes. During the game I observed the player and sent them some clues through the character of Kim. I did not expect that this way to give clues became a real conversation between two friends (Jane and Kim) and fostered immersion. After the player answered the consent form, we spoke about the game and empathy generation. All the players liked the experience. Because I used the fullerton game design process, I did several iterations. Between the playtests I improved the game based on the previous debrief. The first three players chose to decline the consent form so I tried to balance out the dilemma by sending an email from the doctor during the game. This mail explained that the examination could save a young woman treated at the same hospital. During the first debriefs, players noticed that one of the puzzle took them away from the story. Actually, this puzzle was not about the bond between the daughter and her mother but more a logical puzzle. Therefore I replaced this puzzle with another one based on a reminder. Based on Belman and Flanagan’s principle I tried to keep easy challenges to let the player reflect on their role. After the experience, I invited the player to debrief. I asked him several questions about his entire experience, his choice and the empathy (cf. Appendix). The debriefing is essential in all escape rooms and LARPs. It helps taking the players from where they are emotionally and mentally back into the real world and creates a transition between the game and the real world. Players will live a strong experience, feeling emotions and they may need to talk about their feelings, discuss the game and talk about the final dilemma with the the gamemaster. The debrief aims to facilitate returning to the real world and to help me to understand how empathy is generated at the same time.

1. Empathy generation

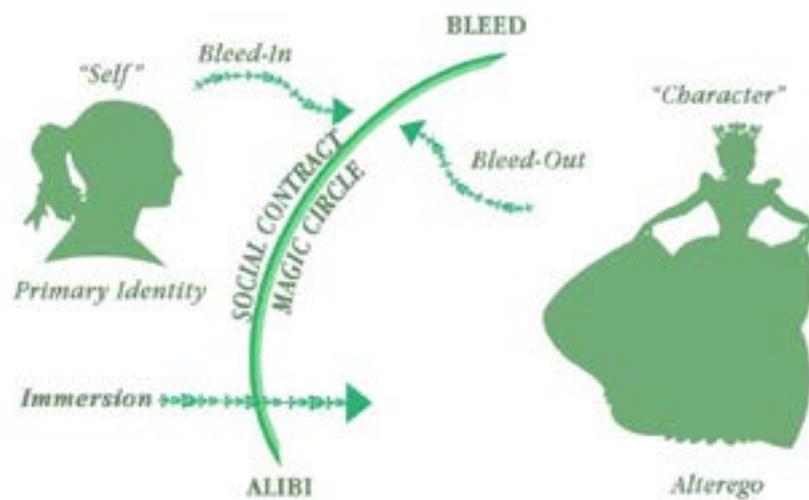
Immersion

Immersion aims to help the player to put himself in the character's place and act and think as if he was the character. Thus, the goal of immersion is to generate empathy. Based on the definition of Murray, immersion is "*the sensation of being surrounded by a completely other reality.*" (Murray, 1997) I attempted to create this other reality in different ways. Firstly, I made a complex setting. Contrary to an escape room where almost all objects will be used during the game, in this interactive story I tried to create a realistic room by adding many different objects that could be found in a regular room. I filled the drawers with clothes, toiletries, plastic boxes, books and also more personal stuff such as teddy bears, jewelry or other mementos. I hung some photographs of Jane when she was a baby and others where she is with her friend, Kim. I played music (cf. Appendix) to perfect the immersion. I wanted the player to participate actively so I wrote a story that could touch anybody: a woman mourning her mother. Most players felt really immersed at the beginning. They opened their eyes in a room that they had never seen before. The situation is a blank page and they have to imagine the story in their own way. The parcel introduced them to the story and made them feel as if they were Jane. "*I could feel empathy when I found the parcel. When I was reading everything I felt a strong connection because the mother was talking to me.*" said Judit, one of the playtesters. As in an escape room, the magic circle is represented by the walls. There is another reality inside the room with its own rules. However I chose to blur this boundary by creating a realistic story and settings. I wanted to make the player think "It could be real".

Role-play

Immersion and role play are interconnected. In fact, immersion is required for role-playing in order for the player to fully embody the role. In Jane's room, the setting and the music will give some clues to the player about who they are. The address written on the parcel and the last will and testament will give the name and the address of the character (Jane Tenenbaum living in Malmö). The photographs and the objects will show Jane's age (around 25 years old) and the music gives the mood (melancholia, investigation). In six playtests, all players manage to put themselves in Jane's shoes at some point especially when they opened the parcel but also when they talked to Kim or when they read the handwritten notes from the mother. For one player it occurred during the

dilemma phase. Role-play generates empathy. The player is encouraged to think and feel what the character could think and feel. Both kinds of empathy are generated. Cognitive empathy is generated when the player understands the bond between Jane and her mother and emotional empathy is generated when the player feels melancholia or kind of sadness when he is reading the notes from her mother. In LARPs, players could experience moments where their real-life feelings and thoughts spill over into their characters' and vice versa. This phenomenon is called bleed. The Vi åker jeep designer collective defines bleed as follows: "Bleed is experienced by a player when her thoughts and feelings are influenced by those of her character, or vice versa. With increasing bleed, the border between player and character becomes more and more transparent." (Jeepen.org, 2017)



Scheme of the bleed (Bowman, 2015)

In the scheme of Bowman, the magic circle separates the player from the character. Feelings and thoughts crossing this magic circle are a part of the bleed. During the debrief of Jane's room I asked the player if they used their own experience to solve the dilemma. During the debrief, two of them said: "To accept or decline it was definitely myself." (Dennis) "I have a nephew, he has really bad problems and I was thinking about him. What if somebody does that to him. I used my own personal experience to relate to this. I projected my own feelings on Jane. What if it was my mother?" (Ligia). Empathy occurs when the player tries to understand the other. Considering that empathy is directed toward someone else, I wonder if empathy is generated when the player and the character blend into each other. Are they one or two person? Is it still empathy when the player feels like and understands a character using his own experiences. In fact, even in the daily life we are empathic through the prism of our experiences. With this in mind, I wonder if empathy generation is better if the game limits the bleed.

Immersion breakers

During the playtests, I noticed several immersion breakers. The first one was the puzzles. As stated by Jamie Madigan, easy challenges relieve the brain and focus its resources on emotional experiences (Madigan, 2015). Indeed, during the debrief players noticed a lack of empathy during the puzzle solving. *“Globally yes but less when I was solving puzzles.”* (Ana) *“But then when the story continued there wasn’t more empathy because I was focused on the puzzle solving.”* (Dennis) *“I was still “I need to solve it” because I am a bit competitive.”* (Marjo). On one side puzzles framed the story but on the other side they break the immersion. A way to improve this game could be to create easier puzzles. The second one was about the role-play. I chose to keep the Jane character open to let the player invent her story. I avoided concrete information about her (hobbies, studies, etc.). One playtester appreciate it: *“We don’t have a lot of information about Jane and I think this is good because it leaves space for me to be her. I can invent her story.”* (Lisa). However, others needed more information: *“I didn’t have so much information about her. When I searched a profile on Facebook, I saw an old person. I needed a frame, more information about her.”* (Ligia) *“I needed more information, more pictures about her.”* (Dennis). Unfortunately, two players didn’t achieve to put themselves in Jane’s place: *“I am not really good at role playing. I was more I am working for Jane now. Jane was more a friend. She is not here and I have to figure out for her mom.”* (Ana). *“I felt like myself. [...]It’s still too shallow because I didn’t know so much about the character in the end. To be honest I didn’t see the photos.”* (Marjo). Some players seemed to be able to play a role more easily than others. What is the right amount of information to optimize the roleplaying of all players?

2. Difficulties

Empathy is subjective

As seen previously, empathy is the ability to share and understand what another person is thinking and feeling. This definition is broad and raises questions. Is it still empathy if someone feel empathy for a role-played character? I have chosen to consider that empathy could directed toward a fictional role-played character. Through the interactive story the player will share and understand what his own character could think and feel. Unfortunately, it is practically impossible to share and totally understand the others. People are

all extremely complex with diverse experiences consequently empathy is felt differently from one person to another. It is one of the reasons why empathy is so personal. That is why I had problems inventing easy empathy-based puzzles and evaluating situational empathy. Empathy is subjective and does not have a right or wrong answer.

Technical issues

I had two main issues with my room. Since the playtesters were my classmates, even if they had never seen my room, they knew my stuff. For example, one object was hidden in a box that I often brought to school. Thus the players did not really look inside. *“I felt confused because I didn’t know what was a clue and what was a part of the game.”* (Lisa), *“I know that this is your room so I know that these things are yours and not built for the character. Maybe if everything was built for the character in a special room but I know you don’t have the possibility to do like that.”* (Marjo). The second issue was with the observation. Contrary to CAS9, I did not use a camera and a microphone to observe the playtester from outside the room for technical reasons. During the game I was sitting on a corner of the room. Unfortunately, I felt some players acted differently. One playtester, Dennis, commented a lot of things. I supposed he wanted to help me in my observation but I had the impression that he didn’t put himself in the character’s place. And it was also difficult not to intervene. Ana, another playtester was in trouble and repeated *“I am so stupid”*. Without thinking I glanced at a drawer to help her. With the camera and microphone, players can not see game master facial expressions.

Ethical considerations

In my interactive story, I chose to generate empathy for a “good” character. Jane Tenenbaum is a normal young woman with a strong bond with her mother. The character is neutral and the story does not any send particular message to the player. However, I could have opted for a sexist man with an awkward story. In this case I would have sent a sexist message. I would have made this situation normal and true. According to Serge Tisseron, empathy can used to manipulate people (Tisseron, 2017). As seen in the first part, we are more prone to feel empathy for people who look like us. Thus, showing a character with failures but doing bad things still generates empathy among the public. In fact, the public see themselves in him; this character is like them. That is why, it could be dangerous to empathize without remaining accountable.

This thesis focused on understanding empathy in games and explored game mechanics that foster empathy. First I defined the main terms: empathy, game and game mechanics. Firstly, empathy is the ability to share and understand what another person is thinking and feeling. According to Serge Tisseron, they are three levels of empathy but I focused my study on the most common one, the first level named direct empathy. Secondly, a game is a system defined by rules in which players engage in an artificial conflict that results in a quantifiable outcome (Salen, 2004). A game mechanic is a set of actions invoked by a player's output, designed to interact with the game state. Based on these definitions, I analyzed four existing games and I used their game mechanics to figure out what makes a good game that fosters empathy. I noticed the importance of role-playing; therefore, I focused my study on role-playing games such as LARP and escape rooms. I proposed a role-play game fostering empathy in practice using the theoretical basis. Several iterations of playtesting and game improvements highlighted interesting issues. Empathy is subjective and difficult to evaluate within the confines of a game. I noticed that empathy is interconnected with role-play and immersion. Increased immersion leads to the player's renewed willingness to put himself in the character's place, which in turn strengthens empathy between the player and his character. To facilitate the immersion, I made a realistic setting. The player could search everywhere. To make role-playing easier, I did not give much background information about the character to let the player invent his own story. I noticed that puzzle solving prevents the player from being empathic. At this moment, the players were focused on solving the game and not so much on the story itself. Nonetheless I wonder if the game could be framed without puzzles. In "Jane's room", puzzles helped guide the player until the end through Jane's memories. What would an interactive story game be like without puzzles, which guide the player?

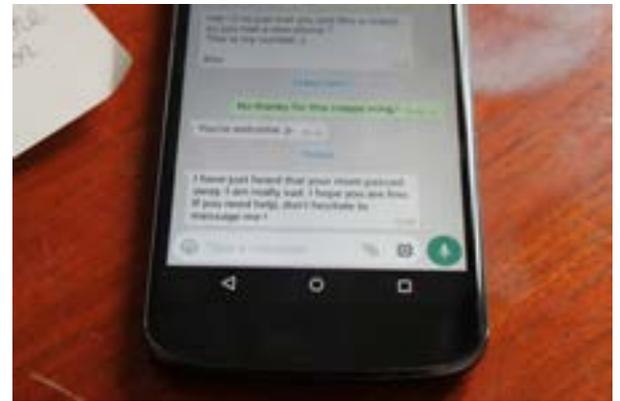
In this study, I tried to meet Löwgren's four criteria. According to him, good research through design knowledge should meet the following criteria: it should be relevant, new, criticizable and grounded. (Löwgren, 2013) This study contributes to design knowledge by presenting an interactive story that fosters empathy. I based my work on different theoretical frameworks such as Tisseron and Sicart and on an annotated portfolio of existing empathy games. I learned that empathy is really complex and even if a game tends to foster empathy, the player is the one who decides whether or not to be empathic. The empathy-based games field is huge and there are many other ways to foster empathy which have yet to be explored. The interactive story is just one of many possible

avenues. Interactive story games could be used in different ways. Like CAS9, these games could encourage players to reflect on moral questions on various subjects, including synthetic biology, post-mortem examination, sexism, etc. Interactive story games are at the interface of LARPs and escape rooms. Both LARPs and escape rooms use role-play and immersion; escape rooms take place in a in enclosed spaces. However, escape rooms are more popular and accessible, whereas LARPs are made for regular players. In this way, interactive story games could bridge the gap between public and role-play games.

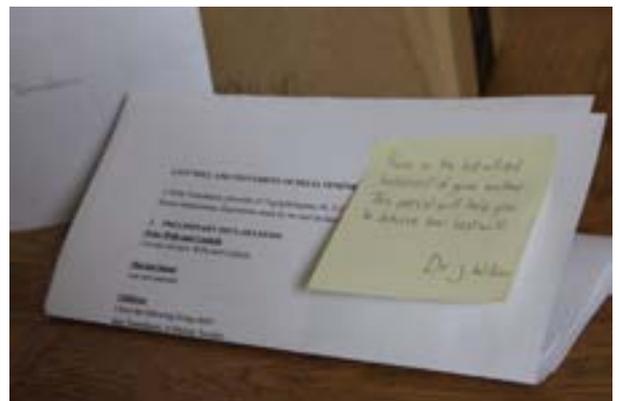
1. Photographs



The room



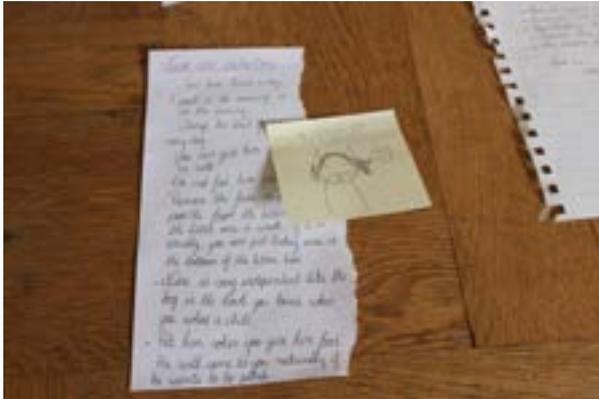
The night table (on the left) and the message from Kim (on the right)



The parcel with: the letter from the doctor, the first part of the last will and testament, a photograph, Nisse instructions, book list suggestion, a guide of Bali and a box with a lock.

The player need three numbers to open the lock:

#1 - The Heart of the Family

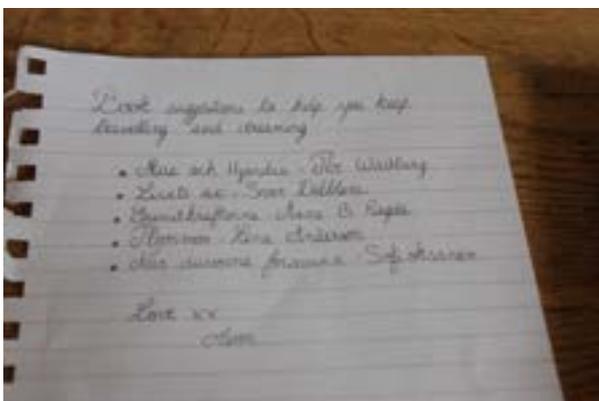


Nisse instructions (on the left) and a book about Nisse with a message “My child, my little girl, my love, forever in my heart, forever in Teddy’s heart” (on the right)



Teddy’s heart with the first number

#2 - Our first trips

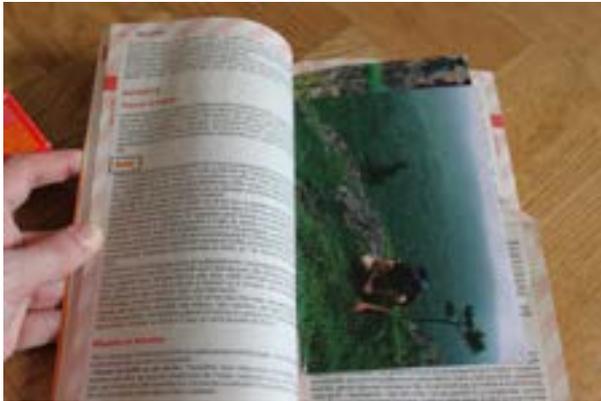


Book list suggestion (on the left) and two messages hidden in these books “You probably can’t remember how difficult it was to feed you when you were a baby. I tried many strategies but the only one that worked was the plane.” (on the right)



The “plane” with the second number

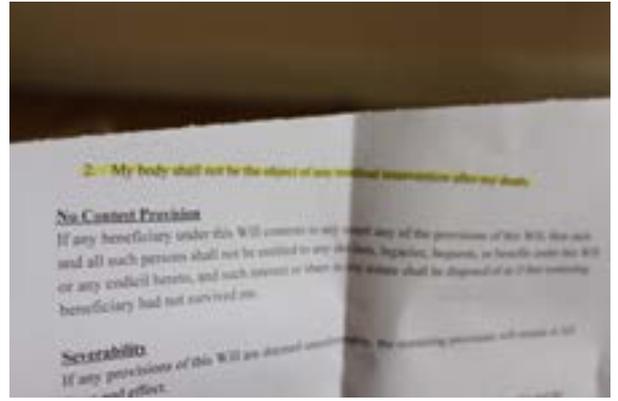
#3 - The Work from The End of the World



The Bali travel guide book with a message “A souvenir from our last trip in Bali. Do you remember our guide, Klaus? He was really funny! I will never forget this last trip before my condition got worse. I’m leaving, peacefully, my mind brimming with memories.” and “BATIK” outlined. (on the left)



The batik with the third number



The second part of the last will and testament

Consent for post-mortem examination of an adult

Consultant / GP in charge of the patient: **Dr James Wilson**
 Hospital number for deceased: **20170330**

Name of deceased: **TENENBALM Delia**
 Date of birth: **1962-07-21** Date of death: **2017-05-08**

This form enables you to consent to a post-mortem examination of the body of the person named above. For each section tick the relevant box to indicate your decisions and sign beneath each section.

I confirm that my questions about the post-mortem examination have been answered to my satisfaction and understanding.

Post-mortem examination

A post-mortem examination may be full or limited. The benefits and disadvantages of each will be explained to you. Please choose one of the following options.

OPTION 1: CONSENT TO A FULL POST-MORTEM EXAMINATION

I consent to a full post-mortem examination of the body of the person named above. I am not aware that he / she objected to this. I understand that the reason for the examination is to further explain the cause of death and study the effects of disease and treatment.

OPTION 2: CONSENT TO A LIMITED POST-MORTEM EXAMINATION

I consent to a limited post-mortem examination of the body of the person named above. I am not aware that he / she objected to this. I understand that this may limit the information about the cause of death and effects of treatment.

I wish to limit the examination to _____
 (please specify)

Other requirements of the post-mortem examination

In some cases there may be further requirements of the post-mortem examination, such as genetic testing of tissue samples. The person explaining about the post-mortem examination will explain these to you.

Thank you for consenting to a post-mortem examination.

Name: _____
 Address: _____
 City: _____
 Country: _____
 Phone: _____
 Relationship to the deceased: _____

Details of person obtaining consent

Name: **Dr. James Wilson**
 Job title: **Oncologist**
 Address: **Oncology Outpatient Malmö, Skåne University**

Date: **01** / **January**

Accept **Decline**

The final consent form

2. Documents

The Brief

- The game is an interactive story
- I will lead you in the room with closed eyes. When I will tell you “the story begins” you can open your eyes. You will wake up in the character’s life
- The room is yours. You can search everywhere: drawers, computer, mobile phone but you do not need to turn everything upside down
- Contrary to regular escape room the final question do not have a good answer
- There is no timer

The letter from the doctor

Dear Mrs Tenenbaum,

It is with great sadness that I offer my condolences for the loss of your mother Delia. I would like to speak on behalf of the entire medical team that had the privilege of meeting her when I say that she will be greatly missed. The box attached to this letter contains some things that your mother wanted to bequeath you. As I explained when we met at my office yesterday, the cancer affecting her digestive system evolved during the last days in circumstances remains unclear for the medical staff despite the data collecting thanks to the monitoring process set up. As a result, my team and I need to perform further investigations. To do so, I need your formal consent to realize post-mortem examinations. I am sorry to address this request to you in such a sharp way. Unfortunately, we only have a limited amount of time ahead as this type of procedure must be accomplished in the 72 hours following the passing of the patient. My secretary will send you tomorrow morning the Post-Mortem examination consent form to the e-mail address. I would be grateful if you could give me your answer as soon as possible. Our thoughts are with you and the rest of your family during this time of bereavement.

Sincerely,

Dr James Wilson

The testament

First part

LAST WILL AND TESTAMENT OF DELIA TENENBAUM

I, Delia Tenenbaum, presently of Tegelgårdsgatan 24, 211 33 Malmö, Sweden, hereby revoke all former testamentary dispositions made by me and declare this to be my last Will.

[...]

The following two last wishes shall be respected:

My daughter shall gather the following three items that bounded us, in this precise order:

- The Heart of the Family
- Our First Trips
- The Work from The End of the World

Second part

My body shall not be the object of any medical intervention after my death.

The email from the doctor

Hello Mrs Tenenbaum,

I don't want to increase pressure in your decision-making regarding your mother. However, the post-mortem examination would really help us understand the evolution of the disease. Especially, it could cure a young woman in our hospital. She has the same cancer and the examination could really save her life.

Best regards,

Dr J. Wilson

The music

Aubry, R. (2008). Play time. [CD].

The dilemma

The post-mortem examination of your mother could save many people. Unfortunately she explicitly wrote on her last will and testament that she did not want to be subjected to any medical intervention after her death. Do you accept the post-mortem examination ?

3. Debriefs

Lisa (10/05-10h)

Personal notes:

Lisa knows my room and my things so she recognized the objects used for the story. At the beginning she seemed really confused by the story and she did not know what she was supposed to do. She just asked Kim one thing. After approximately 14 minutes she understood that she had to find three objects with numbers. She finished the story in 40 minutes by declining the consent form.

Did you like the experience?

I loved the fact that I had to wake up in a bed because it's really different from every escape rooms I tried. I could go through all the stuff in the room. I felt confused because I didn't know what was a clue and what was a part of the game.

Did you understand the story?

I think so! I knew about the amnesia (We invented the beginning of the story together).

Which choice did you make?

I chose to decline because I would never, ever dare to go against a last will. Also I already forgot about the first email. It's the last will of the person I loved. It's her mother's last will even if I could save many people. It's for someone else and not for myself or for my own mother.

Did you manage to put yourself in the character's shoes?

I think so because the first thought I said it's "My" mother. I didn't see Jane as an external character. I felt it was me.

Did you feel immersed in the story?

Yes. Also because the bond between Jane and her Mother seems strong. It is a warm story about childhood. Everyone knows it through teddy bears, children's books. We don't have a lot of information about Jane and I think this is good because it leaves space for me to be her. I can invent her story.

Did you feel emotions through the character?

I felt sadness when I understood that my mother was dead. But all that she left was so sweet so I felt more "heartwarming".

Did you try to understand the life of your character?

I was in puzzle mode when I was looking for puzzles. But I felt a lot of love in the texts so when I was reading I felt more emotion.

Ligia (11/05-10h)

Personal notes:

During the brief she told me that she was nervous because it was her first experience in LARP and escape rooms. In the room she seemed intimidated and she didn't search a lot. I suppose she didn't dare to search in "my" stuff. She read everything carefully. After approximately 14 minutes she searched "Jane Tenenbaum" on internet and found a profile of an old woman. I chose to help her a lot through the mobile phone. After opening the second part of the will and testament, she searched on internet the profile of Dr. James Wilson. After approximately 1 hour she decided to send an e-mail to the doctor:

Her: "Hi, I do have some requests, to be presented all the data you gather from the examination and to tell me before details of the procedure and what are you intending to do with the information and knowledge you gather from my mom's body"

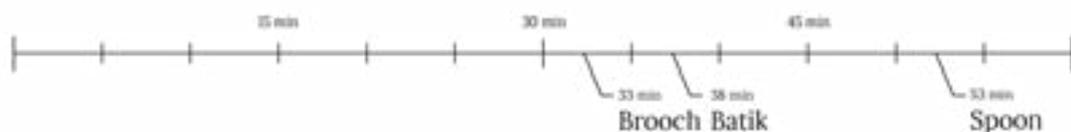
Doctor: "Okay. So check the option 2 ("limited consent") and accept the form."

Her: "I do not agree with the sentence: I am not aware that he/she objected to this! She did not wanted this; but she allowed me to decide."

Doctor: "The form is like this... You can decline if you prefer! There is no good answer. It's your choice."

She finished the story in one hour and fifteen minutes by declining the consent form.

Timeline:



Conversation with Kim:

Kim: I have just heard that your mom passed away. I am really sad. I hope you are fine. If you need help, don't hesitate to message me!

Jane Tenenbaum: Do you know if I have other relatives? I can't remember.

Kim: Did you see the box near the door? I think it is for you!

Jane Tenenbaum: I'm looking at it now, thanks

Kim: Did you see the suggestion list? Maybe you already have some?

Jane Tenenbaum: I think I have them, but not sure

what to do with them.

Kim: Even the suggestion list of books?

Jane Tenenbaum: I found the books.

Kim: I think it's a puzzle from your mom. What if you put them in a special order? Do you find something? A word? A clue? Something that you saw in your room? And on another way, did you find something about Nisse in your room?

[She found the brooch]

Kim: Yes! I think you have your first number to open the lock of the card box.

Did you remember the guide of Bali? I think the postcard was on the page 44 maybe something is hiding there?

Do you know what is a Batik? Ask google if not :p

Jane Tenenbaum: Is the third number from the lock related to the books?

Kim: I think so! Try something with the first letter of the title ;) You are at home, you can search in drawers you know!

Jane Tenenbaum: I feel lost.

Kim: Maybe the plane is not really a plane... Did you see the drawing with the «plane»? You have three numbers now. The right order is on the testament!

Did you like the experience?

I don't have any experience with larps or escape rooms. As a first time it was a bit weird at the beginning and most of the time I felt really confused. I didn't understand what I was supposed to do. Am I allowed to do this? Is the task that I have to do? I am just wasting time and I have no idea what happened. I read a lot of detective books so being here and doing something that looks like detective work (finding clues, ...) I knew this stuff in a way. This method is supposed to be in my head but here I had no idea what to do so I was "talk to Kim!" That was the only way I had in mind. Kim helped me. It was a bit unclear for me.

Did you understand the story?

It's a girl, who's really depressed, whose mother has just died of cancer. And she was supposed to take care of her mother's last will. She had a good friend to help her.

(Kim)

Did you feel frustrated by the clues?

No, I felt good and safe. I know that it was someone that will help me to move one. The phone was the only thing that could help me in my task. I knew that somebody has me now.

Which choice did you make?

This part I enjoyed the most. I felt now I am acting and feeling like Jane. Honestly the puzzles didn't help me to make the final decision. Here I had time to reflect. I chose to decline. First, I searched the doctor online to see his review. I found the profile and he had a quite good reviews (22). Some complained but other seemed happy and thankful. In the real world, not everyone is happy with a doctor. Then, I read the consent. But I stopped because I had questions for this doctor. I asked to show everything he found, to give details of the procedure. But after I was a bit disappointed by his answer. The consent form was not clear. I needed more details, I needed a proper conversation with the doctor, it's my mom! I had a connection with my mother. When I saw it was impossible I preferred to decline.

Did you manage to put yourself in the character’s shoes?

I felt more like her in the last part when I had to decide about the consent. Before it was confused. I didn’t know who I was and what I was supposed to do. I didn’t have so much information about her. When I searched a profile in Facebook, I saw an old person. I needed a frame, more informations about her. The first phase of the game was really difficult.

Did you feel emotions through the character?

Actually, yes. I have a nephew, he has really bad problems and I was thinking about him. What if somebody do that to him. I used my own personal experience to relate to this. I projected my own feelings on Jane. What if it was my mother?

Ana (11/05-14h)

Personal notes:

She went directly to open the parcel. After approximately 40 minutes I felt she was frustrated so I gave her a lot of clues through Kim. She was saying “I am so stupid”. Finally, I had to get involved in the story and I glanced at a drawer to help her. She understood and found the spoon. She achieved the story in 1 hour by accepting the consent form.

Timeline:



Conversation with Kim:

Kim: I have just heard that your mom passed away. I am really sad. I hope you are fine. If you need help, don't hesitate to message me!

Jane Tenenbaum: Hi kim

Kim: Hi Jane!

Jane Tenenbaum: I think I have amnesia from my medicine. Need to solve things for my mom. Part of her will is gone

Kim: Owvvh crap :/ Do you know what is a Batik? I saw something about that in a guide about Bali at your mom's house. p.44 something like that

Jane Tenenbaum: It's in french

Kim: Google is your friend!

Jane Tenenbaum: I know I'm there. It's a textile wax technique

Jane Tenenbaum: I'm closer I think

Did you like the experience?

Yes, really. I really liked the addition of the phone because it is so personal and it makes me think more like the character. I was really taking my time through the entire will and stuff. I wasn't sure what was a clue so I looked through everything. I think it's nice with this communication.

Did you understand the story?

Yes.

Did you feel frustrated by the clues?

No. Because this is not a timed experience I didn't feel competitive at all. I just wanted Kim to help me. For me it means a lot because I am a competitive person and I would have felt very frustrated if I was in an escape room and I didn't make it.

Which choice did you make?

I chose to accept because for me it was a no brain decision. My mum didn't say in the testament she didn't want it. The argument of helping or saving someone through this examination for me it's a more important issue. If I say no I will not be able to live with that. It's just her body. I will not become a criminal or whatever, who cares?

Did you manage to put yourself in the character's shoes?

I did with this communication with Kim. When I was about to start the conversation. I felt I need to talk to Kim like what's going on and she could help me. For me, the picture broke the immersion because it's not me. I am not really good at role playing. I was more I am working for Jane now. Jane was more a friend. She is not here and I have to figure out for her mom. When I saw the picture I thought it was her and not me.

Did you feel immersed in the story?

Globally yes but less when I was solving puzzles. I didn't know what to do with the books so I got away from the story at this moment.

Did you feel emotions through the character?

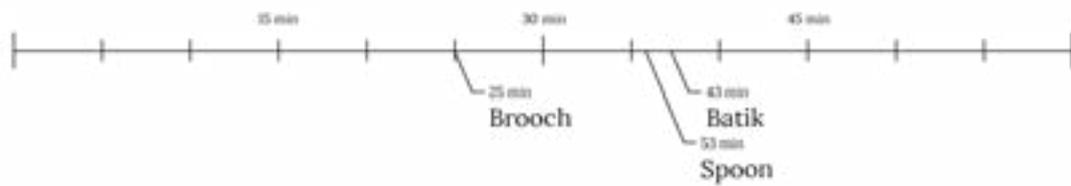
A little when I was reading the last will. The best moment is when you think on your own. I felt anything from Jane. The will is so formal, handwritten letters are better.

Dennis (12/05-10h)

Personal notes:

His first words were "Too much to read, this is so complicated" but he read carefully the will and testament. During the story, he commented a lot of things. I suppose he wanted to help me but I had the impression that he didn't put himself in the character's place. He achieved the story in 45 minutes by accepting the consent form.

Timeline:



Conversation with Kim:

Kim: I have just heard that your mom passed away. I am really sad. I hope you are fine. If you need help, don't hesitate to message me!

Jane Tenenbaum: Hey Kim, thank you. I found the will of my mum, would you help me to find some things?

Kim: Sure!

Jane Tenenbaum: Great

Jane Tenenbaum: Did I ever tell you about the first trip with my mum?

Kim: Mmmh, It makes me think about nothing... Maybe it's not a real trip?

Jane Tenenbaum: What do you mean?

Kim: I mean, maybe a metaphoric "trip"

Jane Tenenbaum: I'm thinking about it. Do you remember teddy?

Kim: Sure! Teddy is your teddy bear :p

Kim: I remember, I saw it in your room last time!

Jane Tenenbaum: Thanks! Found him!

Kim: I remember your funny drawing with the "plane"

Jane Tenenbaum: Yeah? What did I tell you about it?

Kim: Play the plane was the only way to feed you

Jane Tenenbaum: Yes, I remember!

Jane Tenenbaum: Do you know where my drawings are?

Kim: No... I remember just that one. Maybe you have to find the «plane» of the drawing?

Jane Tenenbaum: You think it's in my room?

Kim: Oh yes! I saw it. This pink disgusting thing hahaha

Jane Tenenbaum: Big or small?

Kim: A small! For eating

Jane Tenenbaum: Haha good one :)

Kim: Yey :D

Kim: Do you know what is a Batik?

Kim: You should search what is it on your guide or on internet

Did you like the experience?

Yes definitely. It was very challenging! I really liked the riddles and the settings.

Did you understand the story?

The box introduced me to everything. I think I did.

Did you feel frustrated by the clues?

It would be nice to get an introduction to who Kim is. I think that the interaction is great. It is really helpful and that much better to have it as a conversation terms than a paper under the door (Reference to the ethical escape room). Maybe just a picture of Kim could be better. If it's someone that will treat me as a friend or a sibling.

Which choice did you make?

I chose to accept because for me it's not a dilemma. I put a lot of thought previously about this decision and I am very much pro-donating organs and everything. This is something that is very clear for me. I've thought about it personally before.

Did you manage to put yourself in the character’s shoes?

Yes and no. In the beginning with the box it was the most. Reading the will that was very formal. Maybe a picture or something less formal could be better. I wondered why I was taking the medicine. I needed more information, more pictures about her. Who am I on this picture? But then when the story continued there wasn’t more empathy because I was focused on the puzzle solving. To make the decision I was me and not the character.

Did you feel emotions through the character?

Yes, in the beginning especially. I woke up I didn’t know anything about the story. The box was an emotion trigger “Wow my mom died”

Did you try to understand the life of your character?

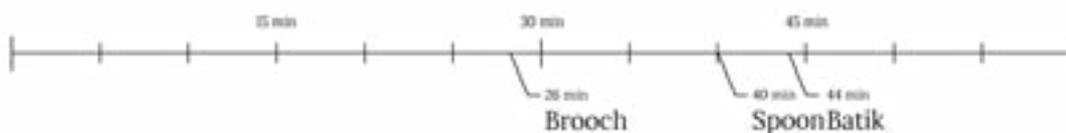
To accept or decline it was definitely myself. But when I was going through the books I let my fantasy invent the story. Especially the one with the spoon that triggered a great trigger in my mind. I saw my mom feeding me.

Judit (12/05-14h)

Personal notes:

She didn’t know the concept of escape room or LARP. During the story she was really quiet and looked thoughtful. She seemed very confused by everything. She didn’t understand the consent form and the final dilemma so she searched everywhere the “good” answer. She completed the story in 52 minutes by accepting the consent form.

Timeline:



Conversation with Kim:

Kim: I have just heard that your mom passed away.
I am really sad. I hope you are fine. If you need help, don't hesitate to message me!
Kim: Do you need help?
Jane Tenenbaum: I'm confused /:
Kim: Did you find teddy's heart?
Kim: I think it's from Teddy, your bear
Kim: Did you open his heart?
Jane Tenenbaum: I haven't found Teddy
Jane Tenenbaum: I found teddy's heart and

opened it and found a number
Kim: Yay! :D I think it could help you open the lock!
Kim: Now you need two other numbers
Kim: Did you find the "plane"?
Jane Tenenbaum: Yes
Kim: The drawing will help you to find it
Kim: You have the same "plane" in your room
Jane Tenenbaum: Is it a drawing plane
Kim: Maybe in a drawer ;)

Kim: On the drawing, the plane is not really a plane

Kim: What is it?

Jane Tenenbaum: Spoon? Bowl? Confused

Kim: Yes! :D

Jane Tenenbaum: I got these

Kim: You are on the right way!

Kim: Did you find a spoon in the drawer?

Jane Tenenbaum: I think I got the number 257

Jane Tenenbaum: Yes

Kim: ?? Where did you find it?

Jane Tenenbaum: That was the book page nr

Kim: Mmmmh, You should look at the guide about Bali :p

Kim: Do you know what is a Batik?

Jane Tenenbaum: No

Jane Tenenbaum: Am I still missing the last item work from the end of the world

Kim: Mmmh, I think you found all of the objects.

Did you receive the consent form by mail?

Jane Tenenbaum: OK not sure if I need to do anything else

Kim: You need to answer to the doctor!

Kim: Check your new mail :D

Jane Tenenbaum: I can't find the answers

Kim: Because it's your choice! You have to accept or decline this form

Did you like the experience?

Yes I did. It was kind of positive excitement. Something mysterious that I have to solve.

Did you understand the story?

I think so. I am the daughter of this person who passed away.

Did you feel frustrated by the clues?

For me it was really important for me. First when you asked if need help but at that point I was unsure what kind of help I can get. I didn't know which way to start. After that, when I had the first help it makes me good. It was a hope.

Which choice did you make?

I was unsure if I had to accept or decline. I think I didn't understand the consent form. I didn't pay attention to the last will so I filled out all the form without thinking about the dilemma.

Did you manage to put yourself in the character's shoes?

I think only a little bit. I could feel empathy when I found the box. When I was reading everything I felt a strong connection because the mother was talking to me. And less when I was solving the puzzles.

Did you feel emotions through the character?

Yes. First, I was excited to find the result. After opening the box I felt kind of melancholy.

Did you try to understand the life of your character?

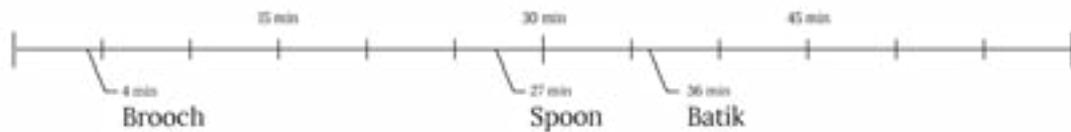
I think I was mainly working on finding the information. After the Teddy bear I felt a little ease and I was less confused and it made me easier to connect to the character. The personal notes was really good it was really helpful.

Marjo (12/05-16h)

Personal notes:

She was really quick and focused more on the puzzle than on the story. I had the impression she didn't want clues. That's why she didn't pay attention to the mobile phone. She achieved the story in 37 minutes by accepting the consent form.

Timeline:



Conversation with Kim:

Kim: I have just heard that your mom passed away. I am really sad. I hope you are fine. If you need help, don't hesitate to message me!

Kim: Are you okay?

Kim: Hey?

Kim: So... I guess you are alive. Did you find something in the books?

Kim: Did you open everything?

Kim: Did you see a "plane"?

Kim: You can answer me you know :p Mmmh, the same "plane" than on the drawing

Jane Tenenbaum: I need the last number!

Kim: Did you read the guide of Bali?

Did you like the experience?

Yes it was really interesting. it's like a tough topic but it was really enjoyable.

Did you understand the story?

Yes!

Did you feel frustrated by the clues?

It took me a long time before I realised that I could use that. Actually I don't know how to use an android phone. But I wasn't frustrated by it. I didn't realize I could answer. I don't want typing I prefer calling.

Which choice did you make?

I chose to accept. She says that she doesn't want to but come on, the doctor said it could be really helpful for somebody else suffering of the same disease. It was really selfish to say that because she is dead. It's just a body.

Did you manage to put yourself in the character's shoes?

I guess in some way. I liked the story about Bali and Klaus. The first thing you read is very formal and technical language and you think "okay this person I supposed is

my mother just died” but then you realize that it is more as a real person thanks to the little stories.

Did you feel immersed in the story?

Not super fully. I was still “I need to solve it” because I am a bit competitive.

Did you feel emotions through the character?

Yes a little bit. Not really deep.

Did you try to understand the life of your character?

I felt like myself. I was just “I need to figure this out”. It’s still too shallow because I didn’t know so much about the character in the end. To be honest I didn’t see the photos. Maybe because I know that this is your room so I know that this things are yours and not built for the character. Maybe if everything was built for the character in a special room but I know you don’t have the possibility to do like that.

I would like to thank:

- All of my classmates for testing my prototype and providing me constructive feedbacks: Lisa, Ligia, Ana, Dennis, Judit and Marjo. A special thank to Lisa and jr for their ideas.
- Simon Niedenthal for driving me during this thesis project and for giving me the opportunity to practice game design.
- Angela for correcting my grammar and spelling mistakes.
- And foremost, Pierre for always being on my side and supporting me in my times of doubt, for your support, your corrections and your ideas.

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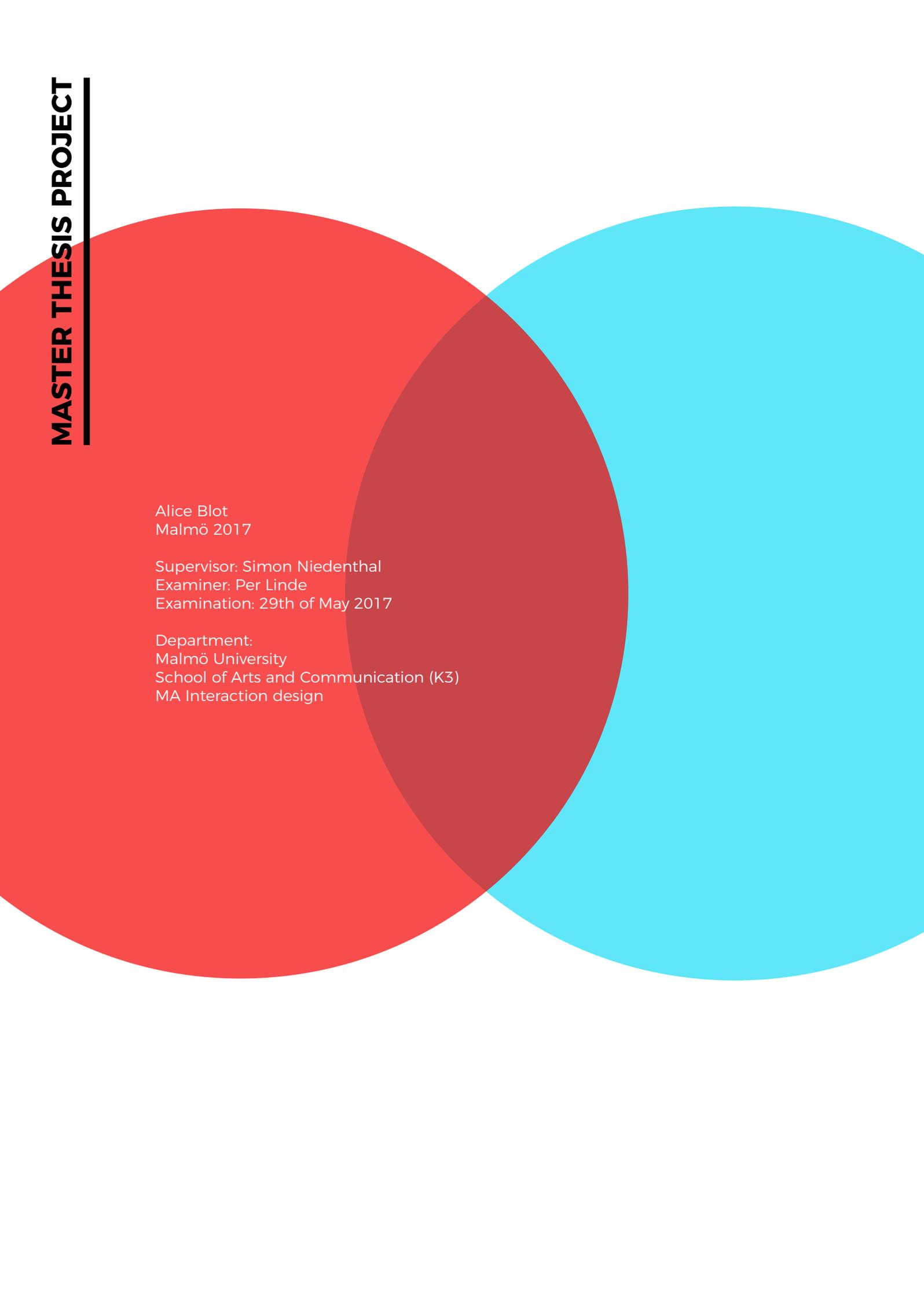
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Definitions:

Empathy - <https://en.oxforddictionaries.com/definition/empathy>

To foster - <https://en.oxforddictionaries.com/definition/foster>

MASTER THESIS PROJECT



Alice Blot
Malmö 2017

Supervisor: Simon Niedenthal
Examiner: Per Linde
Examination: 29th of May 2017

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School of Arts and Communication (K3)
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