"The Golden Rule": A Portable Escape Room designed to promote empathy and playfulness in challenging social contexts

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Buffalo State
State University of New York
Department of Creative Studies

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A Portable Escape Room designed to promote empathy and playfulness in challenging social contexts

A Project in
Creative Studies

by

Isabella Gomati de la Vega

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Master of Science

May 2017
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A Portable Escape Room designed to promote empathy and playfulness in challenging social contexts

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Isabella Gomati de la Vega

An Abstract of a Project
in
Creative Studies

Submitted in Partial Fulfillment
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May 2017

Buffalo State
State University of New York
Department of Creative Studies
ABSTRACT

The development of a Portable Escape Room (PER) board game aims to promote empathy as one of the key skills that, for a society in constant change, is necessary to face and solve complex social challenges. The development of a PER is a way of addressing the need for both innovative and accessible tools that can be used in different sectors of the economy. The PER not only encourages creative collaboration, but it also introduces the possibility of playfulness as a bridge for learning and problem-solving in a variety of scenarios. The product itself encompasses an excellent example of a Creative Problem Solving process, and it raises awareness of the importance of embracing creativity as one of the 21st century’s most valuable skills.

Keywords: Empathy, Social Change, Playfulness, Creativity, Collaboration, Board Games
Buffalo State
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Creative Studies

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Isabella Gomati de la Vega

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05/06/2017
Date
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Section One: Background to the Project

Purpose

The purpose of this Master’s project is to design and build a prototype of a Portable Escape Room (PER) in the form of a board game. Most escape rooms are found in physical locations, where players are given a time limit to solve challenges and escape. However, this format limits the experience to the location of the escape room. An escape room board game will make the experience much more accessible and approachable to a variety of target groups. I have two key outcomes for participants who play this game: 1) To generate empathy among team players (I see/understand that my way of solving things is different from yours, and I value your perspective/contribution to the game); and 2) To incentivize teams’ idea generation and output to show them the importance of going beyond obvious or initial solutions. When empathy and ideas collide, there is a much greater chance of generating change.

Yet the purpose of this project is not only to generate empathy or to incentivize idea generation. It is also to give adults the opportunity to learn through the act of playfulness. Most human beings stop playing relatively early in life due to cultural misconceptions that play is not productive and is simply childish. But when individuals stop playing, they also give up an opportunity for learning a series of human traits such as teamwork, curiosity, and persistence. This game aims to promote and revitalize these traits.

Background to the Project

The escape room as we know it today is a relatively new concept. It is usually a physical room into which a team gets locked, and is then tasked with
finding a way out in a limited amount of time. In order to escape, the team must successfully solve a series of puzzles and riddles that follow a theme or storyline.

Escape rooms are cooperative games. The first physical escape room was created in Japan in 2007 (Corkill, 2009) 8, and after that they appeared in Singapore in 2011 (Marinho, 2012). The first escape room in the United States was in San Francisco in the year 2012 (Cheng, 2014). They have become popular all over the world, and in 2015 there were more than 2800 escape rooms worldwide (French & Shaw, 2015). In the beginning, they were just games – some of them inspired by thrillers or mystery novels – but over time, the themes, profundity, and technology of the games evolved.

In a traditional escape room, players are presented with a context (topic) and 60 minutes to escape. It is usually a collaborative game with teams averaging 4 to 6 players working together to escape. Escape rooms are commonly housed in physical rooms, which are prepared and designed to allow the players to have a complete, practical, and sensorial experience. But traditions sometimes change, and escape rooms are now becoming more portable. Most of the portable escape rooms are not only incredibly expensive, but also uncomfortable and tedious to prepare. Many of these portable tools try to compile, into one set, everything that you need to build the escape room in any place.

Patel and Rubin (2016) took a different approach with their “Escape Room in a Box.” It is designed as a board game, and it doesn’t need to be constructed inside of an entire room. Instead, it gives players a context, a board, a set of instructions, and a set of puzzles to be solved.

Although there are many different themes and topics among escape rooms, they all have one thing in common: they help teams work cooperatively. While
board games do not usually share this cooperative nature, both escape rooms and board games promote playfulness, team building skills, empathy, and persistence, all of which are skills needed to productively approach challenges in today’s world.

**Creativity and Creative Problem Solving Skills Involved**

Creativity and Creative Problem Solving (CPS; Osborn, 1953) will play an integral role in the development of a PER. First, the project requires a CPS Model. The FourSight CPS thinking profiles model (Puccio, Miller, & Thurber, 2002) is going to be the main driver of this project, and in each stage of this model, the Portable Escape Room is going to take form. CPS will be integral in determining the pieces to be defined when designing a board game:

- What should the topic of the game be?
- How many puzzles it should have?
- How can we make it international?
- What is the audience we are trying to impact?

These questions, among others, will require clarification, ideation, development, and implementation (Puccio, Miller, & Thurber, 2002). The result of using Creative Problem Solving to develop this PER will be to encourage team members’ empathy, ideation skills, and team playing abilities.

There is currently only one toy on the market created specifically to promote empathy (Twenty One Toys, n.d.), and it is not a board game but a blindfolded puzzle. Empathy is unfortunately not a skill that is commonly taught through gamification. Because of this, it is clear that CPS is going to be integral to promoting empathy through a board game.

**Rationale for Selection**

The decision to create a Portable Escape Room / Empathy Board Game
for my Master’s Project wasn’t easy. I spent a lot of time trying to figure out what it was that was motivating me, until I finally had an AHA! moment. I wanted to spend my 100 hours of work playing, and I wanted to create something that was going to have an impact in world of social challenges.

What I feel passionate about in my life – and I would even dare to say what my mission in life is – to give people the possibility of having more than just one point of view. The escape room is a great vehicle to live out this mission, as it challenges a group of people to work collaboratively on a task, solving multiple puzzles that require different perspectives and capacities.

Most critical to winning the game and escaping is the need for communication between teammates. Without proper communication, there is no way the game can be solved; players need to work together in order to escape, or in the case of a PER, to win the game. The challenge in creating a PER is to create puzzles and a story that forces the team to be empathetic, and to alter their mindsets to achieve the common goal.

There are three key elements to this project:

1) Playing is a bridge between learning and growth. If there is something I want my users to experience, it is the possibility of learning about empathy and its importance through the act of play. If I can make this happen, it is going to be a better experience both for the players and for myself. This would be a way of smoothly introducing creativity into the players’ lives.

2) Being open-minded and empathetic are qualities that every team needs in order to be successful. It doesn’t matter if the team is from a corporate enterprise or if it’s a team of high school seniors, those two qualities are invaluable to success.
3) The concept of a Portable Escape Room promotes empathy, and it is conveniently packaged in a box. There are no comparable board games on the market: users gain new experiences, and the portability of the game means they don’t have to go anywhere. This product is both useful and novel, which is what creativity is all about (Stein, 1953).

Section Two: Pertinent Literature

The pertinent literature around this project can be divided into three categories: Games, Empathy, and Playing. Each one of these areas of research has a different impact on the development of the board game, and affects the practical, theoretical, and intentional parts of the game respectively. Although they are presented separately, they are all interrelated in the actual practice of developing a board game from scratch.

Games: Escape Rooms and Puzzles


A common and consistent way of identifying creativity throughout human civilizations has been through the evaluation of products. In this article, the authors presented puzzle solving, and how creativity is a prerequisite for the success of a product. The article aimed to develop a general theory of creativity, and it is interesting and useful to see how the authors intended to build the theory by examining the creative process in the puzzles domain.

This book provided a series of instructions to develop the puzzles found within escape rooms. Although it was a good introduction to both escape room puzzles and their requirements, it was focused on practical aspects that do not apply to the creation of a board game.


In this article, the author explained how solving puzzles as a free-time activity is interesting for children, teenagers, and adults. The tool analyzed within the article is a game called *Contraptions™*. The tool analyzed within the article is a collection of puzzles based on the cause-and-effect principle. The puzzles in this game are based on the cause-and-effect principle. It was interesting to see how the author broke down the game into its educational design to show that within the game exists the possibility of creating playful digital environments that engage different types of users.


This article is a compilation of a series of surveys, which were made to better understand the nature and development of escape rooms. The author presented the intentions of escape room owners, as well as the types of games that are the precursors of escape rooms. The author also described the competition, size, and cost of running an escape room, along with the average number of players, the
most common themes and narratives, and the different types of puzzle sequences.

This article was a gem! The author, Scott Nicholson, is a well-known professor and gamer, and he updates this article periodically, which means that it is a living document.

**Empathy**


This chapter addressed two different questions: How can we know what another person is thinking and feeling? and, What leads a person to respond with sensitivity and care to the suffering of someone else? From these two questions, eight different phenomena are explained. Some of these phenomena, including cognitive empathy – how to feel like another person, understanding what others are thinking – and projective empathy – how to connect with another person by finding common feelings and or behaviours – were incredibly helpful for the development of this board game.


This article discussed how empathy is one of the requirements for design thinking to be successful. It usually inspires people. The article poses the question of how researching close groups of people might be helpful in expanding the mind, as well as in expanding the human understanding of different cultures. According to this research, the interaction between people in closed or very small groups might lead to something like selective empathy: depending on the context, people within these groups may feel empathetic or not with one another.
The scientific explanation for empathy found within this article is extremely interesting. According to the authors, when exposed to others’ emotions, recent brain imagery results suggest that individuals automatically share these emotions. This is both exciting and reaffirming. Taking this perspective as a base, the authors proposed two major roles for empathy: an epistemological role, which aims to provide information about the future actions of other people, and a social role, which tries to serve as the origin of the motivation for cooperative and pro-social behaviors and improve social communications.


This transcription related affective learning with empathy and explained how affective learning is an important aspect of education that can be supported through games. Although it was presented in a specific frame of videogames, the information provided is useful to any type of game. It basically presented how games can and do address affective learning, especially considering the growing trend of educational and serious games aiming at changing behaviors and attitudes. To support affective learning through games, players’ emotions need to be recognized and interpreted (here is where empathy comes into play), and an emotional experience needs to be created to motivate players and deepen their learning.

The article presented the concept of design anthropology, which promises to translate different human values into design. It is a good tool to reference when considering how to translate empathy in a board game. How do I connect players to experiences by using both empathy and design at the same time?

**Play, Creativity, and Social Change**


The article provided a series of examples of people who use the field of play as a vehicle for generating social change. A collection of in-depth interviews with athletes were compiled and coded, and four different characteristics that were found in their playing experiences are to be understood as motors for change: social consciousness, meritocracy, responsible citizenship, and interdependency.


The context for this article was schools, and why it is so difficult for teachers to create conditions that support creative behaviors. I see a parallel between the context of school and the context of board games. Many schools and games alike follow a series of rules that are obsolete and that need a reform to promote creative behavior among the students and players.


Who would’ve thought that games could encourage people to solve real-life problems? The premise of the book was that we can leverage the power of games to fix what is wrong with the real world – from social problems such as depression
and obesity, to global issues such as poverty and climate change. This book explained what a game is, why they make us happy, how they can reinvent reality, and how they can change the world. It was a delightful read not only because it was groundbreaking but also because it was inspiring.


This article demonstrated that children who experienced 10 minutes of playfulness related to intelligence had positive results in 6 different clusters that were being tested. This is in contrast to children who experienced playfulness related only to fun, in which the effect was moderately negative. Coefficients from the shifts and the clusters in the study were near zero, which supports my decision to create a game (playfulness) that must be solved using empathy (intelligence).

All of the resources presented here had a purpose. Some of them were informative, others were practical, and most of them were inspiring and reaffirming. Designing a board game is not a simple process; it has several steps, and by itself it is already a hard task. Additionally, mixing it with empathy is a challenge. Knowing that there is only one real game on the market that is intentionally promoting empathy - Empathy Toy, (n.d)- is enough reason to build another one. These readings provided me with information about how to build a game, why games are change vehicles, what empathy is, and how empathy might be integrated into a board game. See appendix A for a brief summary of the project.

**Section Three: Process Plan**

The first step to creating the PER board game is going to be clarification.

For example: What is an escape room? What is going to be tackled, and how? What
will be the theme of the PER? How many players will the game have? How many puzzles will there be? What’s the story? After clarifying comes the ideation phase, which is probably going to be one of the most important stages in the process. All of the ideas for the PER story, as well as the types of puzzles that are going to be used, are going to emerge in ideation. In addition, the look of the PER, the size, the price, and the possible targets are also going to come out of the ideation phase.

The development phase is going to be the longest one. After ideating, and choosing the ideas that are most appealing, it’s going to be time to start creating. I will need to develop and design each puzzle and figure out how they will look, how big they will be, how they are going to fit in the box, how they are going to be interrelated to one another, and how the story will connect them.

Understanding that the CPS process is not linear but cyclical, it is possible that I will need to go back to clarifying or ideating at any time. The implementation phase is the last one, and will include completing a prototype, building the box, and finalizing the puzzles to give the PER a try. This is the practical, physical part of the whole process, and it has to do with the experience that the game is going to provide to the user.

But there is another aspect that the game must address. The story and the puzzles need to build empathy and promote a “thinking outside the box” attitude amongst team members. How is that going to happen? First, the literature review is going to be a crucial first step. I will need to understand what is already out there and the psychology behind playing, empathy, and social change. Taking that review as the core of the investigation, the development of each puzzle and of each part of the story is going to need to be tested to understand, or at least observe,
how players respond to it and if it is really serving the purpose of generating empathy to tackle complex social problems.

After the testing, it will be time to unveil the final product. If each puzzle is timed, placed together with the others, has a design that is compatible with the game, and is user friendly, the game should be ready, and my goal of building a Portable Escape Room should be accomplished.

**Project Timeline**

The project started with a clarification phase, followed by the literature review. After most of the literature review was completed, an action plan was created. I broke down the parts of the project into the following: How it is going to work? What comes first and what is next. The outcome of the action plan can be seen in Figure 1.

![Figure 1. Action plan.](image)

According to the action plan, I created a tentative calendar, considering that the number of hours and dates might change (see Table 1).
## Table 1. Action plan calendar.

<table>
<thead>
<tr>
<th>Task</th>
<th>Week / Date</th>
<th>Approximate Dedicated Hours</th>
<th>Meetings / Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Story Development</td>
<td>March 1&lt;sup&gt;st&lt;/sup&gt; – March 10&lt;sup&gt;th&lt;/sup&gt;</td>
<td>30 hours</td>
<td>Meet March 3&lt;sup&gt;rd&lt;/sup&gt; Feedback – Redeliver March 10&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Puzzle Development</td>
<td>March 1&lt;sup&gt;st&lt;/sup&gt; – March 10&lt;sup&gt;th&lt;/sup&gt;</td>
<td>25 hours</td>
<td>Meet March 3&lt;sup&gt;rd&lt;/sup&gt; Deliver: Feedback – Redeliver March 20&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Empathy and Ideation integration</td>
<td>March 17</td>
<td>10 hours (excluding testing)</td>
<td>Deliver report</td>
</tr>
<tr>
<td>Graphic Development</td>
<td>April 3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>20 hours</td>
<td>Meeting April 3&lt;sup&gt;rd&lt;/sup&gt; – Review Send in advance for feedback</td>
</tr>
<tr>
<td>Industrial Development / Production</td>
<td>April 10&lt;sup&gt;th&lt;/sup&gt;</td>
<td>10 hours</td>
<td>Meeting April 10&lt;sup&gt;th&lt;/sup&gt; – Review Send in advance for feedback</td>
</tr>
<tr>
<td>Prototype (Industrial + graphic)</td>
<td>April 24</td>
<td>10 hours</td>
<td>Meeting April 24&lt;sup&gt;th&lt;/sup&gt; – Review</td>
</tr>
<tr>
<td>Testing</td>
<td>May 1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Final Deliver</td>
<td>May 8&lt;sup&gt;th&lt;/sup&gt;</td>
<td></td>
<td>Send in advance for feedback</td>
</tr>
<tr>
<td>Total Amount of Hours</td>
<td></td>
<td>105 hours</td>
<td></td>
</tr>
</tbody>
</table>

### Section Four: Outcomes

The outcomes of the Master's Project include technical outcomes, such as specifications about the game, as well as more deep and theoretical outcomes, such as research, concepts, and character development. Some of these outcomes were
not evident until the final stages of the process, and some of them went through a metamorphosis from beginning to end. Without having such a deliberate creative process, it would have been impossible to achieve specific and valuable results. Utilizing the stages of Clarification, Ideation, Development, and Implementation (Puccio, Miller, & Thurber, 2002) allowed me to create the following information about my PER board game.

**Type of game**

This is a cooperative game in which team players must discover for themselves the need to work together to solve a series of themed puzzles, challenges, and riddles in order to escape the game. It is a physical board game that can be transported and played in different locations. The players are given instructions and a set of envelopes, a clock with a limited time, and a task. When the clock starts ticking, the game begins.

**Players, puzzles, and time frame**

2 players, 4 puzzles, 35 minutes to escape

**Prototyping**

The game consists of a box (see Figure 2), a clock, a board, a pair of glasses with different colored lenses, and a set of cards. The cards include instructions, context, descriptions for each of the characters, and specific cards for each character characteristic.
Figure 2. Game box mockup.

Research

The research process for this project was filled with challenges, especially how to connect topics that are not obviously connected to one other. The concept of learning and promoting empathy throughout a game in different environments – governmental institutions, corporate jobs, nonprofit organizations, social development programs, etc. – started as a vague idea and grew significantly as time passed. The main outcomes of the research process were the insights that ended up contributing to the structure of the board game. The two main insights included a deep understanding of empathy, how it works, and how it might be incorporated into a serious playing process; and how playing is not only a conductor of key learning, but also a new and powerful tool for key learning to take place.

Concept development

Choosing and developing a concept was key to building the
game. It was the first step before getting into specifics. What is this game going to be about, and how might I make it happen? What is its concept?

After an ideation process (See Figure 3) in which possible themes were generated, I converged with the selection of the title “The Golden Rule,” or the law of reciprocity (see Figure 4). Although this rule states a maximum of altruism, and it is commonly known or presented as “one should treat others as one would like to be treated,” it was selected as the main basis for the game with a couple of changes. Although the origin of the golden rule is primarily religious (Wattles, 1996), it has been spread to other contexts such as human rights, economics, and psychology. How might we establish the golden rule as something both fun and necessary to have a more cooperative and united society? How to make this concept viable throughout the playing of a game? The concept of the golden rule is something broader than its origins: it is empathy as a way of living and promoting a better, more inclusive world.
Figure 3. Narrative ideation.

Figure 4. Concept clarification.
Character development

The game is composed of two characters that are experiencing changes in their lives. These two characters have to work together in order to beat the game, but the collaboration aspect is never specified in the instructions; the players must discover it for themselves. The challenge in the character development phase was to create two personalities that were opposite enough to have conflict, but also had some strong points in common, allowing empathy to occur. Jung's (1969) archetypes and The Enneagram (Palmer, 1995) were two theories reviewed in order to select and create the characters’ personalities (Figures 5, 6, and 7).

Figure 5. Enneagram abstraction.
Figure 6. Character backbones.

Figure 7. Character ideation.
The outcomes of this stage were two characters with the following:

General characteristics:
- No gender is specified
- No race specified
- No nationality is specified
- Both characters are middle-aged
- Both characters are disappearing
- Both characters are experiencing a challenge related to the way they are interacting with the world and communities around them

Character no. 1 “The taker”
- The body starts disappearing (the character can’t see him/herself)
- The character has no sense of space
- Other people can see the character

Character no. 2 “The giver”
- The character starts to disappear from others’ view
- The character is struggling to be noticed

Both characters need to talk to each other and work together to beat the game. Each has characteristics that the other needs to understand in order for both of them to move on. These characteristics are represented with cards displaying vital organs of human beings. These organs exemplify specific personality traits that are needed to solve the puzzles. Because the intention was to maintain the characters free of physical traits such as gender or nationality, the organs were an elegant solution, as we all have them. (See Figures 8 and 9)
Set development

My goal was for this game to be played in every kind of culture and setting,
so most of the game happens in a neutral space, white, without noise, in which the characters have only one another to figure out what is happening with them with a set time of 35 minutes.

The beginning of the story takes place in an urban setting in which both characters have jobs, friends, and family, but are promptly moved to a neutral space (like the Matrix), which is where most of the game happens (see Figure 10). The decision of having a neutral space as an outcome was based on the need to provide a space that every single player could relate to, no matter his or her culture, religion, or socio-political views.

*Figure 10. Setting ideation.*

**Plot development**
Coming up with a story for a board game is not an easy task. The storyline has to both cover the concept of game and allow for its purpose and intention to occur. After a long creative thinking process, with several divergent and convergent phases, the outcome of the plot development was magnificent.

Two characters, both different in personality and needs, end up having a common problem. Each character is not going to be able to solve his or her own problem alone, which is why both characters need not only the help of, but also the ability to connect with one another to be able to solve their problems (see Figure 11).

![Figure 11. Story backbone.](image)

When they work together, the characters make a strong team, but this facet is not something that is mentioned in the instructions of the game. Any information given to the players is relevant to their own stories and states that
they are going to be set up in a neutral environment (see Figure 12). Whatever occurs in that environment will determine whether the puzzles – and ultimately the entire game – can be solved and understood.

*Figure 12. Context card mockup.*

**Solution development**

Coming up with a solution was probably the most difficult aspect of the process. Part of the solution is that once the players understand that they need to work with each other and not against each other to solve the problem, the game starts to flow. It gets easier, and even though it does not become simple, it does become doable. What they are truly realizing throughout their playing exercise is that once they understand, validate, and appreciate each other’s needs, they can work together in a much more open and collaborative environment to solve whatever it
is that needs to be solved. In this specific case, the solution of the game is being empathetic toward each other.

**General Playing Outcome**

Although the game is still under construction, including final touches to its pieces and storyline, the outcome is well-defined. This outcome is both personal and addressed openly to potential players: to promote empathy, which is a mental process that can not only be learned, but also encouraged through playing. If users allow themselves to play with others, they will be freeing themselves from a series of social constructs that may be making it more difficult to solve problems and move forward in everyday life. The outcome of the game is a metaphor to real life situations that can benefit from empathy.

**Section Five: Key Learnings**

The process of creating and developing the PER was more than just a regular academic experience; it was a once-in-a-lifetime learning opportunity. Throughout the process, I experienced a series of insights and transformations in both my academic and personal life that I want to share, not only because they are full of information that I find infinitely useful, but also because they are my educational outcomes on this journey.

**Content Learnings**

**Games: Escape Rooms and Puzzles**

I gained incredible insights on how to build an escape room, a board game, and the puzzles within the game. This was all new to me as I had absolutely no experience before in designing games. I had played several board games before,
and I had been to two different escape rooms, but my familiarity was limited to those experiences.

I would like to compare the task of developing the content of an escape room to the process of writing a book. First you have to select a concept, an intention, and then you have to follow the process of selecting a theme, developing a story, and designing characters, set, plot, challenges, and solutions. Anyone who has tried this before knows that it is not easy. It gets messy, and it can be frustrating.

Both of these activities are perceived as tasks, when in reality they are creative processes. During the first few weeks of developing the PER, my levels of anxiety were high. I was leaving behind all that I had learned in my experience as a Creative Studies student, without putting into practice what I had learned. I talked about it with my peers and my professors, and step-by-step I started to untangle the challenge. I put together a resource group, I broke down my challenge and went through it step by step, and I did divergent and convergent sessions for each step. This was a major key learning; having a creative process works, you just have to trust it!

The same anxiety kicked in during the development of the puzzles and the design of the board game. Trial and learn made up a large part of my creation process. I often asked myself, How might I do something that I've never done before? It is incredibly helpful to have experience in the field in which you are creating a new product, but even though I didn’t have that experience, I knew that I was not going to be able to accomplish my goals if I didn't at least try. So, I played. I went to physical escape rooms, I played escape room board games, I played other types of board games, I looked at gaming blogs such as Board Game Resource
puzzle creation blogs, such as Puzzling Parts (n.d.) and PuzzleNation (n.d.). It became part of my daily life. Living what you are doing is key when you are trying to build something. Most of what I did or read became inspiration; some of it became useful in a technical way. I talked to people who had more experience, and I started getting closer to achieving my goal.

Incubation time and an outsider’s perspective were also necessary. At least once a week, all of the information that my brain was processing became overwhelming and the anxiety came back. Every time that happened it was time to step back. STOP. Focus on something else, and when my mind was ready to start processing again, come back to review the challenge. This process was revealing because it incorporated the core mission of my product. The information about empathy, playing, creativity, and social change was important to the content and the intention, but the content was not going to be useful unless I was able to generate a motor for it.

The design process of the product itself, understanding how it was going to function and what it needed to work, was the final challenge. There were also some technical key learnings. I spent some time working in the woodshop and doing some prototyping with the laser printer. Experimentation with color filters and color samples was also conducted, so that a senses experience could be integrated to the game. At this point the results are still not as expected, so more trial and learning is still required.

**Empathy**

Why is empathy so important? The process of understanding how to solve different social challenges and issues was long and confusing, until I ran into the
concept of empathy. For some of us, empathy is something so natural that it might be challenging to perceive as something that someone might need to learn, or even as something that someone might lack. Empathy doesn't have a specific definition, so for this specific project I have chosen to apply my personal definition: the ability to understand, validate, and connect with another human being. How can we know what someone is thinking or feeling (Batson, 2009), and how is it that we might be able to respond with sensitivity to those thoughts or emotions?

Projective empathy relies on the idea that when one identifies in others characteristics of oneself, one becomes able to connect with those people on different levels (Batson, 2009). This phenomenon of empathy was key to developing the board game. I might say it was the spine of it. For example, considering that the aim of developing this board game was to create a tool that could be helpful in different social scenarios and that needed viewpoints from different perspectives to be successful, the idea of empathy was incredibly relevant.

Empathy can be considered a requirement for the design thinking process (Brown, 2008) in which the first step in order to understand the problem that is being addressed is to empathise with the other stakeholders in order to define it (Dam & Siang, 2017). Most social challenges can be addressed by using a design thinking approach in addition to creative processes. Playfulness, along with the possibility of using a tool such as a board game, to address social challenges can be very beneficial. This tool – which in this specific case provides a neutral scenario for both players and therefore generates an ideal spectrum for empathy to occur – allows both players to see one another’s perspectives in the context of the game,
and allows them to connect or embrace some characteristics that may have been previously invisible.

The idea of using empathy through design to generate a more complete and pleasant user experience (Xu, 2011) was crucial in the learning process in developing this PER. Connecting the players not only with each other but also to the design of the game through the translation of their different human needs, values, and characteristics was monumental. For me, it was proof of the connection that exists between my passions, anthropology, design, and playfulness.

Playing, Creativity and Social Change

The whole idea of my Master’s project was born in the post-conflict Colombian context. The assumption of playing as a source for social change was just that: an assumption. Until I started my research, I had no actual evidence that playing could be a way of solving complex social problems. Similarly, the idea of involving empathy in the process was just that: an idea that did not necessarily have the potential to be realized.

The literature review provided me with some examples that used play as a vehicle for generating social change (Kauffman & Wolff, 2010). During the literature review, I found examples of characteristics such as leadership and consciousness that were proven to be consequences of playing. Other research revealed that playing games in made-up scenarios might contribute to solving challenges in real-life scenarios (McGonigal, 2011). Some games help imaginary societies reinvent reality, which generates a deep wish for change. What is interesting is that these theories were proving my initial assumption— if I can build a board game with a made-up scenario, I might as well use that scenario to
incentivize the players to make the world a better place. My game could be the inspiration or the example that people need to solve their real challenges.

There was also a handful of information that showed that many traditional approaches to learning are obsolete. One of the ways of fighting this is to support creative behaviors throughout the learning process (Gude, 2010). Changing obsolete rules, in this case on the board game spectrum, might be what is needed to generate a positive change in the learning and growth experience of the players.

My key learning was that playfulness is a valid way to promote social change, and that the learning outcomes of play come from using the creative process as a learning and teaching tool.

Personal Key Learnings

This entire process was both life-changing and intellectually challenging. Creating something from scratch was incredible and well worth the time and effort. But it was also difficult and frustrating. During the process my creative preferences were more than revealed. The ideation and the development phases of the process were my favorite; it was like experimenting with an uninterrupted flowing process. But when it came to narrowing down my ideas and bringing the final product to reality, I started having a lot of problems. Generating the concepts and each part of the board game was a reassurance of my capacity to think and build something close to perfection. But when it came to actually polishing it – for example, actually writing the story – my mind went blank, and that was also a reassurance of my fear of failure and judgment.
I am the meanest and scariest judge of all. I am the only one who is holding me back. I realized that sometimes I am sabotaging myself in my creation process just because I am aiming for perfection and there is no such thing.

This whole process showed me characteristics of myself that made me feel both proud and scared. It showed me that curiosity is my motor. When I am curious about something I am going to go after it to get some answers. It also showed me that I can be interested in something for more than a short period of time, but only if that interest is undergoing constant change. This process also showed me that being organized and structured is a characteristic that is going to help me accomplish many things in life. On the other hand, it helped me realize how important it is to have time management skills, and how important it is for me to work on something that I feel in love with.

Section Six: Conclusion

Going through the Creative Problem Solving process from beginning to end can be a life-changing experience. During the Master’s program, we experience the theory of it CPS: how it works, why it works, and when it works, and often we are able to try it, facilitate it, or train it, depending on what it is needed. Most of these experiences are short in length and give us a brief glimpse of what we are going to experience if we decide to follow the path of creativity in our lives. This Master’s project not only has the potential to apply all of what was learned during the process, but also it challenged my ability to be a creative being.

It is accurate to say that human creativity, as unique as it is, has transformed the planet we live on (Gabora & Kaufman, 2010). It is not only something that we have, it is something that we are. Being creative is innate to
humans, as it is to many other species that engage in creative acts (Kaufman & Kaufman, 2004). In other words, creativity can be interpreted both as a trait and as a way of living. As with many natural features of the human being, everyone tends to develop and be aware of their own creativity in different ways. For me working on this project was a reminder of that. Creativity as a way of living allows us to engage in the most complex and challenging tasks and be able to solve them and go through them with resilience and tactics.

If I could make an analogy, I would say that creativity is like magic, and the individual is the magician. Each one of us practices our tricks every day until we have managed them and they become natural to us. We all have a this magical ability, we all have within us what is needed to be a great magician, it’s in our blood, but only the ones that decide to practice enough to master it are the ones who live up to its potential. Building this board game was the result of that magic that I decided to train. Every day for the last year, I have been breathing and acting creatively, I have been learning and trying to be more creative, and to live up to my creative potential. I have been also understanding what creativity means, and acknowledging its perks and its faults.

As I mentioned previously, there is one element that for me is key for creativity development: curiosity. Elizabeth Gilbert (2015) mentioned in her book *Big Magic: Creative Living Beyond Fear* how following our curiosities instead of our passions is the real key to being able to live an interesting and creative life. Curiosity instills human being with some of the clearest characteristics of creativity such as flexibility, problem solving, and positive uncertainty, therefore becoming the driver of living a creative life. The human being tends to thrive in the process of discovery (Wahl, 2013). And in this specific case I thrived in the process
of discovering how to build a PER board game. It was exciting, it was novel, it was useful, and it was what I needed.

Creativity is driven by curiosity and, as a consequence, expands the mind of the individual that is using it and its context. Creativity itself is making the world a better place, and creativity placed into action, like in my board game, is helping others learn how to do the same.

What I see myself doing next is using creativity to help me make changes in both my personal and professional life. I am making big decisions such as what I want to be when I “grow up”, what the work is that I want to do, what my non-negotiable needs are to have a stable relationship, and other questions that orbit my mind. In my personal life, the interpretation of my preferences in creativity tests such as the Kirton Adaption-Innovation Inventory (KAI, Kirton, 1977), the Myers-Briggs Type Indicator (Myers, 1962), and FourSight Thinking Profiles (Puccio, Miller, & Thurber, 2002), has been a starting point. Identifying and getting to know myself from other points of view has given me several insights about what I want to be, and who I want to become. At the same time, the use of the CPS process is probably going to be key in this discovery, since it is always helping me diverge and converge around most of my questions and needs.

Specifically, within my Master’s project, I see myself gathering together a group of people interested in the area of board games and empathy, who have both technical and theoretical knowledge in order to help me develop a fully functional prototype of the PER. After building the team and developing the functional prototype, I would like to find financing for the product and begin commercializing and pitching it to different sectors in order to promote empathy as a responsive tool for different complex social challenges.
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Appendix A

Summary of the design process of the project

“THE GOLDEN RULE”

A Portable Escape Room designed to promote empathy and playfulness in challenging social contexts

A project in Creative Studies
by Isabella Domali de la Vega

“THE GOLDEN RULE”

The development of a Portable Escape Room board game aims to promote empathy as one of the key skills that, for a society in constant change, is necessary to face and solve complex social challenges. The development of a Portable Escape Room (PER) is a way of addressing the need for both innovative and accessible tools that can be used in different sectors of the economy. The PER not only encourages creative collaboration, but it also introduces the possibility of playfulness as a bridge for learning and problem-solving in a variety of scenarios. The product itself encompasses an excellent example of the Creative Problem Solving process, and it raises awareness of the importance of embracing creativity as one of the 21st century’s most valuable skills.

Keywords: Empathy, Social Change, Playfulness, Creativity, Collaboration, Board Games
“THE GOLDEN RULE”

Escape the Room by ThinkFun

Escape Room in a Box Kickstarter Project

Escape Challenge North Standart Portable Game

Escape Room the Game by SpinMaster

“THE GOLDEN RULE”

The Empathy Toy by Twenty One Toys

Background

Existent PER

Existent Empathy Toy
"THE GOLDEN RULE"

The development of the design process of "The Golden Rule" covered four of the five steps of the Design Thinking Process. Going back and forth, the results of the prototyping phase were outstanding and aligned with the expectations of the project itself.

"THE GOLDEN RULE"

In order to achieve the desired outcomes the first step of the design process was to select and understand the needs and drivers of the primary stakeholders. The users were selected based on the context of the majority of complex social challenges, in which this 3 actors are present almost all the time.

1. Adults
2. Anyone that needs to generate empathy within a complex social challenge
3. Public & Private Sector; NGO's, Non profits
"THE GOLDEN RULE"

Most escape rooms are found in physical locations, where players are given a time limit to solve challenges and escape. However, this format limits the experience to the location of the escape room. An escape room board game will make the experience much more accessible and approachable to a variety of target groups.

Key Outcomes for participants who play this game

1) To generate empathy among team players (I see/understand that my way of solving things is different from yours, and I value your perspective/contribution to the game)

2) To incentivize teams’ idea generation and output to show them the importance of going beyond obvious or initial solutions. When empathy and ideas collide, there is a much greater chance of generating change.

Yet the purpose of this project is not only to generate empathy or to incentivize idea generation. It is also to give adults the opportunity to learn through the act of playfulness. Most human beings stop playing relatively early in life due to cultural misconceptions that play is not productive and is simply childish. But when individuals stop playing, they also give up an opportunity for learning a series of human traits such as teamwork, curiosity, and persistence. This game aims to promote and revitalize these traits.

"THE GOLDEN RULE"

IDEATE
Design Thinking Process

Narrative Ideation  Characters Ideation  Setting Ideation

Narrative Backbone  Traits Ideation  Characters Backbone
“THE GOLDEN RULE”

Type of game
Cooperative game in which team players must discover for themselves the need to work together to solve a series of themed puzzles, challenges, and riddles in order to escape the game. It is a physical board game that can be transported and played in different locations. The players are given instructions and a set of envelopes, a clock with a limited time, and a task. When the clock starts ticking, the game begins.

Players, puzzles, and time frame
2 players
4 puzzles
35 minutes to escape

Design Specifics
The game consists of a box, a clock, a board, a pair of glasses with different colored lenses, and a set of cards. The cards include instructions, context, descriptions for each of the characters, and specific cards for each character characteristic.

Container Box
Mockup
“THE GOLDEN RULE”

Characters General Characteristics

- No gender is specified
- No race specified
- No nationality is specified
- Both characters are middle-aged
- Both characters are disappearing
- Both characters are experiencing a challenge related to the way they are interacting with the world and communities around them
- Both characters need to talk to each other and work together to beat the game. Each has characteristics that the other needs to understand in order for both of them to move on.
- These characteristics are represented with cards displaying vital organs of human beings.
- These organs exemplify specific personality traits that are needed to solve the puzzles. Because the intention was to maintain the characters free of physical traits such as gender or nationality, the organs were an elegant solution, as we all have them.

Vital Organs Illustrations
“THE GOLDEN RULE”

Set 1
Vital Organs Cards
Mockup

“THE GOLDEN RULE”

Set 2
Vital Organs Cards
Mockup
“THE GOLDEN RULE”

Set and Context General Characteristics

- This game was designed to be played in every kind of culture and setting.
- Most of the game happens in a neutral space, white, without noise.
- The characters have only one another to figure out what is happening with them.
- The beginning of the story takes place in an urban setting in which both characters have jobs, friends, and family, but are promptly moved to a neutral space (like the Matrix), which is where most of the game happens.
- The decision of having a neutral space as an outcome was based on the need to provide a space that every single player could relate to, no matter his or her culture, religion, or socio-political views.

“THE GOLDEN RULE”

Context Card Mockup
"THE GOLDEN RULE"

The Key to the Solution

Once the players understand that they need to work with each other and not against each other to solve the problem, the game starts to flow. It gets easier, and even though it does not become simple, it does become doable. What they are truly realizing throughout their playing exercise is that once they understand, validate, and appreciate each other’s needs, they can work together in a much more open and collaborative environment to solve whatever it is that needs to be solved. In this specific case, the solution of the game is being empathetic toward each other.

The Key to the solution is a pair of glasses that has different lenses of different colors. The correct combination of colors in each puzzle, gives the players a clue that allows them to continue to the next one.
“THE GOLDEN RULE”

General Playing Outcome

Although the game is still under construction, including final touches to its pieces and storyline, the outcome is well-defined. This outcome is both personal and addressed openly to potential players, to promote empathy, which is a mental process that can not only be learned, but also encouraged through playing. If users allow themselves to play with others, they will be freeing themselves from a series of social constructs that may be making it more difficult to solve complex social problems and move forward in everyday life. The outcome of the game is a metaphor to real life situations that can benefit from empathy.

“THE GOLDEN RULE”

LET THE PLAYING BEGIN!