"VIESTI VENUKSESTA / MESSAGE FROM VENUS"

- CREATING NEW KIND OF GAME CONCEPT WITH EMPHASIS ON EXPERIENCE DESIGN

Noora Juju
Aalto University
School of Arts, Design and Architecture
Department of Media
Media Lab
Helsinki
New Media, Game Design and Production
Master's Thesis

AALTO UNIVERSITY - SCHOOL OF ARTS, DESIGN AND ARCHITECTURE - MEDIALAB HELSINKI - GAME DESIGN AND PRODUCTION -
SPRING 2018 ( - SPRING 2019)
"Viesti Venuksesta / Message from Venus"
– Creating New Kind of Game Concept with Emphasis on Experience Design

Noora Juju

Aalto University
School of Arts, Design and Architecture
Department of Media

Media Lab Helsinki
New Media, Game Design and Production

Master’s Thesis
Spring 2018 (– Spring 2019)
“We don’t stop playing because we grow old; We grow old because we stop playing.”

- George Bernard Shaw
ABSTRACT

The games offer, or actually ultimately, they are experiences. These experiences can be directly, as well as indirectly, crafted by the game designer. How can the various design principles, especially the experience design principles, be used to create exceptional game experiences? I look into the ways of telling meaningful stories and to the methods for creating emotional experiences. But before that, the attributes for, and the affects to an experience needed to be thought out. As part of this Thesis, I present my unique game concept Message from Venus and explain the basis for its design and describe the design journey. I discuss my use of the previously studied tools, methods and principles. I ended up developing my own experience design principles, that combines and enhances the existing ones. I map the experience goals for my game, and think of ways to reach these goals. Also, after comparing three existing analysing frameworks, I created my own analysing framework to break my game down into pieces, so that I could perform a thorough analysis of it.
ACKNOWLEDGEMENTS

The writing process of this Thesis lasted over a year, and I want to thank the persons who have helped me the most in this journey and in finalizing this monster of a Master’s Thesis:

- Daniel Vorojeikin for even though being often neglected, as I spent endless hours in front of the computer, for always showing unconditional love and support, and helping in every turn
- The family: Hilppa Järvinen, Markku Hirvonen and Ninnu Campbell for all the support, help and witty remarks about my never-ending studies at the University and another never-ending Thesis project, so that I finally managed to make it happen. I also want to especially thank my sweet mother for the big work she did with some of the proofreading
- Supervisor Miikka Junnila for the patient guidance with this monstrosity of a work, and for having to read all this
- Doctor Elina Koivisto for all the wise words, comments and for being always there for me, was it professionally or as my dear friend
- Rasmus Vuori for always taking care of my worries, always counselling and supporting. I think you are like a warm father figure for the medialabbers
- Anna Arsniva for always answering my, and I guess every medialabber’s, stupid and endless questions
- Professor Perttu Hämäläinen for recommending our game for all of those grant applications
- Riku Erkkilä for creating the initial idea of the game with me and all the amazing game design ideas and wicked prototypes you’ve had and done
- Andrei Rodriguez for jumping in with this game project, and for all the amazing art, especially the cover poster that I used as a base for my cover
- Along with Riku and Andrei, also thanks to Tuukka Muukkonen and Henri Taussi for being my very own cosmic crew, that is now working hard to actualize the game.
- Laura Uusitalo and Jonna Rantanen for being my opponents, and for reading the first drafts of the Thesis and for all of the excellent comments
- Outi Järvinen for coming to help and motivate me when I felt most desperate
- Teemu Leinonen and Markku Reunanen for all of those high-quality Thesis seminars
- Karim Vuorisara and Usko Toivo for always pushing me forward
- Juuso Kekkonen and Jori Virtanen for the game’s early stage ideation session
- Anssi Laurila, I will always thank you whenever I have the change for everything you’ve done for me and for the world

I also thank everyone who were not mentioned above, but have nevertheless supported me and with whom I’ve discussed about the practicalities and contents of this Thesis.

Message from Venus got two grants from AVEK Digidemo (for the concept in 2016 and for the digital demo in 2018), and without them, this game project would probably have never seen the daylight. I am truly grateful for believing in me and in this and making it possible.
# TABLE OF CONTENTS

ABSTRACT .................................................................................................................. 3

ACKNOWLEDGEMENTS ............................................................................................ 4

TABLE OF CONTENTS ............................................................................................. 5

1. INTRODUCTION .................................................................................................... 7
   1.1 About this Master Thesis .................................................................................. 7
   1.2 About Message from Venus ............................................................................ 8

2. DESIGNING EXPERIENCES ................................................................................. 11
   2.1 What is an Experience? ................................................................................. 11
       2.1.1. Physical and Psychical Experiencer ....................................................... 13
       2.1.2. Designer of Experiences ..................................................................... 17
   2.2 Field of Experience Design (XD) ................................................................. 17
       2.2.1. Experience Economy ........................................................................... 18
       2.2.2 Relating Fields ....................................................................................... 20
   2.3 Designing Emotional Experiences ............................................................... 23
   2.4 My Experience Design Principles .................................................................. 27
   2.5 Telling Meaningful Story .............................................................................. 30
       2.5.1. Creating an Emotional Story ................................................................. 30
   2.6 Experience Design in Games ......................................................................... 32
       2.6.1. Two Different MMORPG Experiences .................................................. 35
   2.7 Designing Emotional Games .......................................................................... 37
       2.7.1. Character Emotions Felt as Player Emotions ........................................ 39
       2.7.2. Example of Emotional Game Design ..................................................... 42

3. DESIGNING MESSAGE FROM VENUS .............................................................. 45
   3.1 Basis for Design ............................................................................................... 45
       3.1.1. Inspiration for Theme and World ............................................................ 45
       3.1.2. Inspiration for Characters ..................................................................... 48
       3.1.3. Inspiration for Game Elements ............................................................... 53
   3.2 Games Benchmarking ...................................................................................... 57
   3.3 Use of Research Findings ................................................................................ 65
       3.3.1. Story Design ............................................................................................ 66
       3.3.2. Experience Design ................................................................................ 70
       3.3.3. Design for Inducing Emotions ............................................................... 75
   3.4 Making of Message from Venus ...................................................................... 83
3.4.1. Early Phase and First Prototypes ................................................................. 83
3.4.2. Later Phases and Changes ........................................................................ 85
3.4.3. Developing Venusian Language ................................................................... 87
3.4.4. Status Report (January 2019) .................................................................... 88

4. ANALYSING MESSAGE FROM VENUS .................................................................. 94
4.1. Introduction to Analysis .................................................................................. 94
4.2. Genre Definitions ......................................................................................... 94
4.3 MDA Framework .......................................................................................... 96
4.3.1. Mechanics .................................................................................................. 96
4.3.2. Dynamics .................................................................................................. 97
4.3.3. Aesthetics .................................................................................................. 98
4.4. Elemental Tetrad Framework ........................................................................ 100
4.5. MTDA+N Framework .................................................................................. 101
4.6. Creating My Own Analysing Tools ............................................................... 102
4.6.1. Asking Questions ...................................................................................... 103
4.6.2. My Definition of Game ............................................................................. 111
4.7. Analysing Message from Venus .................................................................... 116
4.7.1. Answering Questions for Message from Venus ........................................... 116
4.7.2. Message from Venus as Game System ....................................................... 122
4.8. Analysis Conclusions ................................................................................... 125

5. REFLECTION AND FINAL WORDS ................................................................... 127
5.1. Producing this Master’s Thesis ...................................................................... 127
5.2. Producing this Game Project ........................................................................ 127
5.3. My Thoughts on Experience Design ............................................................ 128
5.3.1. About My XD Principles .......................................................................... 132
5.4. Future Work .................................................................................................. 133
5.5. Received Recommendations for Message from Venus .................................. 134

REFERENCES ........................................................................................................ 135
Ludography ........................................................................................................... 142
List of Images ....................................................................................................... 143
Appendix .............................................................................................................. 147
1. INTRODUCTION

1.1 About this Master Thesis

This Master’s Thesis is rotating around two topics. Message from Venus is my game concept, which I present here in detail, also the basis for its design. I am also analysing this game, and for this purpose I created my own framework to break the game into pieces. Experience design influences my design work, so I am also highlighting this field more in my thesis, as well as other principles that has affected my design methods. This is by half a research-oriented Thesis, and by half a post-mortem game design Thesis.

I want to be honest from the start: I made Message from Venus for myself. I would love to play my own game. I am an experience addict, and I would love if someone would have made a game like this for me to play, as now I will never be the experiencer, only the experience provider. But again, I have always been passionate about creating experiences. I think all my work and hobby projects have been rotating around this, in creating something for others.

This Master Thesis is about designing memorable experiences, especially through games. In this light, I present the design methods that were used in the creation of my game concept Message from Venus. I also present sources of inspiration, for the theme and for some of the game elements. When creating new game concepts benchmarking is important part of the pre-production, and in this thesis, I have listed most relevant games. As this is partly project-based Master Thesis, I also show the design process and reflect on it. There is also the game design document (GDD), a detailed script of the game, in the Appendix.

I made a research on the nature of experience and how to design them. I was curious to find out how experiences are born, how human body and mind work in perceiving them, and what affects to the intensity and the quality of them. Already few years ago I made my own definitions for experience design, and now I wanted to validate those with my research. I am presenting some tools, methods that can be used, when designing experiences.

As the player experience was in the centre of designing Message from Venus, I discuss the design choices I made against the tools and methods I found from the experience design literature. I also created my own experience design principles, as I found the existing ones all lacking aspects. As my game is strongly story driven, I also studied scriptwriting and storytelling methods. I decided to stay on the basics, even though it was so tempting to get sucked into the literature about interactive storytelling and immersive theatre.

Emotions, even though they are always present in every experience and therefore not that easily separable, were also part of my research. Good design must provoke emotion to be meaningful. Therefore, meaningful experiences are emotional experiences. What is it I want to make players to feel, and by what means can I achieve this? I want to see if it is possible to deliberately induce specific emotions by design. I have created an emotion path for Message from Venus, with all the desired emotions and triggers to summon those.

I have analysed Message from Venus quite thoroughly, using a self-made framework. First, I studied three different existing analysing frameworks, but as I found these insufficient for my
use, I crafted my own analysing approach. I listed a set of questions for the game designer and then created my own, preliminary framework. The aim was to break my game into the game system with all the elements it consists of, to the game session (also pre- and post-session), to the player/players and their actions and also, to the possible affects to the game session. In the beginning, I also define the related game genres, a task that proved to be a bit tricky, as my game combines multiple genres and mechanics.

It is important to anticipate why people would like to play this game and what kind of experience they would enjoy. When understanding the motives of players, it is also easier to design the right kind of challenges, goals and rewards. Already earlier I made some preliminary player experience goals, but they were clarified while working on with the analysis. This is one example why analysis is a powerful tool for a game designer, as Hämäläinen (2018) points out, one part of the game research is to think how players are experiencing games, and therefore it is beneficial for the designers as well.

With Message from Venus my main goal was to design a super experience. After the game session I want the player to say: “I will never forget this!”. Or simply, “Wow”. But as this is yet only a concept, not an actual playable game, the evaluation of how well I succeeded in this will remain somewhere in the future.

1.2. About Message from Venus

Message from Venus is a new kind of game concept (see: Appendix). It combines different game elements and genres and has aspects of interactive narrative. At first, the Message from Venus might seem like an escape room, but it is actually a new genre of its own. I will name it as “a scenario room”, “an experience room” or “an adventure room”. Message from Venus will be the first episode of a series of games, all operating under the name of StarScape.

Four players, dressed up as retro futuristic pace pirates, are controlling a space ship in a room that looks like an actual command deck. The players operate four touch screens and the main screen, but also use physical game elements like buttons and valves and some tangible objects. All four touch screens have a different interface to operate the same digital game, which is sort of “a game inside a game”, and the players have to work together verbally and virtually to make it work. There is an operator supervising the game from outside the room, and acts as the voice of the ship’s artificial intelligence whenever assistance is needed.
The player in front of a touch screen, operating the virtual game. There are tangible, mechanic game elements around the screen, and using them will affect the gameplay. All players will constantly see each other and the main screen. (Juju, 2016)

The players need to learn how to operate the ship, how to fly and fight with it, access captain’s video log files, study the World Wiki Book, have conversations through main screen and eventually help the nice Venusians against an evil alien race that wants to enslave them. The players also have an option not to follow the “given path” and leave the mission to do some space exploration on their own, when the game turns into a group cooperation space battle game, or they can turn evil and destroy the Venus.

The story consists of four acts:

Act 1: “From Confusion to Control”
This is the setup, where the four players, or space pirates, have just landed to examine a drifting, abandoned space ship. At the very beginning they witness a fight between their ship and the hostile aliens, and see their ship being destroyed. The pirates also engage into a battle, and at the same time they learn the basics of how to operate the ship. They need to divide roles among themselves, as there is a different operational interface for the captain, the pilot, the tactic and the mechanic.

Act 2: “Call for Heroes”
It is time to examine the ship more and learn what happened to the crew. After some time of orientating, the pirates receive a distress call from Venus. They set a course there and on the way study more about Venus and try to find information on these hostile aliens. On the way they will encounter another fight.
Act 3: “The Venusian Trouble”
Upon arriving to the orbit of Venus, the pirates are greeted by a green alien lady who is the representative of Venus. She tells them about their troubles with the bad aliens, who are planning to conquer their planet and doom them for eternal slavery. The Venusian leader hands them an ancient artefact, that is some sort of a power enhancer. They need to find out how to use it against the nasty aliens.

Act 4: “Time for Heroes”
The pirates will encounter the evil aliens in a final battle. It first it seems impossible, the odds are not even. But if they manage to solve the puzzle and figure out how to use the power-tool, they will beat “the final boss”. The Venusians are delighted, they ask the pirates to pose for a picture to be presented around Venus and they invite them down to their planet to celebrate.
2. DESIGNING EXPERIENCES

In this chapter I will present some observations, points, notes, tools, methods and principles from the field of design, that I found relevant for my project. But to understand better the nature of an experience, I first need to study more on how an experience is born and what affects to the quality of it? How does the human body with its brain and senses work, how do we process the data we receive? How do our previous experiences and expectations shape the experience? Or our current mood? Does it matter where we are experiencing the experience? Are there cultural differences on how people experience things?

2.1. What is an Experience?

“Pure logical thinking cannot yield us any knowledge of the empirical world; all knowledge of reality starts from experience and ends in it.” - Albert Einstein

So essentially, what is an experience? Merriam-Webster Dictionary states, that an experience is something derived from an observation of events or from a participation in an activity. It is something personally encountered, undergone or lived through. It is the act or process of directly perceiving events or the reality.

Based on Hassenzahl (2010), an experience is born from the interaction between a person and the world. He states, that: “An experience is a story, emerging from the dialogue of a person with her or his world through action” (Hazzenzahl, 2010, p. 8). He emphasizes that an experience is an episode one went through, involving sights and sounds, feelings, thoughts, motives and actions. This is broad, yet bit vague definition. I think that there can be experiences even without any specific action from the person, as passive experiences are experiences nevertheless.

Just to clarify here, the term experience can mean two things. It is either something extracted from personally lived-through moments. Person who has encountered these moments enough by some general standard, can be called experienced. But experience is
also the process of being directly present in these moments. And from these moments it is possible to gather knowledge, opinions and skills, and it all happens through the perception. The experiences are the moments of when, where and what. The quality of an experience can be measured on how these moments affected the person, what emotions were induced, what kind of impression and memories were created?

In Finnish language there are two different words for an experience, “kokemus” and “elämys”. Kokemus is something general that has been experienced, and it can be positive, negative or neutral, and normally an adjective is added to the word to describe the quality of that experience. Kokemus also means the experience one gains from these experienced moments, usually expertise of some sort. If used to describe a moment of experience, kokemus has a bit negative ring to it, if used without any additional positive adjective, but on the other hand, it has a positive tone when used to describing the person-improving aspects, that were gained from it. Elämys is only used to describe experience moments, and it is used only for positive, often even some surprising and surprisingly good experiences.

I wonder why there is only one common word in the English language, as in my opinion, and to help the work of the experience designers, there should be several words for different types of experiences. Like to describe the quality of an experience (just to throw something out of the hat and being humoristic, like: surpriserience, joyrience, amazingrience, boringrience, disgustrience, annoyranrience, horrorrience), or to describe the act, where the experience is happening (yet again, something like: swimmerience, dancerience, runnerience, climberience, user-testerience, base-jumperience... “That filmerience was quite a shockerience!”).

It would be possible to study experiences on a deeper level, like through ontology, which is a study of being. It tackles many experience relevant issues, like is there an objective reality and what does the verb “to be” mean. It is closely related to metaphysics, which is a study of the fundamental nature of reality, and even when they have overlapping questions about the existence and existing, they differ by that otologists ask “what” and metaphysics “how” questions, (Philosophy Terms). I think both are very relevant for an experience designer, at least when I started defining the field of experience design, I started to wonder the very essence of the experience. The very first question I asked was “What is an experience?”, and then I continued by asking a series of how’s: “How is the experience born? How does it exist? How is it, and how should it be, like? How can it be measured? How can it affect a person, and the world? How it can be affected?”.

In my opinion, the experience should not be about something, but for someone. The experience can offer sights, smells and sounds or other sensations, it raises thoughts and feelings, provokes actions and creates memories. How human body work in perceiving and feeling the experience and what matters affects it? Humans receive information through their senses that are quite equal for every healthy person, but everyone process this information and acts on it on an individual level.
2.1.1. Physical and Psychical Experiencer

"Listening is more than hearing, savouring is more than tasting, feeling is more than touching, looking is more than seeing." -Unknown

The human body receives a stimulus from the outside world. This is picked up by the sensory system and the message is carried through the nervous system to the brain to be processed. Perception is how we recognize and interpret this stimulation, in order to understand this information (Study.com).

There are three levels of processing this information. The visceral level is fast to make rapid judgements. The behavioural level affects most of the human behaviour, and its actions can be enhanced or inhibited by the reflective layer. The highest level is this reflective thought, that does not have a direct access to the sensory input or to the control of behaviour, but it watches over, reflects and tries to control the behavioural level. (Norman, 2004). Because of the visceral level, the appearance and the first impression always matter.
The experiencer can be both aware, and subconscious, of all the aspects of an experience. According to Wright & McCarthy (2010), most experiences consist of the subtle interplay of the conscious and the non-conscious action. The habits and intuition of the experiencer connects the past experiences to the present experience. Also, I think that, if the experiencer is knowingly in an experience situation, the more attention is paid to it, than when being in a casual and accidental experience moment, therefore more determining details become obvious to the experiencer.

It is personal, how the mind reacts to the stimulus and what are the memories and the feelings that are evoked, and how are all the aspects that affect the perception, like the experiencer’s behaviour, mood, ways to process information, the attention span, observation skills and preferences. Like Gulliksson (2015) states, “The complementary effects of the whole range of affects, preferences, moods, emotions in a particular situation will always be personal to a user.” Schwartz (2017) also points out, that there is a wide range of personal preferences and attitudes as each person is different, so it depends on the person what experience he/she will find satisfying. So, it is important to recognize the motivations and preferences of individual users as they also play an important role in the experience design. But here we run into a question - for who the experience is aimed for? A more generic, smaller experience for everyone, or more focused and stronger experience for a specific target group? And even in the more specific target group, all the individuals will be different. The best case would be a tailored experience for a one individual at a time.

We are constantly connected emotionally to every situation. The past experience is connected to the present moment and to the future experience by anticipation and expectation. There is a gap filled with emotions, between what is imagined that might happen and what actually happens. These processes of making connections, interpretations and reflections help to make sense of the world and anticipate the future actions. (Wright & McCarthy, 2010). I think, that no matter how fine the experience currently at the hand is, if the experiencer had bad past experiences, that relates to the current moment and reminds of them, these memories may have the power to shadow the current experience and the expectations towards it. On the other hands, if there is no or little expectations, the possibility to be positively surprised is greater. The purest experience is attained without any prior experiences and expectations, so that they can be received and felt purely as they are.

Cognitive psychology focuses on the way how people process information: how we receive and process information about the outside world, how we solve problems, how errors in our thinking are caused, and what leads to an emotional distress and negative behaviours? (Study.com). It is a study of attention, focus and concentration. Findings from cognitive psychology has improved our understanding of how people form, store and recall memories (Kendra, 2018). Cognitive psychology also studies how thinking affects behaviour. Essentially, the way we understand the world around us and how we act in it is through the interpretation of the stimuli.

Studies done in various scientific fields have shown that the emotions serve as baseline to behaviour and also to experiences. For example Lerner et al., (2014, p.34) conclude out from the various studies done during the past 35 years of research, that: “Emotions constitute powerful and predictable drivers of decision making. (...) emotion effects are neither random
nor epiphenomenal.” So, it works the both ways: emotions can affect the experience whereas the experience can also induce emotions. But what are emotions?

**IMAGE 6:** Definition of an emotion. (Oxford Dictionaries / Google)

Emotion can be described as conscious experience, a mental activity with some degree of pleasure or displeasure, whereas the scientific discussion has no consensus on the definition. Emotion is often connected with mood, temperament, personality and motivation. (Wikipedia: Emotion, 2018). In psychology, affect is a concept used to describe the experience of feeling or emotion. Affective neuroscience is the study of neural mechanism of emotion. This combines neuroscience with psychological study of personality, emotion and mood. Emotions are connected to activity in brain areas that direct the attention, motivate the behavior and help to determine the significance of events happening around us. (Wikipedia: Affective neuroscience, 2018).

Collective intelligence is labeled as an aspect of human intelligence. Often when making decisions, we ask ourselves: “What would the people I know do in my place? What have they done in a similar situation? What would they think of the choices I will or have made?” The experience is not only our own experiences from our own perceptive, but from the other people’s point of view as well. When the experience can be seen emotionally and intellectually from someone else’s perspective, and when that other person can do the same, it is referred as inter-subjective understanding of that experience. (Wright & McCarthy, 2010. p. 20-21). I think this could be described easier: mutual empathy.

Some other external aspects are the physical location and type of the setting, spatial feeling like the atmosphere, time of the day and year, how is the weather, world events and news and all the subtle details in the experience. The mood of the experiencer also will also affect the experience, as the experience also affects to the mood. When engaging with an experience, the current mood the experiencer is having, will greatly affect the experience, at least the very beginning of it. This mood is either inflicted internally, or from the external aspects, it can be new or it has continued longer. The experience has a great power to change the mood, for better or worse.
Of course, depending on the type of the experiencer’s mood (below in Shwartz’s picture are listed of some of the various possible moods), the experience has different changes to affect it. For example, curious or happy experiencer is more open to experience, than an irritated or exhausted experiencer. The mood can be inflicted by the previous experiences one has just recently had, or by random or ongoing thoughts and the following emotions they stir up, or by physical reasons, like being hungry or having a hangover. I think it might be easier to affect the preceding mood if it is caused by psychical, rather than physical reasons. Of course, the intensity of the experienced mood matters (for example slightly annoyed versus greatly annoyed), as well as the more topical the cause for the mood is, the more significant it will feel.

**IMAGE 7: Some moods (Schwartz, 2017)**

The experience itself can also set off moods that affect the rest of the experience, for example too bright lights can cause irritation (due physical reasons, like causing headache, or due personal preferences), and no matter how good the rest of the experience is, the resentment will affect everything in it. The irritation lessens the enjoyment and lowers the respect towards the experience. It will also break the immersion and commitment to it.
Therefore, it is crucial that there is nothing the experience, that can cause negative feelings and moods.

2.1.2. Designer of Experiences

“Anything one man can imagine, other men can make real” – Jules Verne

It is reasonable to raise a question, if it is even possible to design experiences, as with so many aspects that can affect, it cannot be predicted. Maybe it is more like enabling them, making possible, but not certain. Therefore, maybe we should call an experience designer as an experience enabler.

We tend to surround ourselves with people who are similar to us. We share the same ways of perceiving the world, the same morals, the same ways of thinking and behaving. This makes us bit biased to design experiences for others, especially if they do not share our “bubble”. To be able to step into the shoes of another person, requires strong emphatic skills and life-experience. Still it is possible, that the designer’s given meaning transforms into a different meaning, interpreted by the experiencer.

Solis (2015, p.34) states, that the ability to see the world through the eyes of others is the most important quality for the experience designer: “The secret ingredient in creating any meaningful experience is empathy: the ability to understand and share another person’s feelings.” In my opinion, the experience designer is required to possess a natural emphatic tendency, sensitivity, an open mind, curiosity, skill to pay attention to details, experiencing as large variety of different experiences as possible and analyzing them, meeting a lot of different people and trying to understand them, and from all this life’s experience, forming a wide view of the world. I think the more analytical attention one starts to pay to their own experiences, the more obvious all the elements in the experience are.

2.2. Field of Experience Design (XD)

The emerging field of Experience Design, XD, is about designing products, processes, services, events, environments and multi-channels with a focus on the quality of the experience of the user, and culturally relevant solutions. Several disciplines have metamorphosed under XD, including cognitive and perceptual psychology, cognitive science, interaction and service design, storytelling, architecture, environmental design, haptics, product and strategic design, information architecture, ethnography, marketing and brand strategy and design thinking. (Wikipedia: Experience design 2018).

So, is experience design a new approach or just a collection of old approaches? Shedroff (2001, p.2) manifests, that even as experience design as a field is recently defined, recognized and named, it is culmination of many ancient disciplines. These disciplines have never been so interrelated and integrated before being combined here. He states, that the elements that creates a superior experience are known and reproducible, therefore they are designable.
Virpi Roto clarifies the matter nicely when describing her Experience Driven Design course. It is a design approach, in which the first task is to find out, what creates the good feeling and experience, then to design something, that would best enable that experience. “What we do might be mobile applications, face-to-face services, branding elements, spatial design, communication tools. So, we don’t restrict the scope of design.” (Roto, 2015)

Hassenzahl, Eckoldt, Diefenbach, Laschke, Lenz & Kim (2013, p.21) also emphasize the importance of the positive feelings: experience design is an approach, that places pleasurable and meaningful moments in the centre of the design efforts. This requires understanding of, what a positive experience is, and how it can be created through activity, and strategies to create and mediate experience through things.

2.2.1. Experience Economy

“Experience is the new brand. Experiences are the new branding. The future is experience.” - Brian Solis, 2015

The businesses have started to realise the importance of experiences. We are living in a new society, in which everything, was it a business, community or people as individuals, will thrive on the basis of their stories, not just information. (Pine & Gilmore, 1998). Nowadays customers are more and more choosing products and services based on the quality of the experiences they provide. A guide by Adaptive Path (2013) emphasizes on building a deeper empathy, “It is about telling your customer’s story”.

![The Progression of Economic Value](image8.png)

**IMAGE 8: The Progression of Economic Value (Pine & Gilmore, 1998)**

The experience is should be the main product, as in the end, it is all about human experiences. Pine and Gilmore (1999) ponder, that businesses must create memorable events for their customers, and therefore the memory itself becomes a product. I wonder are there many businesses, who are perceiving the matter so and acting upon it?

Solis (2015, p.33.) points out two things, “Changing the way businesses create experience starts with defining what the experience is and should be. The challenge here is, how we see
the world.” As an experience is individual by nature, in some level we are always biased to design for someone else. And this affects also defining the experience, as people may pay attention or value different aspects of it differently. Also, the risk of someone misunderstanding the intentions or getting upset exists, especially in bolder projects, as experiences are perceived from as many personal viewpoints and backgrounds, as there are experiencers. Shortly put: there are always as many experiences, as there are experiencers.

Customer experience may not be a rational, but rather an emotional experience, where subconscious interpretations have an impact. Therefore, it is not possible to control what kind of experience customer will get, but business can choose what kind of experiences they try to give. (Nuutinen 2017, cited in Löytänä & Kortesuo 2011). Like I stated earlier, rather be experience enabler, than experience designer.

Quite obvious desirable attributes for an experience are pinpointed in a presentation by Shedroff (2011): the usability, delightfulfulness and meaningfulness, but then he highlights that everything we create is an experience so they are totally designable, and therefore, all design can be viewed as a process of making experiences. He continues, that the experiencer approaches the experience with questions: is this something that answers to their needs, is this worth of the price, how does this make them feel, do they identify with this and does it fit into their world, does it have a meaning for them. I agree with Shedroff, as I have had the same thought of all things being experiences, and as I am delighted about his point that all design work is creating experiencers, as I never took the thought that far. I also know the reason why I didn’t, and this is lacking from his presentation – there are also wide range of experiences, that are un-designed, not man-made. And those can, and will affect the man-made experiences, especially when preset during, or in the near-past or near-future of the designed experience.

Shedroff (2011) emphasizes, that meaning is in the very core of an experience, and this invisible, deepest connection is most often established between people, between people and objects or between people and places. The experience designer should aim for that connection. Schedroff continues, that there are at least six dimensions to an experience. Time/ duration, interactivity, intensity, breadth/ consistency, sensory/ cognitive triggers and significance/ meaning.
2.2.2 Relating Fields

As so many aspects that relate to experience design – as experience design is, or should be, part of everything that is done for others, it flirts with various fields and professions. The experience design can relate to space and environmental design (like architecture, interior design, landscape design), design of actual objects (for example industrial or fashion design), design of digital products (like software, user interfaces or game design), design of intangible and more abstract systems and services (like service design in real environments, UX design, interaction design). This listing is made based on experience disciplines presented by Schwartz (2017), but I regrouped and somewhat changed those categories and their contents. His categories were “things, space, modelling and sensory”.

Just as a side note, I find it constantly hard to use the academic literature, as I do not agree with it most of the time. Like with the Schwartz’s categories, why the things do not belong to the sensory design? For example, the animation is in the sensory category, but the game design is in things. How do they differ in this? I think both of them are things, as well as sensory experiences. Why does he consider a game to be more of a thing, than an animation? Because it is interactive? Why then the interaction design in in the sensory category? And using words like “things” in a credible scientific discussion sounds quite vague, as a thing can be anything, it does not clearly point out to something or act as a relatable

**IMAGE 9:** Elements of an Experience (Shedroff, 2011).
nominator for something. For me it would be easier, and more enjoyable to make my own definitions, like in this case for mapping examples on how experience design relates to other fields and professions, and why.

Most often, the terms user experience design (UX) and the experience design (XD) are mixed. Even the professionals working in the field of UX call themselves experience designers, but associate it strictly to working only with technology. As an example, out of numerous similar comments, and no longer than two years ago, Toscano (2016) claims that: “Our job as Experience Designers is to make technology easy to use.” But experience designers are not restricted only to technological fields. Besides the UX design, the field of XD collides with several other fields. Few of them are shortly discussed in this chapter.

The main colliding fields, in addition to the UX design, are the usability and UI design, the product and service design and the industrial and the interior design. In my opinion these fields differ with XD in their way of emphasising what is perceived as good design. These fields do focus on experience, but they perceive the experiencer often only as a user with needs. It might be due the design thinking mindset, probably the most important common denominator, that is present in every field that is overlapping with the XD. Designing something is essentially a process of creating something new, and design thinking is used as a base. (Brown 2008, Fraser 2006, Lockwood 2008). The design thinking approach by Gibbons (2016) is a process of three stages, that all interact with each other. First stage is understanding the user using empathy and gaining knowledge on what do they do, say, think and feel. Second stage is creating solutions that meet the user’s needs. The last stage is testing the design and gathering feedback from the users, and then either implementing or iterating the process.

In this sense, couldn’t the experience designer’s target, the experiencer, also be referred as a user with needs? I think this is bit limited point of view, as the focus then would be serving the needs of the user: finding the problems and solutions. What if the user does not have any specific needs, or there are no specific problems? For sure, everything can be always improved, but when totally new experiences are designed, the approach, in my opinion, should not be problem-oriented, rather, at first, with the minimum of constraints, new-seeking and -allowing, broad, open-minded, a possibility-oriented approach.

Usability is about allowing people to more easily accomplish their goals, as UX is more about delivering delightful and meaningful experiences. (Gócz, 2010-2015). Good UI design is when a digital interface is easy to use and navigate, and the layout and the used colours pleases the user. Service design emphasizes convenience and efficiency, whereas industrial and product design value ergonomics, functionality and aesthetics.

The division between products, services and their design has become in a way obsolete, as the core of every design product and business is the provided experience. It is about fulfilling the needs and desires of the customer or the user. Pine and Gilmore (2011, p.14) propose that “…customizing any good turns that good automatically into a service.” As an interesting continuation to this, they continue “…customizing any service turns that service automatically into an experience.” Yet, I do not understand that isn’t a not-customized service experience as well? Or are we now talking about qualities of the experiences?
The whole concept of design has changed quite a lot during the past decades. Design is no longer limited to the traditional factors, such as form and functionality, but is more focused on designing the interaction between people, “products” and technologies (Miettinen, 2011. p.22). According to Lockwood (2008), service design is a system of thoughtfully executed customer interactions and can be found at the heart of most businesses today. Actually, what I have understood, in the service design the whole service path is mapped and polished, and the focus is not only in the customer’s experience, but also in the service provider’s and in every stakeholder’s experience.

The experience is not just a sum of its parts, it is always more. For a designer, the inability to see the big picture may cause only a part of it being polished, when the overall experience will remain insufficient. The experiencer might not even notice the insufficiency, but they will remain unsatisfied, for reasons they probably can’t even point out or understand. Like I have stated before, this has been another problem for me with the multiple fields that relates to XD – they seem to be focusing on specific elements and problems, while for me, the overall experience, with all of its nuances and affects, has not been covered wholly.

For example, I enjoy my stay in a café more, if the lights have pleasant colours and brightness, the soundscape (accidental and purposeful) is tuned, the temperature and humidity is just right, there are beautiful things for me to look, lot of details to study, the mug’s handle is shaped just right and the metal of the spoon feels smooth in my hand etc… I do not necessary enjoy it more, if the operating in the café has been made optimal, if it has been made easy for me to navigate and get information, the tables and chairs have been placed comfortably, but it does not necessarily mean cosy.

I am just pointing out the differences in these fields and emphasizing the need for the experience designers in various design processes. Experience designers do not just design for a need, they rather change something in the world. Once the change is there, it is notable, and if the change would then disappear, it would be missed. I consider the experience design to be more emotionally appealing and instinctively influencing to people, than what is possible from any other design discipline. Experience design aims to holistically better the quality of life, not just by making it more efficient and tolerable, but making it exiting but cosy, surprising yet sentimental, sweet and spicy – just more enjoyable, emotional and memorable.

I think that in all of these relating fields, the user should not just be just a user, but also experiencer. Often the main focus of the design effort and goal lies in fulfilling the needs, not for example, in creating something that people yet do not even know that they need, or not even need, but would enjoy it nevertheless. Crafting and delivering enjoyable experience, unasked for, even unneeded for, only for the sake of it. Crafting experiences for the experiencers. Serving all kinds of experiences, rather than just solving problems. Contributing to this world, not by making it easier, but more pleasant.
2.3. Designing Emotional Experiences

Strong experiences create strong memories, and for that to happen, various emotions should be induced. Therefore, experience design is also designing for feelings and emotions. What specific feelings I want to evoke in the experiencer, and by what means is it possible?

Like written earlier (See: 2.1.1. The Physical and Psychical Experiencer), in the cognitive psychology it is known, that the thoughts, feelings and actions are all interconnected. The thoughts are linked to our worldview and they trigger feelings and emotions, and those in turn guide our actions. Actions provoke thoughts, and the circle starts again. The field of usability design has its roots in the cognitive sciences. (Norman 2002). I see no reason why it could not be implemented in other design fields as well.

![Cognitive triangle](image10.png)

**IMAGE 10:** Cognitive triangle (Moran, 2018)

The emotional design aim to create products, that evoke desired emotions, in order to create a positive experience for the user. The designer needs to consider the connections that can form between the user, and the design product they are using, and all the emotions rising from that activity. (International Design Foundation). Nuutinen (2017, p.15) claims, that “Businesses have long ignored the role of emotions, and a logical process has been favoured.” Emotions can be a major differentiator and are perhaps the most underestimated of the available assets. (Nuutinen 2017, cited in Shaw & Ivens 2005). Based on my research it seems, that the design that aims to induce emotions, seems to be gaining more attention and popularity these days.

It is important to acknowledge and understand all elements the experience is constructed of and all of the elements that can affect to it. Hassenzahl (2010. p.5) writes about the importance of all the elements the experience is constructed of: “From a design perspective... understanding experience as emerging, but emerging from something, is important. Because although we aim at designing an experience, we still have to manipulate single elements to craft the experience.” Experience does not emerge from a single aspect, but rather from the
whole, from multiple different elements present, both visible and known, but also hidden and not so well-known.

Pine & Gilmore (1998, p. 102-104) have identified five key experience design principles. First is to give a theme to the experience: “The proprietors have taken the first, crucial step in staging an experience by envisioning a well-defined theme. If poorly conceived, customers will have nothing to help them organize the impressions they encounter, and the experience yields no lasting memory. An incoherent theme is like Gertrude Stein’s Oakland: ‘There is no there there.’” The theme has to drive all design elements and staged events to create a unified storyline that will captivate the customer. Secondly, the impression needs to be harmonized with positive cues. “Impressions are the “takeaways” of the experience; they fulfil the theme.” Pine & Gilmore emphasize the meaningfulness of even the smallest cues to create a unique experience. Thirdly, it is important to eliminate the negative cues, meaning everything that can distracts from the theme. The fourth principle is mixing in the memorabilia, offering customers the possibility to take physical reminders of the experience with them. Lastly, engaging all five senses, the sensory stimulants that accompany the experience should support and enhance the theme. Like Pine & Gilmore summarize: “The more senses an experience engages, the more effective and memorable it can be.” I agree with all of these, and quite surprisingly, they align with my preliminary definitions for an experience design (See: 2.4. My Experience Design Principles).

To define an experience, to be able to design one, one should also look into its boundaries. Much like in a story, an experience should have a beginning, a middle and an end. To initiate the experience, an attraction based on desire or need is required to initiate it. The engagement is the actual experience, and it has to be meaningful for the person to stay engaged. If there is no satisfying end to an experience, no matter how good it had been so far, it may create dissatisfaction and confusion. The conclusion needs to offer a resolution of some sort. But it is possible to have an extension for the experience, that prolongs it or connects it to the next experience. (Shedroff 2001, p.4). This point of view is great, as the designed experience is always happening after another experience, and followed by yet another, although mostly un-curated. And the experience itself, by nature, has a beginning (like first impression), middle (the actual experience) and the end (how the experience ends, by the decision of the experiencer or by the decision of the designer). One experience can be collection of experiences, or the main experience is just single spark in the continuity of experiences, called human life.

Human experience is complex, and mostly intangible. With the help of experience mapping it is possible to uncover critical information about the customer’s experiences. (Adaptive Path, 2013). First phase is to “uncover the truth”, which involves studying the customer behavior and interactions across channels and interaction touchpoints. Second phase is “chart the course”, that tries to synthetize the key insights into a model of the customer journey. Third phase is to “tell the story”, it is about visualizing a story that creates empathy and understanding. Fourth phase is “use the map”, that encourages following the map to get new ideas and better experiences.
I found the explanation by Adaptive Path quite vague, so I continued research on the matter. Churruca (2013) has a nice list of elements to have on an experience map. There often is listed user needs, experience triggers, mental status (attention, attitude, motivation, mood etc.), user emotions, thoughts, feelings and reactions, type of the interaction, user activity and points of interaction, system actions, pain and delight points, a resume for a persona and scenario, opportunities and barriers, the path. Some maps focus more on user emotions, some interaction phases or the actions of the system. A simple map reflects one possible path during one scenario. Complex map has cross platform experiences or experiences occurring at different time sessions or scenarios.
IMAGE 12: The experience map needs to contain the whole customer journey, from the anticipation to the interactions and to the reflection. The changes in the emotional state are also mapped, the feelings, the needs and the pain points. (UX Lady/2013)

Desmet & Pohlmeyer (2013) propose three aspects for design, to increase people’s wellbeing. Design for pleasure is the presence of positive affect and absence of negative affect: being relaxed, carefree and having fun. Design can cause pleasure directly or facilitate pleasurable activities. Design for personal significance is enabling people to achieve their goals and develop their talent. Design for virtue address the moral level, “Am I behaving honourably?”. Design can support people’s efforts to be virtuous. It is also stated, that design can also enable or stimulate non-virtuous behaviour, like I think majority of the players in Grand Theft Auto will experiment at some point during their gameplay.

![Image 12: Experience Map](image12)

IMAGE 13: Example on experience goals for welding, that are aligned with the positive design framework. The pleasure is momentary, self-motivation is episodic and proudness is accumulative. (Kapanen, 2018)

![Image 13: Experience Goals](image13)

It is stated, that in order for an experience to be a meaningful and valuable, its content needs to be original and fulfill a need, it has to be easy to use, it evokes emotion and appreciation, necessary information is easy to find from the content, it is accessible to people with disabilities (currently 10% of the population) and it is believable and trustworthy. (Morville, 2004). This highlights the usability, efficiency and accessibility of an experience.
2.4. My Experience Design Principles

The experience design is a way of approaching, viewing and understanding the world. It has been underlining and influencing all my design work, was that Message from Venus, or any another design project. I am trying to understand the nature of an experience. For me, experience design is about trying to look harder, further, from different angles or from the distance, trying to anticipate all possible different experiencers, and everything that might and will relate and affect the experience I am trying to craft.

In the done research, there were many good points, but I found the presented principles and methods either bit vague or incomplete. So, after studying various experience design principles and opinions, I came up with my own. From all of my past observations and previous experiments, I have self-learned basics for creating experiences, and from the academic research I got more ideas, view-points and validations.

Below are my own experience design principles. Some of them are partly overlapping, as this just the first draft. I am showcasing more my thoughts on the matter later in this Thesis (See: 5.3. My Thoughts on Experience Design).


- **Environment Design**: how, what and why is the design of the space / set / surroundings creating, enabling, supporting and communicating? No matter if the experience takes place in a virtual, actual or imaginary environment.

- **Theme**: gives the tone of voice, “all the possible flavours”, sets sort of framework for the experience. All the details enhance and communicate the theme.

- **Story**: supporting theme, offering more background, world lore, adventure, Narrative. Brand. Possibly a way for experiencer to interact straight with the theme.

- **Immersion Methods**: using as many senses as possible, feel of reality, not from this world, no distractions from the experiencer or from the outside. Nothing breaks the illusion. All the details enhance immersion, both functional and decorative.

- **Feel and Look**: appearance (physical or virtual setting), first impression, materials and their durability, temperature, colour and amount of lights, smells, air moisture? How everything looks like, how everything feels like?

- **Flow and Usability**: everything is clear and understandable, positive cues guiding the action, flow-stage or losing sense of time, accessibility,
- **Social Interaction**: pleasant human contact, co-operation and/or competition, shared experience, possibility for a de-brief

- **Feel of Something Great**: great adventure is about to happen, something dramatic, grand. Or then the feel of greatness comes from the setting, being in somewhere unique, mesmerising.

- **Believable**: the story, the setting (and the mechanics, if it is about a game) are meaningful and make sense, details

- **Overall Experience** (all the “touchpoints” of the experience, also before and after)

- **Anticipation**: how to create anticipation and the right kind of, minimizing spoilers

- **Emotions and Possibly Humour**: humour and/or other desired emotions. Humour is not necessary for a great experience, but if done right, powerful.

- **Not Underestimating the User**: trusting in them and not under-designing but rather over-designing, visible from all the design work to the superior customer service

→ Together these will create the memory. The stronger and well-designed these are elements are, the more powerful is the impression and stronger the memory. It is all about creating memories in the end!
When theme, story, feel & look and believable meet, the experience is successful. Story in here is not necessary storytelling, but the way how things are presented in the experience. Immersion is born when theme meets with feel & look, and believability delivers the immersion. Details are way to bring theme, story, feel & look and believability to the experiencer. Usability is when the feel & look is believable.

In my principles the feel of something great, when colliding with the story causing epic and the social interaction, colliding with the story creating role-playing, are not required elements for a great experience, but if they are present, they make it stronger. In social interaction I mention that the experience can be shared with others, but also when someone is caring for the experiencer’s experience.

The experience starts with what is known about it beforehand, if any, and how it is known. The anticipation and getting ready for the experience follow, but it can also start with the first impression, without any prior knowledge. In good experience it continues all the way to what is told to others about it. Humour can be present, but not obligatory. But emotions
should be taken into consideration – how do I intent this experience to feel like? What kind of emotions I would like to induce?

2.5. Telling Meaningful Story

“The whole thing is – you’ve got to make them care about something” – Frank Capra

As I am creating a strongly story-driven game, I will briefly study on how to tell stories. What makes a good story? Wells (1979) brings out an opinion, that a good script should be about something meaningful. “Content and emotion in the same dramatic story may seem a strange mix... Yet the record shows that this odd couple produces distinguished offspring – plays for the stage, screen, or television which explore the truth. They are about something.” There should be ethical and moral points to make (p.65).

I want to create a story of something, but I disagree bringing up the ethical and moral points, as I think there can be good stories that are not emphasizing these. Also, I can’t make the story too captivating, as the game itself will probably take a lot of focus from the players. Yet, I would like it to be entertaining and yes, memorable.

As I aim for adventure and action, my main theme in the design is continuous conflict. Dancyger and Rush, 1995 (p.3) state, that: “Conflict is a central feature of the screen story. A man against man, a man against environment, and a man against himself are the classic versions found in the screen story.” There will be constant state of conflict, rising from the story but also from the player actions. The players may have conflicts between themselves, and maybe even internally – do they want to follow the story or create their own?

This freedom of choice is one of the main aspects of my design. As Murray, 1999 (p.207) states: “The more freedom the interactor feels, the more powerful the sense of plot.” The plot is presented to be influenced by causality, so the interactors should have a feeling, that their choices have led to the events of the story. Murray, 1999 (p.207) also points out, that “Stories have to have ‘moral physics’, which indicates what consequences attach to actions.”

2.5.1. Creating an Emotional Story

“Drama is concerned only with emotion” – Paddy Chayefsky

To have a greater impact with the game is to make people identify and care emotionally. “By engaging your spectator’s emotions, you give them illusion that they are sharing a dramatic experience.” (Wells, 1979, p.72) But how can these be induced in a story?

Movies use peaks and troughs to control emotions (Harper, 2012). After intro, there is some sort of turning point in the story, after which the story continues to develop. The climax should stand out from the rest of the story, and there is a low point in the story where everything seems impossible but then the hero of the story conquers the difficulties and raises above them. No pain, no gain.
The three acts structure is used in narrative fiction to divide the story into three parts: the setup, the confrontation and the resolution. The first act is laying ground for the story, and there is the inciting incident that sort of starts the story. The second act, referred to as the rising action, is to resolve the problem but finding the conditions even worsening. The heroes of the story do not only need to learn new skills, but to gain higher sense of awareness of who they are and what they are capable of, to deal in the situation they are in. This is referred to as the character development. The third act is resolution in the story. There is a climax, where the main tensions of the story are brought to their most intense point, and as a result, the protagonists are left with a new sense of who they really are. (Wikipedia: Three-act structure, 2017)

The Hero’s Journey is a common template of a broad category of tales, that involves a hero who goes on an adventure, and in a crisis wins a victory and becomes home transformed (Wikipedia: Hero’s journey, 2018). In his practical guide to the Hero with a Thousand Faces, a book written by Campbell, Vogler (1985) writes that, “In his study of world hero myths Campbell discovered that they are all basically the same story – retold endlessly in infinite variations.” He insists that these same basic elements have been used for thousands of years, Based on Vogler’s (1985) manual The Hero’s Journey consists of the following elements:
Heroes are introduced in the ordinary world, where they receive the call to adventure. They are reluctant at first to enter the unknown but are encouraged by a mentor or cross the first threshold and enter their special world. They encounter tests, allies and enemies. They approach the innermost cave, crossing a second threshold. There they endure the ordeal. They take possession of the treasure or the reward. They are pursued on the road back to the ordinary world. They cross the third threshold, experience a resurrection and are transformed by his experience. They return with the elixir, which is a boon, treasure to benefit the ordinary world.

**IMAGE 19:** The Hero's Journey (Vogler, 1985)

2.6. Experience Design in Games

"Games are structured activities that create enjoyable experiences. They are easy-to-start mechanisms for fun. People play games not so much for the game itself as for the experience that the game creates..." - Nicole Lazzaro (2004)

As the experience design as a field is quite new and undefined, the game experience field might be even younger. But principles form the relating fields can be used in designing better game experiences. As Huunonen (2015, p.64) states: “Game experiences are most often modelled by focusing on a specific factor one at the time, for example on the level of enjoyment. The game experience models are not usually considering the whole game experience holistically, whereas viewing the entire customer journey is the corner stone of service design process.” There seems to be need academically discuss about the all aspects of game experience, where does the game experience arise and what are all the aspects game designers need to take into consideration?
Based on Jesse Garret’s user experience design framework, John Ferrara (2011) has developed a game experience design framework, that is intended to help building more successful, engaging and enjoyable games by understanding them better. Fun and enjoyment are most crucial parts of the play experience, but they are not in the framework, as it is thought that they cannot be designed directly, rather they emerge from the experience when all the other elements work together. (Ferrara, 2011). But is it a guaranteed by-product? Where does the enjoyment arise? I think succeeding in making a game, that takes all these levels into consideration, does not automatically create enjoyable game experience.

![Playful model](image)

The first thing is to think why the player wants to play the game. In the game analysis lecture by Hämäläinen (2018) it was emphasized, that there are two types of motivation: either by external elements such as fame or the high score, or then by intrinsic elements such as doing something just for the sake of it. Either one or both motivations makes player interested of the game and when trying it for the first time, the game needs to serve this motivation or both, so that it feels rewarding to play and player wants to play it again. To engage the player in this way, the game should generate a sense of pleasure. As there are two types of player motivations, there are also types of rewards: it can fulfil the player’s more “egoistic” needs like achieving fame or reaching the highest score, or then the reward comes from the internal feelings, the reasons from oneself, like playing just for the joy of self-improvement or
discovery. The rewards in games are often serving both the external and the intrinsic needs, maybe to be appealing for a larger group of players. (Hämäläinen, 2018). But what about boredom? Often, I see people playing games to pass time, for example while riding in the public transport. What is the motivation to play in this case? And what about if someone plays a game to keep oneself not to fall asleep during a boring lecture? What is the motivation here? Also, sometimes games are played just because of its delicious art, or as a way to meet new people. Do these needs fit into intrinsic category?

”A game is a series of meaningful choices.” – Sid Meyer

The next level in Ferrara’s model is about meaningful choices, enabling player to have control of their gameplay through rules and structure. The player is challenged to consistently make better moves, and the game work best if it is not too obvious which actions will result in better and which in worse outcomes. The third level is about balancing the game elements, so that it is appropriately challenging but will still feel fair to the player. The forth level is usability, the design needs to support an experience where the player understand the things are happening in the game and how they affect them. The last level is about many aspects of the game’s aesthetic design. There is direct sensory experience involving sound, visual look and haptics, like through vibrating feedback on the game controller. (John Ferrara, 2011). I think this is a good start, but in my opinion, Ferrara does not take all of the affecting aspects into consideration, that I later tackle on my framework (see: 4.6. Creating My Own Analysing Tools).

According to Lazzaro (2004), players play to experience visceral, behavioural, cognitive and social sensations that results from and drive their actions. Some play for excitement, some to experience wonder, some to experience pride and achievement, some to feel relaxation or contentment or just for the feeling of knowing they did it right. Here we come for the individual motivations to play. The Quantic Foundry has an online survey to create a personal gamer motivation profile, which is highly interesting and offering detailed information on the primary and secondary motivations to play the game, based on how one answers the questions. For example, I found out to be “calm, analytical, relaxed, social and creative”.

IMAGES 21 & 22: My primary and secondary motivations to play. (Quantic Foundry, 2018)
I find this profile quite apt, as it reflects also with my personality that is both social and creative. I have played games only for social reasons, like the Ultima Online. This game also offered a platform for creativity, so no wonder I played it for many years. The discovery in this sense means “What if...?”, trying all possibilities in a game. I am not always playing in ways the game maker probably intended, as I like to be the creator of my own tools, rules and experiences. But if I make a sort of toy out of a game, doesn’t it mean I am really truly playing? When not playing the game, then with it.

**Image 23:** My second greatest motivation, “Social”, explained. It also offers possibility to see what kind of games other people, who are also motivated by the social aspect, like to play. (Quantic Foundry, 2018)

### 2.6.1. Two Different MMORPG Experiences

I played Ultima Online (Origin Systems, 1997-2004) for several years in the player-made game worlds, different servers called shards. There was always a strong community behind them and therefore a lot of interaction, room for creativity and a lot of storytelling by the players, that often continued beyond the actual game in the forums. The game offered me a perfect platform to craft an exact game experience of my liking. I enjoyed that I could use the game as a tool for self-expression and self-study, which was also important when I was in my early twenties.
A special slave market event, arranged only to bring my character to the game. The other players are witnessing and interacting in this unique happening that was created by the game masters. This event also offered players possibility to study the moral views of their characters, and also to make them act accordingly. The good guys tried to save my character, as the more sinister ones could showcase publicly their unempathetic ways. (Juju / Origin Systems, 2003)

When people moved from Ultima Online to the World of Warcraft (Blizzard, 2004) I followed, but only to be disappointed. The never-ending mindless grinding with fancy graphics overruled the player given meanings, softer values, possibility to level up without ever touching a weapon, and the strong sense of belonging. I felt I was lost in a game, without any context and meaning. The guilds offered only little comfort, as they felt somehow unnaturally glued over this world. The UO offered, even though I am not sure how intentionally, more natural ways for interaction, as in WOW it felt somehow forced and artificial. After that I have not returned to MMORPGs. Here I see that the intrinsic motivation Ultima Online offered, along with strong social interactions, was compensated and overridden with external motivation – like levelling up and getting more fancy gear. The social and creative game experience I so much enjoyed turned into an experience of an individual achievement.
2.7 Designing Emotional Games

"Games evoke emotion in a similar way to non-interactive works, with some exceptions – the greatest difference being emotion facilitated through action.” - Christy Dena (2013)

To be meaningful, an event must provoke emotion. And not just any emotion, but for a game to hold the attention of the player, those events must provoke strong human emotions, like pride, awe, hilarity or terror. The game does not have to make player to laugh, cry or anger, the most important emotions can be so subtle that the player won’t even recognize their existence in a conscious level. Like Sylvester (2013, p.8.) points out: “In everyday speech, people often use the word emotion to refer only to the most extreme forms of passion... But most emotion is much subtler and more pervasive than this.” They can be tiny pulses, rising and falling in response to every action and thought. (Sylvester, 2013.). I think most important thing is to create emotional impulses, no matter what kind of, no matter how big or small. The enjoyment comes from how these emotions resonate with the player. Also, players may seek different emotions, like horror versus tranquillity, sadness versus joy. No emotion at all, or wrong kind of emotion (like irritation), is bad design. Unless one wants to make totally plain, unemotional game experience, or wants to frustrate the player.

“Detecting and understanding subtle emotions is a designer skill.” – Tynan Sylvester (2013)

How to design to induce emotions? Sylvester (2013) states that game mechanics generate events, and those provokes emotions in players. But how do events create emotions? He points out a link, from a happening in a game to the emotional response in a player. They are called emotional triggers. It is something that generates emotion in a person: some change or observation from the surrounding world, picked up by the senses, and as a response causing some sort of feeling to arise from the unconscious mind. Emotions have two roles in cognitive level. They are judgements, as brain constantly scans the environment and uses emotions to make decisions before the conscious thought. They also play important role in decision making, as all decisions are made in emotional level first. (Lazzaro, 2004).

Stronger immersion to the game creates stronger emotions. In 2016 I concluded a small research and wrote an article called “Creating Immersion and Emotion in Virtual Reality Environments”, where I state that “it seems, that Virtual Reality can cause a wide range of different emotions, both pleasant and unpleasant. The sense of immersion creates a deeper state of flow and stronger emotions.” Karamnejad, Choo, Gromala, Shaw & Mamisao (2013) note, that “video game developers are enthusiastic about creating novel interaction approaches that yield a better gaming experience; such interactions are usually built with physical and emotional immersion in mind.” This is known as affective gaming, where the emotional state of the player affects the gameplay, and immersion seems to be the key to make the affect stronger.

Emotions are different when playing individually than when playing alone. In a study made by Lazzararro (2004), they found out that there was dramatic contrast when one was playing alone or when several people were playing together. Playing in group made games more exciting to the players as they created more and more intensive emotions as new kind of behaviours, rituals and emotions emerged.
Lazzaro (2004) presents four keys to create more emotion to the player experience. The first key is to generate emotion with perception, thought, behaviour and other people. The second is to create emotions from meaningful challenges, strategies and puzzles. The third key is immersion, to grab attention with ambiguity, incompleteness and detail. The fourth key is to create opportunities for player competition, cooperation, performance and spectacle.

**IMAGE 25:** The four keys to fun (Lazzaro/ XEODesign, 2004-2010)

These “Four Keys to Fun” fun by Lazzaro were later more defined by both Lazzarro herself and also by Letayf in his blog post:

1. **Easy Fun:** The simplest kind of fun, experimenting on the world and trying different things. It is for curiosity and creativity, also to make players smile.
2. **Serious Fun**: Feeling of flow and being engaged in something. Having a meaning and doing something meaningful.

3. **People Fun**: Making connection and having social engagement. From interaction with others arise a lot of emotional rewards. Acting as part of a team can be a lot of fun. Besides cooperation this includes also the aspect of competition.

4. **Hard Fun**: Achieving difficult goals, epic wins. This feeling is called “fiero”, the feeling which comes after the flow: achieving something after hard work.

According to Lazzaro (2004) these are the four main reasons for people to play games. Each key unlocks different set of experiences. During a single play session player alternates between them, and best-selling games offer at least three of the four keys.

### 2.7.1. Character Emotions Felt as Player Emotions

It should also be acknowledged that there are emotions that players can experience indirectly, through their characters. It depends on the depth of their role-playing: how much they want to and are able to throw themselves to the story and to their characters, have they done similar things earlier, like played live action role-playing games, and for how much and with what motivation and passion? This works better with social games, as other people, if motivated and skillful enough, deepen the illusion of actually being someone else, somewhere else. Do the players support each other’s immersion? How emphatic the players are by nature; how much they can feel for their character and for other characters? I think it is much about tricking oneself to try to belief to be that other person, in his/her shoes and in that situation, and feel through the character, and somehow feel through feeling.

The range of possible emotions is quite wide for the game characters, but as they are somehow artificial, felt only secondary, they will probably not have that great of an impact, as real emotions rising from the players. Often, the emotions in live action role-playing games are only acted out, even if almost immediately and intuitively, they still are based on conscious choices and they are only portrayed, not real, emotions. Although they can feel more effective, than witnessing emotions of characters in movies, books or computer games, as they are channelled through the player, but on the other hand, this can also detach players from these emotions, as acting out on them accordingly can take some focus out of the emotional experience.

I have experienced few quite emotional live action RPGs, where the character’s emotions induced strong emotions in me. They were mostly the same emotion, produced by the game events, shared by both my character and the me. But sometimes there were two different, yet as strong emotions - the character’s emotion that I felt, and from the surprise and appreciation of the intensity of this “game emotion” I also felt sort of sentimental notion, a thought that doesn’t relate to the actual game and therefore could disturb the immersion for a moment, but in my case it only deepened it more by highlighting the meaningfulness of it, and as an unconscious tone, affected the rest of the game. Sometimes all this happened at the same time, with a mixture of others, some even not recognized or even consciously noticed, emotions.
Also, I now realized, that during these affective games, my reactions to various situations were more instinctive. Normally the suitable emotional response of the character would be premeditated, even if it takes only a micro-second, and be based to the common sense or to the behavioural traits and nature of the character. But in these few exceptional games, it felt like I just channelled the character’s emotions straight out, without any conscious thought in between the game situation and the emotional reaction. The convenient response to various events was spontaneous and natural. Somehow the player’s decision-making process moved from conscious level to subconscious level. And this made these game experiences feel more real, thus creating a stronger impact. The game was not being played anymore. The game transformed into a pure experience, presenting some real-feeling reality, that was lived through, in the actual shoes, of the character.

The most intense live action RPG I’ve ever been to was a game called Ground Zero (Jokinen and Virtanen, 2001), where I experienced such a wide range of powerful emotions, even some emotions that I had never experienced before. It truly, profoundly, made a great impact on me, and I think it also changed me as a person. After the game, for many weeks, maybe even for months, I kept exchanging ridiculously long emails with the player who played the husband of my character, as we both seemed to have a burning need to continue discussing about the experience and of all the emotions and thoughts it provoked. I still feel shivers when remembering back to those events, now already over 15 years ago. It is also a good example that a player can also get a lot out of the unpleasant feelings, as this game managed to make me feel anxiety, worry, fright, scare and in one intensive moment, such a strong pulse panic, horror and terror, and yet, also in the same time, warm feel of a strong bond, not being alone but being cared for, of having someone protecting me and also feeling of protecting someone.

In this game the immersion to characters were made with care, the characters felt humane, I resonated with my young newlywed next door-neighbourly woman character, and I think the chemistry felt natural with my opposite player. Before the actual game, there was a lovely dinner themed pre-game, and the actual game started the next morning and continued for 24 hours in a bunker. Here the number of hours spent “in character” helped with the identifying with the character, the similarities between the character and the player, and being for such a long time in an environment that was fully supporting the immersion, to the tiniest of details, and the continuously thickening storyline. The special effects were also something I never had experienced before, and “the bombing” we experienced felt really frightening, as it came as a surprise and felt authentic, with the strong soundscape and the total darkness that was thrown upon the players.
When the game ended, I think I cried, out of the intensity of the experience, the powerfulness of the felt emotions and also from feeling sad for my character, knowing that the life she knew will never be the same, most probably she will die young due radiation, but also sorrow for all the other characters that had somehow become almost like actual friends during the game. For the following weeks I was in weird state of emotional turmoil, I could not stop thinking about the game, the character, the emotions I experienced, and it even affected my life, as my mind was constantly occupied in pondering and remembering this experience. I think this a great example on how strong emotional experience a game can be, how it can affect and maybe even change something in the player, and also how secondary feelings can feel like your own, emotions that feel real even though they are emerging from the character but felt by the player. Also, as surprising side-product, I learned a lot about the Cuban Missile Crisis, so it was the best history lesson one could ever have, on what really happened and what could have happened.

Here, I think I ought to make this disclaimer, if someone would happen to believe in the idiotic idea, that players of the live action role-playing games can “lose themselves / get stuck to their character” or do not know what is real and fiction anymore. This patronizing notion, that popped up rather often, especially in the late 90’s, from people who knew nothing about live action RPGs, is so ridiculous, that I don’t think I need to say much about it - actually this is the only thing I got to say about it - as it is and should be obvious. For a normal healthy people, even such strong experiences like this game was, can’t really make them confused about what is real and what is fantasy anymore or make them somehow forget who they are, because they are normal healthy people. I am not sure if there are people who could have, or have had, if any, this kind of problems, but I guess then they have plenty of other problems as well.
2.7.2. Example of Emotional Game Design

In his presentation about the creation of the game Journey (thatgamecompany, 2012), the director Chen (2013) introduces a process of building a game around the desired emotional experiences. He wanted to make a game, that makes player feel small, and provokes a sense of awe, unknown and mystery. He also wanted the players to see other players not as tools, but connected with each other. He emphasizes, that the game designer needs to be very clear on the wanted experience.

As music is considered to be the most powerful tool to raise emotions, Chen started to prototype the game around music. Instead of starting from making the game mechanics first, Chen suggests that the gameplay should arise from the core emotional experience and be specifically tailored to enhance that feeling. The physical landscape and the colour scheme were also designed to support the desired player experience (Chen 2013).

Journey follows the three acts in storytelling: the build-up, the twist and then the huge rise in emotional intensity. During the development process, it took several test sessions and high-tuning the emotional curve to get it right, as one of the problems was to make the ending stand out from the rest of the game, impressive and satisfying enough.
Based on Lien (2014), Chen has stated, that a truly social game involves players exchanging emotions, not just helping each other to boost stats. The social game was designed so that the players could only help each other, as it was not possible to harm the other player or to compete against them. In his presentation, Chen (2013) stated, that players are like babies, they have no moral. If it is possible to harm another player, most often the player chooses to do so. By minimizing the feedback from undesired player actions and maximizing the feedback from desired behaviour, Journey aimed to make players care about the other player.

A writer, designer and director Dena (2013) writes about her experience of playing Journey. She says that the big part of the emotional experience was that the game was designed to encourage intuition, she felt like she was using her instincts. As she was using the things she already knew, abilities she already had, she identified more with the avatar and therefore the experience became more personal. As she was not busy learning and doing things, there wasn’t much cognitive load, and she had time to project herself into the game, thus allowing herself time for self-reflection. Thoughts and memories of her own life was triggered through the game.

I have played Journey once through, and I remember the bafflement of seeing another player and figuring out ways to communicate. I remember this attempt was mutual, and the feeling respect and gratitude as the other player was helping me out. But it was also somehow frustrating not to have any more means to communicate, even though I understood it was the purpose. Otherwise the game was good, but maybe, in my case, it suffered a bit from the huge amount of hype and praise I heard beforehand, thus creating expectations and
anticipations that affected the game experience. I never want to hear anything, not just spoilers, but not even opinions, about any book I am about to read, any movie I am about to see or any game I am about to play, as all the preceding information makes the experience affected, being observed under some lenses, rather than being taken as it is.
3. DESIGNING MESSAGE FROM VENUS

In this chapter I talk more about the design process behind the game. What were the basis for the design? What inspired me, and therefore the game? What cultural heritage am I honouring with my decisions? I also do benchmarking of existing, related games, and present the making process in more detail.

3.1. Basis for Design

3.1.1. Inspiration for Theme and World

There exist various genres that relates to Message from Venus. In my work I will call this “Retro sci-fi” or “Retrofuturism” (and with an adjective “retro futuristic”). Retrofuturism is portraying past anticipations for the future to come. There are subgenres of retrofuturism called “Cyberpunk”, “Atompunk”, “Steampunk” and “Dieselpunk”, each referring to a different technology from a specific time period. (Wikipedia: Retrofuturism, 2018). From these, Atompunk is the most relevant for me, as it relates to the period of 1945-1965, years that have inspired most Message from Venus. But I mix in a bit of elements from Steampunk, as it fits there quite well, and I always tend to make mixtures to keep things fresh. Also, atompunk is said to be closely related to steampunk (Kato, 2016).

Message from Venus can also be labelled with a genre “Space opera”, as the story emphasizes great but dangerous adventures in outer space. It is colourful, dramatic adventure, that focuses on heroic characters, set in space in a relatively distant future and deals with topics of war and piracy. It is large-scale action with big stakes. (Hartwell & Cramer, 2006). I think Space operas also have a reputation of being a bit pompous and/or often not so serious.

Retrofuturism has many classic features, iconic elements and well-known themes that most likely everyone knows. Therefore, as a genre it offers familiarity, but offering a possibility to interact in this world will make it feel fresh, as it is probably earlier only experienced passively, through old movies and series, comic books and classic posters.

IMAGES 29, 30 & 31: The old imagery of retrofuturism often portrays both robotic and humanoid robots (Spacebohemia) weird accessories and plasma, laser or ray guns (Lost in
Space, 1966), and costumes, that back then probably looked advanced and futuristic, but nowadays look bit ancient and often comical (Myhistoryfix).

I decided to choose this genre, as it comes with the tacky, but somehow delicious aesthetics and the amusing visions of the future that people imagined around half a century ago, expecting these or some other unseen wild visions of the space age to already be reality around these days. Also, this is personally emotional and inspirational setting for me, as well as assumable for other “space nerds”, who probably are around my age or older. My primary target group are people, who grew up with the old Star Treks and the Arthur C. Clarke’s novels, and still cherish a soft spot for science fiction. I want those people, who always dreamed they could be on a space ship, having cosmic adventures, to actually experience that, to make their dreams come true. For sure, mine would.

There have been some attempts to bring back the retrofuturism. Atomic Age Pictures launched an Indiegogo campaign to get funding for their web series “Space Rangers”. They provided a lot of pictures, information and teaser videos, but it did not reach the funding goal. I guess as there is already so many retro futuristic movies and series, that even as there seems to be some interest, but no urgent need, for more. Unless it is an exceptional story that should be told, or has other merits to stand out, to contribute somehow to the genre. I’ve only seen one episode of the tv-series Black Mirror, in which every episode is a story happening in alternative present or potential near future, but it is a good example of bringing something new to the old genre. The episode is called “USS Callister”. Young employee of a game company finds herself virtually trapped inside a game, made by the chief technical officer for his personal entertainment. The game is a simulation of a retro futuristic spaceship, and the CTO was acting as its captain. The episode had positive reception and is rated at the Internet Movie with a score of 8,3/10 (IMDb, 2018).

I think there might be general interest for more retrofuturism - especially due the Black Mirror making it hot again and more known among the larger audience, and maybe even the Black Mirror being made to satisfy the need for more new retrofuturism in the first place - but it needs be done for the right reasons and in right manner, so that it offers something else than just retrofuturism as the only novelty aspect, like seemed to be the case in the Space Rangers (maybe they had some surprises that they did not want reveal even the slightest in their marketing materials).
My novel concept is to offer people a change to have a first-hand experience to retrofuturism, to walk inside this world, feel like being there and part of it. Not to watch a space opera movie, but to be the star of that movie. There is enough passivating entertainment, I think nowadays in the world saturated with easy entertainment, there is also demand for new kind of concepts and activating storytelling models. Also, this will bring something new to the old genre, as there has been little or none similar possibilities to experience retrofuturism in this manner.

The retrofuturism may sound like a parody, but it does not have to be light-hearted, comical or superficial. I like to mix elements, it can have tacky and humorous elements, but also deeper enigmatic and mysterious layers. It can be beautiful, and thought-provoking. It can feel realistic, like an actual vision of the future that has come true, not just something that exists for an hour for the player’s amusement.

I want the world to be mystic, almost magical, but at the same time I want it to feel realistic and have that a feeling of 1960’s. The alien cities are out of this world, and the night sky holds more than moon and stars: the unknown realities, powerful visions of other worlds, futuristic city views and space ships that are not from our world. Mostly this will be visible to the players through the World Wiki Book, but also from what they see from the aliens, like what is shown of Venus in the background, during the video call when they are discussing with their representative.

I will be using “technobabble” as an important tool, as it is present in the various examples in the sci-fi genre. This means using terms and words that sound scientific and relating, but actually means nothing. The use of technobabble has been debated and critiqued, as diminishes the credibility, when compared to using real science and real terms (Extra Credits, 2012), but I think it is deeply rooted in retro futuristic genre, as one of the iconic elements, that it belongs also to my game, and I will embrace it wholeheartedly and even incorporate it to the game system as one of the game elements. I love science, and could try to find proper terms and scientific possibilities, like for example Clarke always did in his books, but this is yet again conscious choice to bring humour to the game. I want to balance realism with fantasy,
humour with seriousness, stress with calmness, fear with victory, absurdness with sensibility, plastic tacky with breath-takingly beautiful, foolishness with fearfulness, “fun casual one-hour enjoyment” with meaningfulness, deeper impact and thought-provocation.

In the game, there will be five space ships, but players will only see four, as they are aboard on one of them through the game. Still, its shape and model affect its functions, like the weapons and the manoeuvrability, and the basic shape will be visible in the blueprints that the mechanic uses. Only for a short while in the beginning, they will see their own pirate ship, before it engages in a battle with an approaching ship. There will be three different alien ships, all met in combat. They all belong to the same evil alien race, but vary in size, shape and abilities.

**IMAGE 35 & 36:** Visual inspiration for the ships. The players will operate a quite basic and simple, yet powerful freighter. The ships of the evil aliens look more advanced, they are sleek and menacing. Always the next alien ship they meet, will look much more threatening, and it is always a harder opponent in the following space battle (Pixabay).

### 3.1.2. Inspiration for Characters

*Space Pirates*

The players are acting as space pirates, that have arrived to loot the abandoned vessel. In fiction, space pirates capture spacecrafts for cargo and occasionally even steal entire spacecrafts. However, on space pirate fiction there are differences on how the pirates are presented, as it is always a manifestation of each author’s vision of the future, and therefore they are not always loyally based on their seafaring ancestors. Even so, often enough, they are influenced by the stereotypical sea pirates. There is quite a long list of space pirates in various formats of fiction, from books and comics to television and video games. For sure the most known space pirates must be Han Solo and Chewbacca, who were pirates, mercenaries and smugglers from Star Wars movies.

I would like to let players determine what kind of pirates they are, how murky and shady or noble and valiant they want to be. Players can enhance this with the accessories and clothes of their choosing, or it is also possible that the self-image is not clear before the game start but the wearables and group dynamics determine later in the game the nature of these pirates. For inspiration, there could also be some known space pirates presented in the walls of the costume wardrobe room.
The costume selection for the space pirates could be both serious and comical. Elements from "normal" pirate genre could be added to the mix as well, like scarves, hats, jewelry, belts, jackets and boots. It also goes borrows elements from steampunk, as it fits the pirates and the costumes and accessories are easy to make look good. Retro futuristic steampunk sounds rather delicious, and I don’t know any other applications for this mixed genre at the moment. And even more delicious it will be with the added pirate elements.

Women from the Retrofuture

The women in the retro futuristic stories are always portrayed as young, pretty, scarcely dressed and almost always in trouble with some nasty aliens and unable to defend themselves. Westfahl (2005, p.710-711) observes, that women in written science fiction do not even exist for sixty years, if so, only in the roles of the beautiful daughters and love interests. They may also serve as assistants to male heroes, but more often becoming object of rescue.

So, almost without exceptions, the retro futuristic stories show the same stereotype for women characters: beautiful, half-naked damsels in distress. Even all of the old sci-fi stories relating to Venus repeat the same theme, even though one could think that Venus, “womanly planet” (as opposite to masculine Mars), would showcase women heroes or alien amazons. “Certainly, progress has occurred, but one cannot say that science fiction and fantasy are entirely free of the ancient taint of sexism.” (Westfahl 2005, p. 710). The question is, to follow this tradition or break free of it?

Image 39: Barbarella was both a capable and a helpless heroine. (Barbarella, 1968).

One example on the matter is from the legendary Star Control II: The Ur-Quan Masters video game. It presents an alien race called Syreen, commonly nicknamed as “Space Babes”, who among the other races, needs to be saved from the evil aliens. When I was doing research on this race for my thesis, I was surprised how sultry image they give out, as my impression on them was sweeter and more innocent. When I played this game about ten years ago, I was so unlucky that I never got to save the Syreens in time, and never met them in game, so I am only building my impression on the short glimpse I saw of the lost race. Yet they have been acting, consciously and unconsciously, as a source of inspiration for the Venusians.
I want to be faithful to the genre, therefore I think it is important not to leave iconic parts out of it. Therefore, as I am making a retro science fiction game, I kind of want to make it a bit sexist on purpose. There has been a strong movement to stop game designers to make games that objectify women, but as I want to be loyal to the retrofuturism, in some sense I need to objectify females. I want to see the green ladies of Venus dressed scarcely and be bit naïve, flirtatious, helpless and in trouble, as this would be a traditional rescue the princess -story.

Also supporting my decision is the aspect of familiarity: there is so much player needs to learn and pay attention and do in the game, that the storyline should be kept simple and somehow already-known. I am well aware I could break free from these old traditions and I may anger some people with my deliberate choice. So, in the next StarScape game, as a compensation and redemption, I can fill the game with the toughest, most badass womens in the universe; the scary adversaries and the cunning associates can all be presented by women.

*The Scary, the Bad and the Ugly*

“Yet across the gulf of space, minds that are to our minds as ours are to those of the beasts that perish, intellects vast and cool and unsympathetic, regarded this earth with envious eyes, and slowly and surely drew their plans against us.”


The Venusians are being attacked by an evil alien race, that have sieged their planet and have bad intentions for its future. The peace-loving aliens of Venus do not have proper planetary defence mechanism, and the evil aliens have destroyed the few spaceships they had. There is another motivation for the pirates to save the Venus, as if they fail, Earth will probably be next on the bad alien’s list of places to occupy.

I did a quick study on what kind of aliens invading other planets are present in fictional stories. The most known must be The War of the Worlds, an old story already from the 1800’s, that was radio broadcasted by Orson Welles in the 1930’s causing terror, as people

**IMAGE 40:** The Syreen commander Talana. (Star Control II, 1992).
though it was real news. There are too many examples, so I will only present two relevant. Both are from games and have aliens that conquers other planets and slaves the inhabitants. In Warhammer 40,000 miniature wargame there is an alien race called Dark Eldar, a race built around on torture and slavery of other species. The characters are presented humanlike, sometimes masked.

The Ur-Quans are the dreaded evil from Star Control I, that aim to conquer the whole known universe. They don’t resemble human at all, and are a good example of a comical style, that still has something menacing in it. I think the weird three-eyed alien hanging from the roof, rest of its body left unseen, with tentacles of some sort and legs or tubes spreading out of its body is rather frightening, even after the earlier delicious candy-colours, that later changes into darker and scarier toned. Yet again, the brain-looking creature sharing the screen steals a lot of credibility, as it resembles Krang, a comical character from the Teenage Mutant Ninja Turtles animated series, an evil but quite pathetic brain, travelling in a body of a cyborg. I think the designers of Star Control II did not want their game to be too scary, so they added the brain character there. Especially later, when the appearance of the Ur-Quans change into scarier, with the brain still there, the lighter and comical tones still stay in the game.

So, what kind of evil aliens to hire for my game? To balance the helpless ladies of Venus, I had an idea to make the bad aliens also female. I gave up this idea, as there aren’t many examples of menacing female aliens in this genre. For sure, it wouldn’t necessarily have to be a male either, it could be an alien of unidentified sex or a robot that does not even have any sex, but I wanted it to feel humane. As in the previous chapter I mentioned, for the next episode after this, I will allow myself more freedom to experience outside from the genre’s restrictions, but for now I will to follow it quite loyally.

When making a retro futuristic game, it was bit problematic to design the level of impressiveness of the bad aliens. They should be loyal to the origins of B-movies and bad props. But, not to amuse players and to evoke bit of frightfulness, they also need to be

**IMAGE 41, 42 & 43:** The Dark Eldar (Warhammer 40,000 Wiki). The Ur-Quans, who change into scarier looking later in the game (Star Control II, 1992).
somewhat creepy and intimidating. It was a fine line to figure out what is sufficiently scary, but not too scary.

The hostile aliens in retro sci-fi imagery are often hilarious and not menacing at all, but sometimes the level of “uncanny valley” is successfully reached. One option would have been to make them robots rather than biological life forms, so that it would be even futile to try to negotiate with them, but like stated above, I wanted them to feel at least bit of humane and real.

Also, it is important not to make the evil aliens too scary, as this is supposed to be aiming towards a relaxing and entertaining experience, not a horror story. I wanted a mixture of the bit silly old style, but still spiced up with those bone-chilling nightmarish visions. The evil aliens will definitely remind of the human race, like the aliens of Venus, but have something eerie and daunting in them. The look is a bit tacky, but scary enough to make the players take them seriously.

**IMAGE 44 & 45:** Retro aliens harassing poor girls. For me there is something sinister about them, but for the wrong reasons. It is not the actual aliens, but somehow their tacky costumes creep me out. (Creature from the Black Lagoon, 1954 & The Monster That Challenged the World, 1957)

**IMAGE 46:** HR Giger has been a great influencer in the science fiction imagery of scary-looking aliens. (HR Giger, 1978).

In the end, I came to a conclusion, inspired by the saying that goes; “what has been seen, can’t be unseen”. Therefore, what has not been seen, can be seen? The power of imagination is often undermined in fiction, as the human mind often is capable to generate the most horrifying visions. The bad aliens in Message from Venus are wearing big dark capes, that will block their faces almost totally. Occasionally there is a sinister glimmer of an eye, for a second, light reflecting from a reptilian scaled skin or a flash of sharp teeth.

The bad aliens are not shown often, only during one short video discussion. At first, I was thinking of making the contact only through audio, without any image, to make the encounter somehow creepier, and that there would be only some vague information and horrifying, unfocused photos, or messy and bloodstained drawings in the World Wiki Book. But as I am loyal to the B-science fiction movies, I thought that visible aliens were required, even if they are mostly hidden beneath the cape. I would have considered these means, with
other means to freeze blood, if I would have wanted to make a scarier game. But why not, maybe one episode of StarsScape will be a space horror game, as it enables different approach to design and as a designer, would be interesting to try.

3.1.3. Inspiration for Game Elements

Various old science fiction films and series act as a fountain of inspiration, some elements are even taken straight from them, as they are desired and also functional in the game, like the main screen and different ways to use it.

Game Room

The game room will be rather small, and the shape is made curving inside. All the game elements are incorporated to the setting, excluding the loose physical items. There will be also screens, lights, meters, tubes and cables that are just to enhance the immersion, but without any specific function. The players will be standing while they are operating the ship, to have better view on everywhere and enabling more active presence.

![Image 47: Interior of a retro futuristic spaceship. There is curving walls and a lot of decorative elements. (Space Rangers, 2014).](image)

“When watching movies or TV shows, I will sometimes see a character flip a big power switch and think to myself how fun it would be to do the same.” (Chapman, 2015). I intend to give players some haptic controllers, that either affect straight to the ship or to the virtual game. There will be physical game elements like buttons, switches and valves.

Changing Game Room

Rogers (2014, p. 77) asks designers to describe what players first see, when they start the game? When the players are entering the ship, it is on a power-safe mode, so I intend the
room to be quite dark, only with few dim lights. They need to find the switch to turn on the engine, so they can have lights and a better look of the room. The room is also cold, and maybe there is a smell of a new car or metal, indicating that no one has been there for a while.

The game room will change during the gameplay, as when a ship is attacking it, an alarm will go on and warning lights are flashing everywhere. Also, there is a different alarm sound for approaching ships. When there is battle, the hits the get will be audible, maybe accompanied with both visible smoke and the smell of smoke. It would be great to have mechanism to move the room, to create vibration when the ship’s engines are on, or when they get hit in the battles, like in Star Trek series and movies, but it will be harder to execute.

**Big Screen**

The big screen has six functions. It acts as a window for the front camera view, space travel mode, close distance flying mode, decorative view for travelling in space, a display for video log files, and as discussion mode for conversations.

**Front Camera Mode:** When the ship is not moving, the front camera view is observing the surrounding space or ships in front of it. This view is used when the ship is not moving, either in front of another ship or ships, or in the orbit of Venus.

**Travelling in Space decorative Mode:** When the ship is flying, stars will slide past the window to create an illusion of moving in space.

**Discussion Mode** (“Google Translated Skype in Space”): The discussions will be portrayed to the main window. The captain will make choices for answers or for new discussion topics from his/her touch screen. The discussion style is following the style used in various games. As all the conversations need to be pre-recorded, they can’t be happening in the real time, but players still have a change to do meaningful choices and emulate a discussion. The game explanation for this is that the alien languages are yet not so known, so computer assistance and a dictionary database is required to understand the aliens and to build sentences that are then translated to the aliens.
Display for Video Log Files Mode: From the captain’s screen it is possible to access video log files of the previous crew.

Space Travel Mode: This view is used when the crew are planning where to go in space. There will be a larger map of surrounding space. It will also show their current location and proceedings in it.

Close Distance Flying Mode: This is for flying and fighting in close distance. Mostly visible to pilot and tactic but portrayed in the big screen during space battles.

Touch Screens

The Pilot’s View: The pilot uses star maps to navigate in space for the longer journeys between planets and solar systems (same as the Space Travel Mode). In short distances, the view is changed, so that the pilot can do more specific and quick moves (same as the Close Distance Flying Mode). The Tactic’s View shares the same closeup view as the pilot, but there are also different radars, weapons and shields visible and to be used.
The Mechanic’s View: The mechanic has an overall picture of the ship. He commands robots that move around different sections to direct power manually from the generator to different systems of the ship. The robots can also move the positions of the shields and cannons also repair possible damage and put off fires. But there are limited number of robots, so some tasks need to be prioritised, and that is the job of the captain.

The Captain’s View: The captain will observe everything, so there are all of the screens in the captain’s screen, to create a better understanding of the overall situation. During
conversations, the captain operates the replying from his view. He can also access the ship record files from his interface.

**Beginning of Immersion**

As I want this game to be fully immersive, the immersion should start from the moment the players enter the premises of the game organizer. Often these things are not so well-thought, but it is important to set the players to the right mood. Influence should be taken from some futuristic interior designs and visions from the 1960’s. A lot can be done with fabrics and lights, so there is no need for big investments. An ideal place would either look like a lounge of some retro futuristic space travel company, or then just as a really authentic room from the 1960’s. The attention to detail is high, even other spaces like the toilet must obediently follow the same theme.

3.2. Games Benchmarking

I had difficulties determining the genre for my game, as it is a collection of multiple genres. There are multiplayer and cooperative elements, its mixed reality including physical and virtual dimension. It is also related to escape rooms and live action role playing games. To make proper benchmarking on related games I first started by listing attributes, that are present in my game and collide with other games. These are: action, role-playing game, immersion, social, cooperation, 4-person crew, verbal communication required, space exploration game, digital, real-life-like, shared physical location and puzzle.

There are few games that remind mine as there is a four-person crew, each having different role, on a space ship. Star Trek: Bridge Crew is for VR, Artemis Spaceship Bridge Simulator to be played on computers. The Star Trek game did not even exist when I started developing my game in 2016, and I hadn’t heard about Artemis, so it was quite surprising to see these games existing now when I started to do benchmarking. Other games I present have similar elements, but these two are the most relevant for me.

**Star Trek: Bridge Crew**

The related attributes: action, role-playing game, immersion, social, cooperation, 4-person crew, verbal communication required, space exploration game, digital, “real-life-like”, shared physical location.

In this game four players share the virtual reality environment, where they are operating a space ship. Each player has an individual role and acts upon it.
**IMAGE 56 & 57:** The players are in the same room, both physically and virtually. (Ubisoft, 2016 & Star Trek: Bridge Crew, 2017)

*Artemis Spaceship Bridge Simulator*

The related attributes: *action, role-playing game, immersion, social, cooperation, 4-person crew, verbal communication required, space exploration game, digital, shared physical location.*

Much like in Star Trek: The Bridge Crew, here the four players operate a space ship, sharing both physical and virtual room, each having an individual role. Only difference is that the players are operating the game through computers, not with VR-headsets.

**IMAGE 58 & 59:** Artemis Spaceship Bridge Simulator, 2010. (Robertson, 2012 & Steam Community, 2016)

*PULSAR: Lost Colony*

The related attributes: *action, role-playing game, social, cooperation, 4-person crew, space exploration game, digital.*

This is a space exploration game, much like the two earlier examples, but the players do not have to be in the same physical room, they only share the same virtual room through their own computers. This is up to five players, yet again each having an individual role in the game. There is a captain, a pilot, an engineer, a scientist and a weapons officer.

**IMAGE 60:** Pulsar: Lost Colony (2014)
**Spaceteam**
The related attributes: *action, social, cooperation, 4-person crew, verbal communication required, digital, real-life-like, shared location.*

Spaceteam is a hectic and fast-paced communication game for two to four players. Players are located in the same room but playing each from their own device. In the game they are repairing their malfunctioning spaceship both by giving and receiving instructions. They each have their own control panel view that they are operating, and they need to do correct adjustments based on verbal directions from the other players, and they will see there what instructions and in what time limit they need to be performed, either by the player or other player. Sometimes there is coolant leaking on the screen that needs to be wiped, and the switches might start falling and need to be attached while doing all the other things. Some of the tasks require everyone to something at the same time, like turning devices upside down or shaking them. The tasks get harder during the gameplay and players often need start shouting their orders to be heard as the players are all talking over each other. This is a perfect example on technobabble, as the game uses for the commands that players are giving to each other. This also makes the game confusing to play due hard words, and entertaining to watch.

![Image 61 & 62: Four people playing Spaceteam (Wikipedia/ Kuchta, 2015) & Example of the control panel (Space Team, 2012)](image)

**Keep Talking and Nobody Explodes**
The related attributes: *action, social, cooperation, verbal communication required, digital, shared physical location, puzzle.*

This is a cooperation game, where at least two players try to defuse a bomb. The other player has instructions manual and based on the verbal instructions the other does the defusing work. Some of the tasks are complex, requiring describing weird icons or guiding the other player through a maze they can’t see.
**Mind Blowing Box (Un-Developed)**

The related attributes: *action, social, cooperation, verbal communication required, real-life-like, shared physical location, puzzle.*

This is like a physical version of the Keep Talking and Nobody Explodes. It is an assemble your own, electronic-based game for two players. One player is defusing the bomb following the verbal instructions read from the manual by the other player. The bomb consists of various modules, and they are interchangeable. Puzzles include memorization, sequence repetition, invisible maze, signal decoding and disconnecting wires.

**Lovers in Dangerous Space Time**

The related attributes: *action, social, cooperation, 4-person crew, space exploration game, digital.*

This is a one to four player cooperation space shooter. Players work together to change between different stations to use engines to steer their ship, rotate the shield and shoot enemies and asteroids.
FTL: Faster Than Light
The related attributes: action, space exploration game, digital, puzzle.

Player is running a spaceship and need to operate the crew inside the ship. There are situations like adding weapons with diving power to them, putting off fire or rerouting all power to engines when escaping.

Star Control II
The related attributes: action, space exploration game, digital.

In this game player needs to save the known universe from the evil alien race called the Ur-Quan’s. Player flies a ship in space, looks for resources and have space fights. There is a time limit to save the other civilizations from the Ur-Quans.
**EVE Online**

The related attributes: action, role-playing game, immersion, social, cooperation, space exploration game, digital.

EVE Online is a MMORPG where players can do various activities, including mining, trading, exploration, pirating, manufacturing and fighting, both against the game encounters or other players. Players can also do cooperation with each other.

**Cosmic Pirate**

The related attributes: action, space exploration game, digital.

In this space shooter game player is working under a space pirate organization and hijacking space trucks. The player uses beacons and radars to help to locate the victims.
Escape Rooms
The related attributes: action, immersion, social, cooperation, 4-person crew, verbal communication required, real-life-like, shared physical location, puzzle.

Usually four players are locked in a room, and they try to solve puzzles to escape from it or solve its mystery. Escape rooms have become hugely popular due the experience they offer, as it is exciting to visit an actual place and try to work together as a team. I feel that the current escape room scene is still young and has not reached, nor yet explored, all the possibilities. With many rooms the aim is just to find hidden numbers and figure out which number opens which lock. I call this a “lock opening genre”. In some cases, the connections are not even logical, or they are quite far-fetched. In some rooms it just feels chaotic try and error and searching for anything that could be used for opening the locks. The teamwork in the game isn’t often actual teamwork, it is more playing in a group but individually proceeding in the game in turns (even though benefitting the whole group and the proceedings are of course celebrated by the others). Probably the fastest, most experienced or the most eager player will solve more puzzles than others.

Instead of just opening locks, I would like to see stronger story lines and more space for logical thinking, brain puzzles instead of trying whatever found number combinations to whatever lock at hand, not much focusing on anything as nothing makes sense and there is a stress from the time limit. I started thinking about escape room without anything to open, only relying on the story and the player’s actions. Also, instead of being in a escape room with other people, but still playing and proceeding somewhat individually in the game, to instead enable more genuine and natural co-operation, that is also required for passing the game.

I found few thematically relating rooms from Helsinki. In Space Bound, by Escape Room Helsinki, players are on a ship that was hit by a cosmic storm and landed on an unknown planet and they need to find a way to be rescued. In Out of Mars, by Room Escape Helsinki, players have landed on some sort of a station in Mars and try to solve its mystery before it self-destructs. The Escape Room Helsinki also haves some VR games, one called Cosmos, where the team has to close a portal that is releasing black matter. I have not tested any of these, so I am not sure how well they work and what is the catch. Based on pictures the Space
Bound at least has some costumes for the players, but I am not sure if they are used in the actual game or just as props for the after-game picture of the players. Quite matching in its game style is an escape room Space Escape by Mission Accepted in Berlin, where players are acting as a crew of a space ship aiming to save Earth from an asteroid. They need to get a control of the ship, engines running and defeat some obstacles in space. There are blinking displays, buttons and levers.

**IMAGE 74:** The game room is an immersive-looking interior of a space ship. (Space Escape).

The most relevant example for my game is an escape room Space Squad in Space by Two Bit Circus in Los Angeles. The creators state it to be an “immersive live-action adventure” and a “social story room” (Two Bit Circus). The goal is not to escape from the room, but rather interact with the given story.

**IMAGE 75:** The game room is mixing virtual elements with the physical environment. (Space Squad in Space)
Live Action Role-Playing Games

The related attributes: action, role-playing game, immersion, social, cooperation, verbal communication required, real-life-like, shared physical location.

Live action role-playing games offer various themes and styles of playing. The players are dressed up, and acting based on their character, in some real-life setting. There are both games that are more rule-dictated, as well as games that are more freeform and based on common sense rather than a set of rules. Science fiction is a popular theme used in various games, the most notorious being Monitor Celestra, held in Sweden in March 2013, organized by Alternativ HB, Bardo and Berättelsefrämjandet. In this live action RPG, a real museum warship was used to create a spaceship, inspired by the Battlestar Galactica tv-series. The players were acting as the crew of the ship.

![Image](image76.png)

**IMAGE 76:** The navigation table in the bridge of Monitor Celestra. (Karlsson, 2013)

3.3. Use of Research Findings

Here I present the aspects that affected my game design work, I discuss with the tools and principles (see: 2. Designing Experiences, especially 2.3. Designing Emotional Experiences) and how they have affected my work. Also, using these tools as tiny frameworks, I can debate more in depth with them and also, have better means to introduce the various design choices I’ve made.

I will showcase my design work and methods, especially in the light of experience design. What is my intended game experience like, and by what means I aim to deliver that to the players?

At very beginning, I made two visualisations of almost everything: of the story, trying to address multiple aspects of the game. I mapped the whole experience journey, the time divisions for each four acts and for all the phases inside them, the plot incidents, the required player actions, the emotion intensity and quality curves, as well as the roadmap for each desired emotional response, and also the cue points for the involvement of various senses.
3.3.1. Story Design

The story plays important part of the Message from Venus. It justifies everything in the game, as everything relates to the story: the events, challenges, the physical pieces, even the sounds and smells. They are given by the story, not to be separated from it. Through them the story is outlived. But I do not just mean the game events, the story is experienced through all the elements, even the smallest of details on the room and smell of smoke during a battle tell also that story, just through different medium.

I have mixed feelings about the meaningfulness of my story. It was stressed by Wells (1979), a story should be about something, mean something, and include moral and ethical points. I am not sure I want my story to be that meaningful, especially have any moral teachings, for two reasons: I aim to make this a game where people can relax, have fun and enjoy themselves, so I do not want it to be a serious story or tackle moral issues. Also, I do not want the story to take too much attention from the rest of the game, like the player actions, that require a lot of focus from the players (like learning to operate a space ship). Overwhelming the players with everything, will cause some aspects, either the story, or the actions, to be dispersed - solely due the lack of players being able to multi-task, or rather, “multi-focus”, in this already overwhelming setup.

But I do include some sort of moral physics, like Murray (1999) calls for, that indicates that consequences follow actions. In my game, this aspect is present, maybe even surprising the player, as often in games one can do whatever and skip the consequences, either by returning to a previous save, or the consequence is not that great that it would affect the storyline, or then it is impossible to do other actions than what the aimed storyline allows. In Message from Venus, if players make some mean or deliberately stupid choices, they can’t
return to the aimed storyline anymore, which may be surprising to some, at least to players who like to try different things possible before continuing in the “main story”. In this sense, my game will mimic real life more than games.

Murray (1999) also cherishes the freedom of choice, which is present throughout the game. Like stated before, this freedom of choice may lead players to have a different game session than what they anticipated and what was the “main game”, instead they will have another kind of game. Unfortunately, due lack of time constraints, the other story paths are not, at least yet, so rich story wise, but will anyhow offer meaningful things for players to do and experience. Murray emphasises the point, that the more freedom interactor feels like having will make the plot feel more powerful. At least in Message from Venus, the players will realise that the choices they make lead the events in it, a notion that will probably be delightful, or staggering, if the players have made choices they would like to unmake.

Yet I wonder, should there be a “event horizon”, some sort of indicator for the players when they seem to be wandering too far from the main story, a notification or warning just before they are not able to return back to the plot anymore, at least not during that game session? What is expected and should all expectations be met, what is respecting the players, what is too much of a pampering? Finding the correct way is crucial, but some aspects can probably only be decided after some game testing sessions.

The Four Acts of Message from Venus

Instead of three acts (See: 2.5. Telling Meaningful Story), I have four acts. The first is introductory and ends with the first battle, the last starts from the climax, which is the final battle. The second and thirds acts are slightly longer, consisting also of more relaxed gameplay. The second act is more about interaction with the ship, and the third act is consisting the communication with Venusians and studying the artefact. The second battle is separating these two acts.

I have a surprise element by having a few surprising turns of events. First being that the players witness their own ship being destroyed, the second being the final fight, which at first seems hard, but soon the players realise that the enemy they thought would be “the final boss” was not it, but it is something that arrives bit later and looks almost impossible to defeat, a huge planet destroyer vessel. Also, they might be surprised to get a tangible object to the gameplay, that will be helpful in their virtual game.
As it is common for hero stories, or even most of the stories, the Vogler’s (1985) Hero’s Journey structure (see: 2.5. Telling Meaningful Story) is visible also in the Message from Venus, but maybe not so strictly following the path. There is call to adventure, challenges, helper (the ship’s AI), moment of realization that they have new knowledge and skills to be used in the more difficult part that is yet coming, the ultimate boon that is the goal of the guest, and that all the previous steps have served to prepare the characters for it, for the final battle. The gift will be an actual handout to the players, a physical evidence of their victory.

Vogler (1985) advocates that the protagonist of the story evolves during the story progresses. This process of growth is described more in his Hero’s Inner Journey diagram:
All these elements are present in Message from Venus. There is a limited awareness of a problem (1.) when the characters enter the unknown vessel. The 2. & 3. are bit far-fetched, but overcoming fear (4.) is fitting when the pirates win the first space battle. The pirates then commit to change, they adjust to their new situation. 6. They experiment with new conditions as they search the ship and learn more about it, and of their new role. The distress call from Venus is preparing them for a major change (7.). The big change (8.) happens when they arrive to Venus, they flip from being pirates to possibility to be heroes and do great deeds. The video call is acting as introduction to this new role (9.). The ancient artefact offers new challenge (10.) and last-minute danger (11.) for sure is the facing of the final battle. The pirates master it (12.) and become new-born heroes.
The players can also opt out of following this hero’s path, as they can choose to make the story something else, like “The Villain’s Path” or “Not-caring Adventurous Space Pirates Path”. The game will still be rewarding to play if they choose to do so, and the players might be surprised for having the opportunity to make the game their own playground, and by the details that also change with the decisions, like that the game prepares the newspaper print accordingly to whatever their decisions and actions end up to be.

3.3.2. Experience Design

In this chapter I am discussing with the done research (see: 2. Designing Experiences) in the context of my game and I am using the found design principles to communicate my design choices.

The main involvement will come from not being just a mere spectator of the story, but an active part of it. I’m offering players a change of being the protagonists. Huunonen (2015, p.9) states, that “Game industry needs to especially find ways to allow users to participate and co-create the essence and range of game experiences, gaming being highly interactive entertainment media.” I think Message from Venus will be quite outstanding in this, as the players are more active, literally being physical elements, inside the game. They will co-create their gameplay with each other, and the game will offer possibility for different interactions.
Like Shedroff (2001, p.4) stated, much like a story, an experience should have a beginning, middle and an end. It is easy in this case, as my experience is the story, but for sure it starts before the actual story and does not even end when the players leave the building, where the game was held, but maybe only after they have visited the webpage to see the digital material taken from their game play session. But the whole experience is quite compact package, and the actual game experience even more compact. And as the game experience is accompanied with a story, it is easy to design it also to have a clear beginning, middle and an end.

The starting point for me was, that I do not only want to create a game, I want to create an experience. For sure, all games are experiences of some sort. This is the fundamental question for every game designer: “Why do they design games?” What do they want to achieve and what do they want to make players feel? Just enjoyment and engagement, or more complex and deeper experiences?

I want to create a game, that the players would remember the rest of their lives. Something truly different, something they have never experienced before. I want the players not see and hear a story, or interact with a story, I want them to feel like they are in the story, that they are the story.

Below is discussion about the aspects of experience design and discussion with the experience design methods (see: 2. Designing Experiences).

I aim to encourage and reward the intrinsic motivation. This game is all about learning new skills, working as part of a team, exploration and discovery. There will be positive feedback on the progress throughout the game, and the joy of playing arises from the playing the game for the sake of just playing it.

I do not aim to reward the motivation from external elements, as I believe for a game to be truly satisfying, it is not necessary. For sure, there is an illusion of fame, being celebrated by the Venussians and getting a newspaper article about the players as heroes, but there won’t be high scores or other external rewards as such for the more egoistic needs.

John Ferrara (2011) has developed a game experience design framework, that has five levels: motivation, meaningful choices, balance, usability and aesthetics. Motivation was discussed above, so next one is meaningful choices. The players will have total control of the gameplay, even more than normally in the story-driven games, as they can choose not to follow the given structure. But if they want to, they still make different decisions, on what is the next thing to do, what they should reply in the discussions and how should they fight the aliens. As it was advised, that it is best not to make the best choices most obvious for the players, this aspect is present in the fight scenes and discussion scenes. It is all about balancing the challenge and fairness. The usability is something that can be designed best through play testing the actual digital prototype, and eventually in the game play test sessions in the actual physical surrounding. As I am having four different interfaces for the same virtual game, they need to be self-explanatory and easy to use, without prior knowledge of space fighting games or any games whatsoever. The last level of direct sensory experience will be present on the physical game room: the appearance of it (lighting, soundscape, temperature, possibly
smells) and changes in it as sensory feedback (power save more at the beginning, the normal state, fight mode and damage to the ship experienced from the inside). There will be also haptic game elements, like the buttons and valves, the book of world lore to browse and the ancient artefact to examine.

The five experience design principles by Pine & Gilmore (1998) were the theme, positive cues, elimination of negative cues, memorabilia and engaging all five senses. I have a very strong theme, over which all other elements are based and even drawn from. The theme will carry through the whole player experience journey, from the website to the waiting room and from there to the costumes, gameplay, narrative and game mechanics. The positive cues are all the details, which will be plentiful, to enhance the lore and immersion. All the possible distractions will be eliminated as thoroughly as possible, players will even be asked to leave their phones outside. There will be physical memorabilia that the players will get after the game, which is the Venusian newspaper print with their picture on it, also they are provided with digital memorabilia in form of pictures and video of their play session. And like stated above, if not all, then multiple senses are involved. Vision, hearing, smell and touch are present, taste yet not implemented but possible.

The three aspects of design for wellbeing by Desmet & Pohlmeyer (2013) were design for pleasure, design for personal significance and design for virtue. The experience goals by Kapanen (2018) were aligned with these: pleasure (excitement, feel of reality), self-motivated (challenge and success, feel of control, learning, self-evaluation and feel of development) and proudness (belonging to a group, external evaluation, self-esteem, feel of development).

I have designed for pleasure, the gameplay is about excitement and having fun, with a feel of reality. With hard but not too hard challenges and by succeeding in them, players will have a feel of development. They are offered a possibility to learn new skills (like various tasks in the space ship) or improve the existing ones (like communication skills). They feel totally in control of the situation, as their choices matter and have appropriate consequences. Players also have a possibility to feel proud and honourable, if they choose to do the right and moral decision to help Venusians. They have a sense of belonging to a group, in a very concrete manner, as they experience this adventure together. After the game, it is possible, that players will feel prouder of themselves, more resourceful and skilful and having stronger social bond with their co-players.

It is also possible, that the players, if they make unmoral decisions, don’t feel heroic or that they haven’t accomplish something great. But I don’t want to force the moral path, as I want the players to be totally responsible of their actions. Yet again, this is something that can also empower the players, making a choice and then carrying at the consequences, even if they were not the most heroic ones. It is also possible, that the players will leave the game less bonded with each other, for example if someone in the group wants to dominate the others (naturally the player who is the captain would have best change to act so, but it also depends on the individuals in the group), or the players end up snapping to each other or even argue, either as a reaction to stressful situations or when they disagree on the next steps, or if their group dynamics just don’t work.
The User Experience Honeycomb by Morville (2004) states, that valuable experience is useful, usable, desirable, findable, accessible and credible. My content is quite original, and I would think there is a need for new kind of gaming experiences. I hope it will be easy to use, but it is hard to say in this early phase. The experience hopefully also evokes emotion and appreciation in players. In my opinion, the findable relates to the usable, but yes, it is important that the players find easily the required information, in- and off-game, during the game play session, but also even when they just want to find out more about the game beforehand, like through the webpage. I am quite proud, that my game will be accessible, not just to people with disabilities, like players in wheelchairs, but that it is possible to tune the level of difficulty, for example if small children or elderly people without any prior gaming experience are playing. Possibilities to create different language versions quite easily also makes it more accessible. Credibility will emerge from the real-life-like environment and of all the details.

For Message from Venus, I wanted to combine different aspects to create “a super experience”, a design product that has a great impact, something that strongly and actively tries to raise different feelings and emotions. For that purpose, I have used my own Experience Design Principles (see: 2.4. My Experience Design Principles).

**How My Experience Design Principles are presented in the Message from Venus:**

<table>
<thead>
<tr>
<th>Environment Design</th>
<th>Both real environment and virtual environment are supporting the feel of being in an actual space ship. The environment design is visible already in the “off game” rooms, that lead the players to the right mood and act as introduction to the game world. Also, the indirect environments, like the brand and the webpage, are all supporting the desired feel of the game.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme</td>
<td>There is a strong theme, that is communicated through everything with multiple details. The theme also mixes a main genre (retrofuturism) with few subgenres (pirates, steampunk).</td>
</tr>
<tr>
<td>Story</td>
<td>The game has a strong storyline, which has four acts. There is rising action and peaceful moments. The players interact with the narrative and steer it with their actions and choices. There are interactive discussions with the characters form the game world. Players are provided world lore, for example through the vast World Wiki Book, containing important material as well as material that just communicate the huge amount of world lore behind the game.</td>
</tr>
<tr>
<td>Immersion Methods</td>
<td>Senses have been included in the design. The game provides visual, auditive, haptic and odour stimulus. The players will be asked to leave their belongings, especially mobile phones, outside of the game room. There will be no interruptions that could break the immersion. The players also have a chance to use toilet and drink water before the game session. The game world will feel very real, as there are multiple details and also the actions of the players count. Also, operating</td>
</tr>
</tbody>
</table>
the spaceship with virtual and tangible means make it feel realistic.

| Feel and Look | The game room feels like an actual deck of the spaceship. It also changes its stage during the game, like from being shut down in the beginning of the game to the alarm sounds, warning lights flashing and smoke coming from somewhere when they get blasts from an enemy during a space fight. All the materials will be durable, so players don’t have to worry for breaking something and can use everything without a worry. The room will be accessible to children over 10 years old and players with wheelchairs. |
| Flow and Usability | There will be cues that guide players to right actions and right directions. The puzzles might require some figuring out, but they should be doable after some pondering with the group. The digital interfaces will be simplistic and self-explanatory. If the players get stuck, the A.I. will readily offer assistance. |
| Social Interaction | There will be a lot of communication and co-operation between the players. There will not be competition, unless the players figure out some creative way how to do so in the game, or if two groups of players in two game sessions want to somehow compare their sessions as a competition (even so, it will be hard as there won’t be usual escape room parameters available, like how fast the players finished the story as it is not relevant in any way). The players have a possibility to discuss their experiences with each other and with the A.I. who was operating the session. They will be encouraged to continue the de-brief online, with the game operator and with other players as well. There will be a player community, and it will be offered a platform to talk about the game, present wishes and give feedback. The operator’s communication with the players will be genuine, warm and all inquiries are always answered. |
| Feel of Something Great | There is a feel of that something great is going to happen next. The preliminary information (like trailers and web page), the set-up and the storyline, the costumes - everything highlights that a grand adventure is about to happen next. And hopefully during the game it will continue to feel so. It is important that the ending will be impressive enough so that it will redeem all the subtle promise. |
| Believable | The actions to operate the ship and all the puzzles that relate to it are all logical. There is nothing that feels separate, clued or forced, everything fits the game world and the narrative. The mechanics serve the story, and the story serves the mechanics. Also, all the details in the room, both active and passive, crucial or decorative, enhance the credibility. |
Overall Experience

All the player touchpoints will be mapped, from the pre-session (first moment of hearing about the game to visiting the web or FB page, seeing trailers, booking the game, to arriving to the game location, getting instructions, dressing up) to the actual game session (the beginning, middle and end) and then the following steps (getting the newspaper print, de-brief, changing clothes, leaving the location, being asked to leave feedback, receiving more materials from the game session, talking about it to someone, talking later about it with the co-players).

Anticipation

There will be home page, that provides intriguing information of the game, but not “spoiling” it. Lead the players to the theme, set-up and bit about the game style (both virtual game, and tangible puzzles, story-driven and interactive). There will be photographs, and a yummy trailer. The FB page mainly direct interested to the actual home page, but also displays reviews, and showcases pictures of other players in their costumes. There also will be some highlighted sentences from the positive reviews, possibly from real critics.

Humor and Emotions

An emotion path has been designed, that follows the four acts in the storyline. The desired player emotions and anticipated intensity for them are listed, as well as the ways (triggers) to induce them. Also, the character emotions are mapped out as they are presented in the in-game world, even though not necessarily experienced by the players, yet hopefully their existence acknowledged by them. Humour is a light underlining tone in everything. Everything is not a joke, or not even taken lightly, but the game world is not too serious, the players hopefully will experience amusement and even laughter. I want to incorporate humour as this will be a “fun adventure”, something that can be leisurely attended with a group of friends.

Not Underestimating the User

Everything will be bit too well done. It would not need to be so well designed and executed game to achieve the desired experience goals, but out of respect to the players who spend one hour of their life to try it out, it will be made almost too well. The players hopefully feel respected and valued. The appreciation towards the players is visible in everything, from all the materials that relate to the game to the actual game setting and to the customer service, all ooze out the respect to the players.

3.3.3. Design for Inducing Emotions

One of my biggest question was: What is it that I want to make players to feel? And then to think of, is it possible to actively design to fish out those emotions. Rogers (2014, p. 77) encourages game designers to think the overall feeling of the game. With different methods, like immersive environment, including senses, attention to details and adding surprising
elements, I try to induce stronger emotions. The atmosphere in the room will also change during the game, both physically, and also through the storyline.

I have all the four keys Lazzaro (2004) presented in my game, the internal experience key, the challenge and strategy key, the immersion key and the social experience key. These keys were made to help designers to create more emotional player experiences, and claimed to be actually the ultimate reason for people to play games. There were multiple main points from each key that are relating to my game. From the first key I have all, generating emotion with perception, thought, behaviour and other people. From the second key I have emotions from meaningful challenges and puzzles, and somewhat of strategy. From the third key, my game grabs attention with immersion, ambiguity and detail. And from the forth key I create possibilities for player cooperation, performance and spectacle, but not yet in the first game any opportunities for competition, unless the players find a way to compete in their own manner in the game. It is allowed, but not designed into it.

The Hollywood Arch (Harper, 2012) uses peaks and lows in the story to control emotions. But it is not so clear about the specific nature of those emotions. I have used it as a base for my arch, but have also include the types of emotions. I named it “Emotion Intensity & Classification Archs”.

**IMAGE 81:** Draft for the timeline for Message from Venus, including the emotion intensity and classification archs. (Juju, 2018)

In the timeline I have black arch marking the intensity. There is action right in the beginning, then small pause in action. The story starts to unwind and players learn to take control of their ship and go for their adventures. The green arch is marking the active and passive times
in the game, when players need to act and when they can take it easier. The third arch is differentiating more hectic moments in pink and more relaxed moments in blue. I also mapped distributed the types of emotions in the timeline, as well as involvement of different senses.

Like Sylvester (2013) pointed out, the unconscious human mind is constantly analysing the situation, and when some conditions are met, the unconscious mind triggers an emotional response. There are numerous different kinds of emotional triggers. Those are the happenings in the game that causes emotions in the player. In the Message from Venus I try to trigger emotions through different events in the storyline, but also through transitions in the room, especially designed for senses, like through changes in the soundscape, lighting, video materials and so on, as I would like people to experience a wide variety of emotions and due different reasons. Also, I try to mix various triggers together, either to aim for a stronger specific emotion, or aim to have different mixed emotional responses to deliberately cause confusion in a player. Also, I intent to include some emotions that are not generally considered so pleasant, like feeling of confusion and stress, maybe even panic, as they can make the experience stronger and emotionally richer.

What are the specific, desired emotions and feelings that are hoped the player to experience in the game. The Emotion Intensity & Classification Arch points out to most possible emotions, but there are others as well.

Some of the Desirable Player Emotions:

- **Confusion**: Where are we, what is happening, what are we supposed to do, how does this work?
- **Curiosity and desire to explore, evaluate and experiment**: Interest to find and examine new things and places. What is here? What is this? What does this thing do? Where can we go, what can we do? (Especially during the more relaxed moments between the action phases, to explore the room and objects in it, to try all the possible functionalities and enjoy all the details. For example, there will be time dedicated especially for this after the action-packed start.)
- **Excitement**: Now I know what to do, I understand this, I can handle this! What will happen next? We are sharing this and working together! We look amazing space pirates! I can hold this book with so much stuff on it in my hands! I love all the details, what is that thing? It is awesome? Did you see this? Look at me do something! I am having so much fun!
- **Surprise**: Where did that come from? How was that possible? It did what? Wow that is cool! Come check this out!
- **Panic**: Hey they are attacking us! What am I/ we supposed to do? Oh no we will be destroyed any minute! We can’t beat this! Those warning lights and alarm sounds are so stressing! Do something! Help!
- **Stress**: This is so stressing, I don’t know how to operate this, can we do this, I don’t know what we should do next, how much time do we have, oh no we are running out of time, help me with this, hurry!
- **Terror**: Hey guys, what is that big and scary thing? And hey... what is that even bigger and scarier behind it? That is creepy! Yikes! Looming doom ahead! We will die!
- **Adrenaline rush**: Let’s beat them! Let’s do this! Fire! Plasma cannons! Laser rays! Take that, nasty alien! Everyone, push that button! We have to hurry! We have to figure this out now!

- **Confidence, in oneself and in others**: being able to act in stressful situations, learning how to handle the ship and getting better at it, taking the situation under control - the players feel like they are mastering the game more than it is mastering them, therefore gaining self-confidence on own skills and performance but also hopefully towards the team, confidence that they can beat the game

- **Social emotions**: **Feel of belonging** to a group, enjoying working as part of a team, **fellowship, friendship, companionship**, joy from sharing this adventure with others and from the realisation that everyone is doing their best and working together towards the common goal, helping others and getting help from others and the **gratitude** emerging from this action, the excitement from the possibilities to learn new things, skills or mind-sets from the co-players and maybe showing or teaching them something

- **Fascination**: Look at this! Look at that! It is amazing! Wow what is this? What are these? That looks cool! There is so many details! They have even thought about this! Look at that silly detail! This is fun to try to talk with alien language! The Venusian looks great! How is this done?

- **Enthusiasm of learning**: This is interesting! I never thought I would be learning how to fly a space ship! I want to study that book! I want to understand how the Venusian language works! It is so nice to learn new things! Can I try what you are doing? I want to know more! I want to try more! I want to learn more of this!

- **Feeling of flow**: Now I got it, this is going smooth, I know what to do next, I can handle this, also now we got it, this is going great, we work so smoothly together, there is nothing uncertain, I enjoy this a lot and it looks like that so do the others, let’s rock this thing!

- **Joy, pleasure, happiness**: This is quite entertaining, I rather would not do anything else at the moment than be here, I am enjoying my time here, I am enjoying the company of the others, I have never experienced anything like this and it pleases me, I am happy of my/our proceeding, I am pleased that I/we/he/she/they nailed that, oh this is so much fun!

- **Amusement, humor**: This is fun, that is funny, that is silly, that is ridiculously silly, a-ha-ha look at me/you/him/her/us/them in these ridiculous costumes and props, look at that silly little detail there, eh-heh come look here what it says in this book, this discussion with the Venusian lady is so absurd, this newspaper print with a picture of us is so amusing - just look at my/that expression, oh there is a video of us playing - that is hilarious! (also, possibly could be embarrassing to some?)

- **Empathy**: Can I help you, do you need help with that, what do you think we should do next? I think that is a great idea! You are doing great! Well done! We are all in this together. What, they destroyed our ship and the crew we just saw on screen, that’s horrible! For sure we will help those unfortunate Venusians, poor things. Oh dear, we blasted that ship to pieces, was there someone on board?

- **Heroness**: We did great, we are amazing, we kick ass! Look at me, look at us! We did the right thing. We are invincible! We defeated them! We saved a planet! We are heroes! I will post this magazine print of space pirate heroes online!

- **Feel of victory and accomplishment**: We figured this out! We got this! We solved this! We defeated them! We also defeated those! Hurray we won the final battle! We saved Venus! Hey, we won the game!
- **Proudness**: Feeling proud of oneself and of the group, also feel of others appreciating oneself and the whole team. Being proud of accomplishments in the game, of the individual performance and of the performance of others and them as a group
- **Deeper Social bonding**: Creating stronger bonds to others through this - while having this experience: facing and handling different situations, solving problems, making decisions, communicating and working together as a group, maybe learning more about the others (like how they act in this quite different situations), but also later from having had this experience: that they all experienced this together and possibility to reminisce about the experience later together.
- **Hope**: wishing that the game would not end any time soon, hoping to succeed and eventually to “beat the game”, hoping that the team would be proud the player and also of the whole team. Hoping for that, whatever expectations, pleasant anticipations, wishes and desires one would have of the game, the play session and the overall experience, they would be fulfilled. And I, as a designer, also hope: I wish, that after the game, the player would be hoping to return one day (to play the same game, with same or different team, or attending another episode in the same room), or that would be at least left with a desire to experience something like this again. I hope that the players like experience room concept, even though they would not resonate with this theme.

**Some of the Not Desirable Player Emotions**

- **Frustration**: I don’t get this, I don’t understand this, I really don’t know what to do next, I still don’t get this, I will never get this, this is too confusing, this is too much. Also, why won’t he/she get it, why everyone seems to be so clueless, why are they so slow? Why they don’t have any good ideas, why they don’t understand my point? Why was this game made so hard? I feel like giving up, I don’t want to continue with this, this is not motivating me and I feel stuck.
- **Embarrassment**: I feel stupid and inept. Oh great, so there is a video where I will look stupid and inept. I am learning too slow, I am slowing the team down, why does this feel so hard for me but not for the others, I think I made a mistake / bad move, maybe I was too dominating, I feel stupid in these clothes. Oh, I feel embarrassed for that player, he/ she made a mistake, they must be so embarrassed. I feel embarrassed for the designer of this game, they made such a stupid game. I feel embarrassed because other players are posting pictures to social media and I look stupid in this costume/ I have such a stupid expression on my face/ I look so fat in that photo. I wonder what he/ she/ they (not in the game) would think of if/ when they find out I took part in something this silly? This game feels too childish for my standards/ self-image/ reputation so I feel stupid being here as I am a serious (=pompous) adult!
- **Envy**: Why that person is so good at this, why everyone seems to be better than me, why everyone seems to have more fun than me, he/she got to carry that awesome plasma gun around that I really wanted and everyone got better looking costumes, why does he/she got to be a captain and I am just some mechanic
- **Distraction**: Player is thinking something or things that does not relate to the game, was it with worry or with delight, from bodily needs (like thirst, hunger, need to go to the toilet) or from other bodily sensations (headache, upset stomach, pain somewhere), other players distracting the player, player thinking about the game but not “in the game”
- **Boredom**: This game is lame, I would have better things to do, this is wasting my time, I wish I would have my phone here so I could check the Facebook, when does this end? Yawn.
- **Negative social emotions**: This team is not working so well together (and I can’t or won’t try to do anything to improve the situation), that person is really pushy and dominating, nobody is listening what I got to say? Feeling like an outside, either left aside and ignored or it culminates to three against one situation, or two against two where they can’t agree on anything. All sorts of arguments and quarrels (especially in stressful situations). Also, if someone is feeling of being better than others, superior, and that only he/she knows the best course of action and the right answers and should do everything, like being the only one to hold the artefact and also the World Wiki Book, blocking the view from others and alone trying to figure out the puzzle. If players leave the game session feeling less as a group than before the session, due whatever reasons. Not wanting to talk about the experience with each other, or only mentioning the negative feelings that the game raised of other players to people who weren’t there but probably know the other players (and this kind of discourse is negative if it is only to gossip and spread negative comments, but can be fruitful if these kinds of issues are discussed neutrally to raise awareness and to figure out what could be done to improve the situation, either directly with the group or then indirectly through other people).

- **Un-satisfaction**: Wanting some other experience than this - something more peaceful/ with more action/ more like normal escape room/ more like a movie/ more or less something than what this is, wanting to have a better team, not happy with own personal contribution, wanting another kind of story, wanting the game to end already, not happy to be here, would rather be elsewhere doing something else.

- **Upset**: upset about the way women are portrayed in the game, upset that the game feels childish, upset for feeling like failing the team, upset for not understanding the task

- **Worry**: worry if team will work smoothly, if they or two people in the team can work without any conflicts, worry to not let others down, worry that someone would feel like they are letting others down, worry of being too dominant/ too passive/ too slow/ too stupid, worry if the rest of the team is having fun or not

- **Distraction**: distractive thoughts and feelings: I’m hungry, I’m thirsty, I need to pee, I can’t stop thinking about something that does not relate to this and is also upsetting me, I am worried of that exam/whatever tomorrow, I wonder what he/she (other player in the room) really thinks about me, my head aches, what was that sound, I see there is a stain on the floor...

What comes to secondary emotions, those experienced through the character: the character’s emotional responses to the events, assumed by the player, and the level immersing oneself to that feeling, being able somehow to feel that feeling. The success to do so depends on the players and how seriously and efficiently they are role-playing. It also has a lot to do with their group dynamic. But also, the game matters, the methods used to deepen the immersion to the game world and to the character (like I stated in 2.7.1. Character Emotions Felt as Player Emotions). Message from Venus is way too short to fully throw oneself to the shoes of the character, especially if they are created on the spot, but maybe with a longer character development beforehand and with a punch of pre-games, some hardcore live action role-players could feel some of those emotions as well, especially if they create a character they identify and sympathise with.
3.3.4. Player Experience Goals

One of my biggest questions was: What is it that I want to make players to feel? And then aiming to design to induce these emotions. My starting goal was to create an experience that would make players say afterwards: “I will never forget this!” But what makes an experience not to forget? I came to a conclusion, that memorable experiences are emotional experiences, therefore I need to focus on inducing emotions with the design.

But how to induce emotions with the game design? I am using the story as a main element to induce emotions, but for example also the game situation itself or the group dynamics can be raising emotions. As emotions are personal experiences, it is impossible to have universal method to design for them, but it is possible to aim somewhere in the general direction. Of course, in the end I can only design for myself, therefore I think what I would find emotional, and hope others would experience it at least a bit in the similar manner. But it is impossible to say how the group will affect this, as there will be four persons sharing the experience, all with different expectations, personalities, skills, limitations and ways to experience and to operate. If I would play the game for the first time, it would be totally different experience with different emotions if I would play it with different people I know. The group brings variable, an aspect that strongly affects the session and on how it is experienced, also making each game session very unique, as it is always looking like the game of its players’.

The set of emotions I aim to induce vary from positive and relaxed to feelings of stress and anxiety. I looked into various definitions and lists of emotions and picked the ones I found suitable. Possible emotions to experience in Message from Venus: interest, curiosity, excitement, surprise, courage, satisfaction, pleasure, joy, serenity, relief, empathy, trust, friendliness and pride, but also anxiety, stress, helplessness, sadness, worry, frustration, doubt, aggressiveness, tension and irritation. Of course, the positive emotions are most desired, but for example stress can be considered a positive experience, in healthy amounts and especially after the stressful situation is over.

There are emotions the player can experience, but also emotions that are possible experience through the game character. Then the range of emotions is wider, but as these are experienced only secondary, artificially, they probably may not leave the same kind of impact as emotions that are generated in the player. Also, as my story is not so serious, the emotions of characters probably will not affect the players as much as a serious, life-like story, where they probably would feel more for their character. Here the character development is left to almost nothing, so the player won’t have much connection to it, unless they are able to create one for themselves and they fully immerse themselves into the story.

I refined the desired emotions in to curiosity, fascination, excitement, joy, stress and panic, enthusiasm to learn, feeling of togetherness, feeling of accomplishment, proundness (of oneself and of the group, also the feeling that others respect oneself back). I hope, that the game would permanently change something in the player, for example enhance the feeling of ability to handle stressful situations, make social bonds stronger through working together as a team and having this experience together, maybe improvement in communication skills and discovery of new things from oneself and from others, for better, but can also happen for a worse.
What then would motivate player to play this game? As this resonates with what the player expects to get from it. As Message from Venus encourages active and social approach, and probably attracts more people who are motivated more by the intrinsic than the extrinsic reasons. It is a good platform to study group dynamics and one own social skills, as well as problem solving and logical thinking abilities. I aim to encourage and reward the intrinsic motivation, and not to pay attention to the needs of extrinsic needs of the players. Some players might feel disappointed, but they could consider this is a gentle push towards softer and deeper values in life.

Now I’ve been discussing a bit of the desired emotions and player motivations, but what is the desired overall player experience? After doing more analysing of Message from Venus, I defined my target experience to be active immersion into another reality. To make player feel like they would be on an actual space ship and feel like being the hero, the protagonist of the movielike adventure.

After setting my overall experience goal, active immersion to another reality, I was intrigued then to find almost similar in the “The Four Realms of an Experience” model by Pine & Gilmore (1998), where four different kind of experiences are determined based on how active or passive the participation is, and how immersive or absorptive they are. So, based on this, Message from Venus would be an escapist experience, which is about right. But I also wish the game to be entertaining, entertainment of some sort, and here it is labelled in the furthers corner.

![Image 82: The Four Realms of an Experience (Pine & Gilmore, 1998)](image82)

In the end, after lot of pondering on the topic, I think my ultimate goal is, simply, that the players experience and enjoy the room with each other. Well, obviously enjoyment of some sort must be the most basic, core goal of all design products, and tried to be achieved by various means, in other words some other goals. But not all design products are experiences. I want Message from Venus to be a specific moment, a unique hour, for four persons share together.
3.4. Making of Message from Venus

3.4.1. Early Phase and First Prototypes

Preliminary the idea came between talks between me and my friend Riku Erkkilä. We heard about escape rooms for the first time while working with our other game concept, “The Cosmic Cowboys”, in summer 2013. The Cosmic Cowboys was a spaceship building and an online PVP game. As we were developing a spaceship game, we came up with an idea of creating a spaceship themed escape room, but as being busy with the Cosmic Cowboys, the other idea got buried under other hurries.

In Spring 2016, I heard about the AVEK’s Digidemo funds, as only six hours before the deadline I got a message from Erkkilä, reminding me of this concept and encouraging to send an application. I applied and got a small grant to develop the concept further, under a title of “Scifi-Scape”.

During the summer 2016 I developed the concept further, clarified it and made some paper prototypes. After several attempts I noticed, that this game is hard, maybe even impossible to prototype with paper, especially with a one-person development team. To get a better understanding of the digital game - of every required, but also of every possible action and interaction, of their affects (either between the actions, or the effect of an action to the game world), to balance the actions and synchronise them, to build a structure for the teamwork, and all this, in every possible scenario and situation – I realised that a digital prototype was needed.
IMAGE 84: Paper prototypes of the four different interfaces and their functionalities. It became clear, that a digital prototype is needed to understand all the actions and interactions. (Juu, 2016)

Around this time, the concept shifted from being an escape room into towards being something new, perhaps a totally new kind of game genre. I named it as “a scenario room” or “a room experience”. It is a gameful simulation of an adventure, in this case of an adventure taking place in a retro-futuristic space. I find the escape rooms to be bit boring, as the main focus too often seems to be in finding locks and codes for them. Even though the set-up in the room would be well-done and immersive, there is not many elements to support the immersion to it, no coherent and important story to carry the players and their actions through the scenario. Now escape rooms mostly are fast-paced, “finding and figuring out” games, although in nice-looking environments. There is a lot of potential, yet unreached. And as this concept quite radically differ from the style of escape rooms, I could not call it such. There even isn’t any need to escape from the room, as it will be an hour-long simulation to be enjoyed in the room, not a competition against time to get out of the room. Together with Erkkilä, a playable prototype for the space flying simulation was made. I did the graphics and Erkkilä did the coding. The graphics loop seamlessly, so that the space would feel endless. To create an illusion of depth, the graphics exist in multiple layers, which are reacting, with different speeds, to the movements of the player’s spaceship. This kind of simulation will be used in the close-distance navigation.
In autumn 2016, I asked two of my friends, Juuso Kekkonen and Jori Virtanen, to join the team. As the game is so story-driven, the narrative being in an important role, I wanted to involve some professional script-writing and storytelling expertise to the early stage of the project. I asked two of my multi-talented (as they have some expertise in game design as well) friends to join me. At this point, Erkkilä also joined. We had one meeting, where I presented the concept I had made, and we developed the story further.

I needed help with the set-up of the story. I had some ideas on how the four-person crew would have landed or already been in the ship, who they were and why they were on the ship, but nothing so good. If the ship belongs to the characters of the players, they should have some knowledge on how to operate it, unless they all have lost their memory for some reason, waking up from the bridge without any idea where they are and why. If they have just got to the ship, then there should be a reason for it. Did they find the empty vessel, drifting in space, or are they stealing one? Or would the ship even be from an alien origin? Or of an ancient Earth technology, ghost from the past?

Kekkonen and Virtanen both emphasised, that the story should have more deeper meaning and not to be only entertaining. They came up with an idea, that the players would be prisoners, awaking in a prison transportation ship, and they would be approached by aliens, who had erased their memories and would take them as their slaves, unless they defeat these aliens.

Based on our discussions, I applied for more funding to further develop the concept and to actualise this as an actual room with all the elements. This new concept was called “Tähtien Vangit”, “The Prisoners of the Stars”. I applied grants from several directions, but had no luck. Somehow the group dissolved, as everyone had their own busies and we had no funding. Also, after some pondering, I realised that (at least with the first episode), I did not want to tell any deep and dark story with moral teachings, as in my mind the game always had lighter tones. I want it to be more approachable, an easy-going and fun space adventure.

### 3.4.2 Later Phases and Changes

The concept got buried under other projects, work and studies, but I never wanted to let it go forever. After few years of letting it hibernate, I dug it up as I thought it would become a nice game project for my Master’s Thesis. Also, I thought, that if I do my Thesis of it, it enhances its chances to become reality someday. The break also offered me to have a fresh approach.
and new ideas. I shook the dust off and immediately started with making some redesigns. As I earlier felt that I needed help with the story, it now flew without any hesitation, poured efficiently from my mind.

In the first, and only meeting, with the previous team we had many great ideas and lot of nice discussions, but even then, I felt like it was slipping into a direction that I did not want to follow. From the start I have been aiming shamelessly towards pure entertainment, an amusing gameplay without any higher goals or moral lessons attached. So, I decided to forget the earlier plot about the prisoners and slavery, and changed the characters into science officers. The game would begin from them landing to examine an abandoned, or otherwise empty, spaceship. They would need to figure out what happened to its crew, and also learn to control it, as they witness their own ship being destroyed.

I took two ideas from the ideation session we had with Erkkiä, Kekkonen and Virtanen. Another one was to implement actual physical interface pieces to the game room, that could be used to control the virtual game (like rotating a valve to make something happen in a game world). The other idea was that the players, if they choose to, could also decide not to be heroes. Surely the physical interactive elements would have eventually found their way to the game, as they are quite obvious for this genre, but I am not sure if I would have ever come up with a thought of giving the players the option to become villains instead of heroes. Of that notion I am thankful for this preliminary team, and I do hope, that one day we will work together on this game.

Later I decided to change the backstory, as I felt that the players should have more freedom for self-expression. They will not be science officers from another ship, instead they will be plundering space pirates. The players will have the freedom to choose from various wearable items (clothes, accessories, hats, weapons etc.) to craft their own character, therefore possibly deepen the immersion or have a more meaningful, or at least more enjoyable, experience. At least for me it sounds like a lot of fun.

Earlier, the story was about becoming “from prisoners to heroes”, but I think like in this case, transformation “from villains to heroes” has quite nice ring to it. Also, if the players choose to become, or actually rather stay as, villains, they kind of follow their character’s nature, and this decision would then have more in-game backstory and reasons to support it.

The Message from Venus is a mixture of this and that, bit of everything and more, and when I started writing about it to this Thesis, I soon realised, that I had troubles with defining the game genre. There are many genres that partly relate to it, but nothing really captures it wholly. I think I am creating something new. So, I decided to make a genre of its own and I named it either as “a scenario room” or as “an experience room”.

In Spring 2018, I applied for the AVEK’s Digidemo demo-grant and got green lights from the to make a digital prototype. It will a proof of concept of “the game inside the game”, in which the four players operate the space ship simultaneously, using four different interfaces, all with different actions in the game and to the game. As the digital prototype is crucial, and perhaps the most difficult part of the project, I am most grateful for this funding. Besides
using this prototype to help in designing and fine-tuning all the features in it, I also am interested to find out, if this space ship operation game will be playable and fun to play.

The production will start in the late summer/early fall 2018, depending on when I find team members and their availability. Erkkilä is busy with his VR-Mech game project and currently not available.

After the digital demo is done, it will be easier to build the rest of the game. If this game inside the game is easy to use and so entertaining, that it could easily be played even longer than for an hour, the proof of concept has succeeded, bringing also more certainty to the whole concept. The rest of the room can be built around it easier. The initial idea is to create a prototype of the room and sell the ready-made and tested concept to the escape room operators around the world.

3.4.3. Developing Venusian Language

I studied for the most needed words in any language, and developed my own, as in this case, the Venusian language is so strange compared to human languages. I also listed words that are not needed in the game, but will hopefully bring credibility to the story and enhance the immersion. There will be some logical vocabulary created during the first contacts: explanatory words, for understanding the other’s world (the space and objects in space, the adjectives) and the other as a being (body parts, actions), mapped when humans and Venussians started to develop a mutual understanding between their languages. There also exists some words for trading, as these are probably most used.

At first most of these words may seem irrelevant, but they need to be used creatively by the players to communicate. The conversations will go by choosing the words from the known alien language vocabulary to an empty sentence model. All of the slots there can be filled, or just few. Based on this sentence, the Venusian will reply something. This is coded so, that the different words have different values, and based on these values in the player-made sentence, the reply will be according. But as the translator does not work so well as the vocabulary is so basic, and computer’s translation program’s understanding of the Venusian pronunciation may be not sufficient, there is also a risk for misunderstandings.

**Few examples of translated Venusian:**

“Thank you, human solid thing, you go here! We are many thank you. Me is (name), Venus planet ruler. “

“We need help many, bad alive something solid and air will come and try make us slave.”

“Them make us space vessel go to time that has been, all that is solid space vessels be no solid. We have no Venus planet shield. We like peace. Them no like peace. Them is soon go here. “

“This is much old solid thing from time that has been. We learn this, know that much power have. No solid space vessel no can try. You as many learn and try and use? “
The language of the evil aliens is not known, so the only discussion they have, will go automatically without any possibility to understand or reply anything. During the first contact it will be only audio, and during the second contact they just see the enemy saying something sinister with an impatient, egoistic tone.

3.4.4. Status Report (January 2019)

I wrote this Master’s Thesis mostly during the spring 2018, and the final parts during the summer 2018. Then I got too busy to continue with this, due being totally occupied with the actual making of the game. The thesis was already done at this point, just in the need of proofreading, that I’ve been now doing during January 2019. Therefore, I will not make any major changes to the contents of the Thesis, I will leave it as it is. There are some parts I could update now, like the Games Benchmarking (see: 3.2. Games Benchmarking), as new games have emerged, or add few new thoughts and comments to the Experience Design chapter (see: 2. Designing Experiences), but I am afraid that if I do so, this Thesis will become a never-ending project. So, now, I will only add a brief update on the current status of the Message from Venus.

**IMAGE 87**: An old poster draft for the game. The player characters are dressed in silvery, unified and impersonal overalls of a prisoners. (Juju, 2016)

**IMAGE 88**: The new game poster that was done later by our artist is based on this sketch (Rodriguez / Cosmic Crew, 2018).
We have been working on the game for almost half a year now, but not full-time. This latest development phase started at the end of the summer. Riku Erkkilä with Andrei Rodriguez and Tuukka Muukkonen were conveniently just finishing up with their VR game project, so I scooped the whole team with me, got us an office and kick-started the project. Later we also got Henri Taussi to join the team, and Erkkilä has already smooth-talked a theater stage designer to participate later, in the set design and construction work for the game room.

I think quite importantly, Message from Venus switched from being my concept into being our concept during the first months of making. The initial idea of me and Erkkilä related to escape rooms, but later my concept was only involving a heavy storyline without any puzzles, but now the active design participation from Erkkilä’s side has pushed this back towards the more traditional escape rooms. But I do not mind, as Erkkilä’s puzzles are really good and they all relate to the storyline and setting.

All of the individual game episodes will be published under one title, like episodes in tv-series. We changed the initial name “StarScape” into “Cosmic Crew”. All of the games, that we will develop later for this spaceship room, will carry this title as a common denominator. For example, this first game will be called “Cosmic Crew: Message from Venus”.

![Image 89: The first image from the set of images, that were made to explain the game concept visually. (Concept Art: Rodriguez / Cosmic Crew, 2018)]
not explained. So far, the adventure room explains best the concept. It is a room for an adventure, or a room where an adventure happens, and in this case of both of these descriptions fit. It also sounds the best. Some could claim that escape rooms are also adventure rooms, but I would rather call them mission rooms, or even struggle rooms. I don’t see them as a medium to offer adventures, even though participating in one can surely feel like an adventure. The experience and the gameplay that the escape rooms provide are not a coherent, planned adventures. For an adventure, normally a story or strong narrative is required, and also certain logic behind everything, a reason.

The preliminary storyline was changed from the pirates finding a drifting spaceship into a story of them being onboard, trying to steal it. This fits the pirate theme, and for the demo purposes this offers good material to include in the first video conversations and an opportunity to add flying and fighting right to the beginning of the game. The story might still change, as this is now being made for the demo purpose. The main storyline is still bit vague – how does Venus fit in this scenario? And would not, for example a great hunt for an ancient star map that leads to a treasure planet, fit the pirating theme as well?

The storyline with Venus was made for the earlier storyline, in which the players would be playing the science officers. Also, I chose Venus as it made the name sounds catchy in Finnish, “Viesti Venuksesta” but now we will be making the game in English. Later we could do it in Finnish as well, but priority is in the English version, as the target group is not the Finnish people anymore, but the international escape room operators. Venus, Mars and other planets from our solar system are reoccurring in the retro futuristic science fiction, but depending on the storyline, it wouldn’t be impossible to head all the way to the closest star to our sun, Proxima Centauri. Or use the speculated large planetary object named Planet X or Nibiru. Potential names could be for example: Mystery of Mercury, The Treasure of Planet X, Cosmic Tales of Proxima Centauri, Echoes from Proxima Centauri, Pirates of Uranus, Secret of Nibiru, Star Map to Planet X, It Came from Nibiru, Course to Proxima Centauri, Storming Saturn, Rumors of Uranus, Obstacle Course at Orion’s Belt, Cosmic Quandary, etc. If Venus is used in the name, it should be catchier, like Whisper from Venus.

Besides the video conversations and steering the ship, there will also be various puzzles. The first puzzle is for the players to figure out how to power-up the ship, as they don’t have the ignition key. I have not been so keen to include puzzles, as I want to separate this concept from the escape rooms. I was aiming towards a purely story-driven and action-packed adventure, but Erkkilä is quite fond of puzzles, and has also now demonstrated a great talent in designing and constructing them. All of our puzzles will be realistic, relate to the storyline and logically carry it further, therefore they are acceptable. They offer a concrete and straightforward way for the players to interact with the ship. The ship is operated digitally from the player’s consoles, but through the puzzles, the control to the ship is more manual and physical, more “hands-on”. With the puzzles there will also be more opportunities for, and for different kinds of, co-operation situations between the players.
But I am not sure I want to call our puzzles as puzzles. For me, the term puzzle sounds too abstract, vague and overly-used, for any kind of situation that requires some sort of thinking to pass it. Our puzzles are all somewhat realistic, having sprouted from the real life, therefore sort of real, and to be solved with the use of common sense one has of this world, not through acquired mathematical abilities or learned patterns. For example, the more experience one has of escape rooms, the better he/she is at solving puzzles in the other escape rooms, as the puzzles are mostly built over the same principles. Ability to solve these puzzles is may not be based to a common sense or to a general problem-solving ability, rather be based on acquired escape room puzzle solving skills. Maybe our puzzles could be called as active/activating challenges, challenges, challengers, troubles, obstacles, hands-on problems, plights (a dangerous, difficult or otherwise unfortunate situation), pickles (a difficult situation), conundrums (a complicated and difficult problem), dilemmas (a difficult situation or problem), difficulties, quandaries (uncertainty over what to do in a difficult situation), enigmas (something hard to understand or explain) or just mess (a situation that is confused and full of problems).

During the summer and autumn, the code and graphics for the digital game were worked on, and puzzles were designed and crafted. Physical game controls like various buttons, plugs and plug-ins were ordered and soldered. Multiple screens were acquired and some of the game elements were already tested with some of them. We also got an idea for a periscope, that the tactic would use to aim and shoot the enemy vessels, and Erkkilä built an impressive, fully functional, cardboard prototype of it.
We have progressed nicely, and now we are aiming to create around 15 minutes long demo of the gameplay experience, in end of March 2019. We want to test the playability of the digital game, the video conversations, some of the puzzles and see altogether how much material we have and how much more is needed. And is it enjoyable to play.

We need more physical and digital puzzles, they need to be designed and/or constructed. I did not know that I get to soldering as a game designer! And there is still funding that needs to be applied. I also did not know that as a game designer, my primary job, for several months, would be consisting only of writing tons of applications. We also got some videos to plan, shoot and edit, some more coding to be done, graphics and 3D-models to be created, and the business to be run.

After the demo the plot, storyline, dialogues and the world lore need to be designed, and for sure some more puzzles, game events, code, graphics and applications to be made, before the actual room is to be build. But to mention something that we already have, is a plan, a clear vision, several functioning elements, a solid business model and loads of motivation and ambition.

We got an introductory web page and a development blog at: [www.cosmiccrew.rocks](http://www.cosmiccrew.rocks)
IMAGE 93: “Captain, they are hailing us!” “On Screen!” A video call from an alien, as it would be shown in the main screen. The actors are filmed against a green screen and edited into a background made with a computer. (Erkkilä, Juju & Rodriguez / Cosmic Crew, 2018. Model: Ida Laasasenaho)
4. ANALYSING MESSAGE FROM VENUS

4.1. Introduction to Analysis

The goal of this chapter is to analyse my game concept Message from Venus. As this game combines multiple genres and mechanics, it offers interesting possibilities for analysis. First, I debate with three existing frameworks and then, as I found these insufficient for my use, I craft my own analysing approach.

My original idea was to use the MDA framework crafted by Hunicke, LeBlanc & Zubek (2004). The MDA is said to be a tool to break the game into smaller components, and to study their affect in the game play. As I did not find the MDA sufficient, I stumbled upon Elemental Tetrad by Schell (2008), that he created to challenge the MDA. But yet again, as it was better for me, I did not totally agree with it.

I had already started coining my own framework, as I figured that I can’t analyse my game using a framework I disagree with. Before finishing it, I once more dug deeper into the field of game research and found the MTDA+N framework, presented by Ralph & Monu (2014). It is a combination of the two earlier frameworks, with some additional meanings. A lot of things I had pointed out to be missing from the two earlier frameworks were there. Yet, I do not totally agree with this framework either, so I decided to continue with my own framework. For sure, given the time limitations, it is only preliminary, but I found it most helpful to use to break my game into pieces. I am broadening the scope also to include aspects, like the situation where the game is played, and possible affects, to the game session.

Even though I will only use my own framework to analyse my game, I will present all of these three frameworks, as part of my learning process and also as a possibility for the reader to compare them as well. Choosing the right tool is as important as using it, and I thought, that if there are not sufficient tools, one should craft their own.

Hopefully my analysing method will work as a sufficient viewpoint, to create better understanding of my game, both for me and for anyone interested of it. I am also using this as a tool to further discuss and validate the design choices I’ve made. I try to break the game into the game system, with all the elements it consists of, the game session (also pre- and post- session), the player and player actions and also the possible affects to the game session.

Before making the analysis, I also tried to define the genres of Message from Venus, even though it is bit problematic, but it helped me in setting some grounds. I also realised that among the unfinished game theories there are not just the frameworks, but also common definitions for the game genres.

4.2. Genre Definitions

Message from Venus is a combination of various game genres, like action, role-playing and live action role-playing games, games that are based on cooperation and verbal communication, also space exploration, adventure and sandbox games, narrative games,
escape rooms and puzzle games. It has both a digital and a real-life environment. It is an immersive adventure to be shared with four players and it has aspects of interactive storytelling.

It is problematic to determine genres as the concept of genre is under debate in the field of game research. Junnila (2007, p. 36) states, that while game designers aim for some specific genre with their design, the players might act differently than what was designed for. The possibilities to use the game in other ways, “play it wrong”, may offer more interesting gameplays.

In this case the players are making the final, end-design for the game and using it as a tool for their self-expression. As I was designing Message from Venus, I wanted to leave freedom for the players to make decisions and to give meaning. At best, this game would offer a great set of tools to explore, for example, the player’s group dynamics. I would like to be surprised of someone to use my game in a manner that I had not yet anticipated, and I am even worried that I have not made enough room and possibilities for this.

Should players determine the genre rather than the game designer? Junnila (2007, p. 36) continues on the matter stating, that when the rules are given for the players to be shaped, and the style of game to be decided by them, the player’s influence to the game genre is emphasized. As the same game can be played in different manners, the gameplay and game experience will be always different, therefore it can be considered that the genre of the game changes as well. In optimal case, the genre/genres for Message from Venus would be determined by how the players will play the game, and perhaps it would have a different genre in every game session.

So, the concept of genre is problematic. Apperley (2006, p. 9-10) suggests, that therefore the genres should be replaced with alternative taxonomies, that are describing the type of interactions happening in the game. These 42 categories were coined by Wolf (2001), and they are based on gameplay and interactivity, excluding mood or theme. However, Wolf’s system is lacking some of the modern game genres like MMORPGs and First-Person Shooters (Clarke, Lee & Clark, 2015 cited in Whalen 2004; Clearwater, 2011). And doesn’t this mean naming game genres based on game mechanics?

Like in my case, Junnila (2007, p. 38.) agrees that the genres are not static, and it is also common, that these are combined, either mixing them fully or by taking some smaller aspect from the other genre. Järvinen (2008, p. 43) agrees, that defining genres is challenging, as many games have traits from number of genres, and concepts of game mechanics and system behaviour are important to find the similarities and differences between groups of games.

Apperley (2006, p. 11-17) presents four possible genres. The simulation genre includes games that simulate some actual activity, like doing sports or driving, or real-world dynamics, like in towns and cities. The strategy games are usually divided into real-time or turn-based strategy. The action genre consists of two major subgenres: the first-person shooters and the third-person games. The role-playing games are a genre of adventure, closely tied to the literary genre of fantasy. Of these, Message from Venus is a simulation, as it simulates a
functioning space ship and players simulate operating it. It has both the real-time and the turn-based strategy, as sometimes the game waits for the players to react and move on before continuing. It is also an action game, being a real-life first-person action-packed session. And lastly, it is also a role-playing game, with its theme of actually acting as someone else and being somewhere else, in this grand space adventure. Therefore, my game relates to all of these.

4.3 MDA Framework

The MDA is a formal approach created to understand games better. Games are studied by breaking them into distinct components: rules, system and “fun”. Their design counterparts are mechanics, dynamics and aesthetics. Mechanics enable the behaviour, which in turn creates the experiences. Player is approaching the game from the aesthetics, as the designer from the mechanics. When the player’s perspective is kept in mind, a more experience-driven design is encouraged. (Hunicke, LeBlanc & Zubek, 2004, p. 2-3.) Hämäläinen (2018) also pointed out, that the player experience, the aesthetics, can’t be controlled, as the designer can only directly control the mechanics.

4.3.1. Mechanics

What are the game mechanics? Sicart (2008) admits, that the meaning is not always clear, even for the game researchers. He states, that they are methods invoked by the agents, designed for interaction with the game state. In the MDA Framework the nature of the game mechanics is discussed by Hunicke, LeBlanc & Zubek (2004), and they state that the mechanics: “describes the particular components of the game (...) mechanics are the various actions, behaviours, and control mechanisms afforded to the player”. Hämäläinen (2018) presents, that the mechanics are rules and verbs for what is designed and implemented in the game. On the other hand, Järvinen (2008, p. 74) only talks about the action, as he states that performing the mechanics is what playing games is about. Yet I wonder, isn’t the game environment enabling the use of those mechanics, as playing is not just doing something but with something? And is this game environment therefore also part of the game mechanics, as the player action arises from it? Sicart (2008) states, that a game mechanic is the action invoked by an agent to interact with the game world, constrained by the game rules. Are the game rules and the game world part of the mechanics, enabling the player interaction, or are they just other game elements, separated from mechanics, but affecting them? Järvinen (2008, p. 73) continues on the topic: “Game mechanics describe one possible means with which player interacts with the game elements, as she is trying to influence the game states in order to complete the goal.” So, the mechanics are way the player interact with all the game elements, and the dynamics are the possibilities and consequences rising from this action. But then isn’t it necessary to also map all the game elements to make proper analysis of the game?

Sicart (2008) presents the division (also discussed by Järvinen, 2008), of the mechanics into the core, primary and secondary mechanics. He defines the core mechanics as the mechanics that are repeatedly used to achieve a rewarding end-game state. The primary mechanics are the core mechanics, that can be directly applied to solve challenges, that will lead to the desired end state. These mechanics are explained in the early phase of the game, and
consistent thorough the gameplay. In more complex games, there are mechanics that are not tied to the goal/reward structure, and these secondary mechanics may play a role in helping to achieve goals. There also might be mechanics, that can’t be labelled as core, primary or secondary mechanics, and even if they will not be categorized, it is important to understand them and how they affect the gameplay.

I think it is required to define the game elements, before mapping out the mechanics that are emerging from them. Järvinen (2008, p. 55.) lists three categories of game elements: 1.) the systemic elements, that are components and environments, 2.) the compound elements, that are ruleset, game mechanics, theme, interface and information and 3.) the behavioural elements, that are players and contexts. The player is interacting with the systemic elements through the theme and compound elements. Players can also interact with each other through the behavioural elements, that also affect how they are interacting with the game. Now I got confused, as for me the mechanics are the compound and systemic elements, and the behavioural are the dynamics. Järvinen (2008, p. 62) also presents, that game elements in games are: 1.) the events, that are the game mechanics and game system procedures according to rule set, 2.) the agents, that are players and game system agency via rule set and 3.) the objects, that are components, environments, information and goals, as stated by the rule set. I am not sure why there are two set of game elements, although they are related. I wanted to define the game elements for my game if I would be using only the MDA framework, as I felt I need to deepen it with this, but now I think it is not necessary anymore, as I want clearer possibilities to break the game into pieces.

4.3.2. Dynamics

The dynamics create aesthetic experiences. The challenge is created, if there is a time-pressure and a possibility for playing against opponent, the fellowship is encouraged by sharing information, or achieving to do something with another player, something that would have been more difficult alone. The expression comes from the possibility for the player to leave their mark in the game. The dramatic tension is a result from the dynamics of a rising tension, of a release and of a dénouement. (Hunicke, LeBlanc & Zubek 2004, p.4.) In my opinion, the dynamics presented here, are all aspects designed by the game designer, either forcing them or enabling them, directly or through the game system. They are possibilities for the player to play the game as intended or try to create their own way of playing. But in both scenarios, they are not aspects rising from the player’s own choices and ways of interaction with the mechanics, they are merely styles to play, was it intended or not intended, but still probably anticipated.

Hämäläinen (2018) presents, that the dynamics are how players are interacting with the game mechanics, and the behaviour patterns and strategies that are emerging from them. He also states, that the designers can only control the mechanics. In my opinion, these dynamics can be designed as much as the mechanics, if all the possible actions are taken into consideration, and the unwanted actions are discouraged or eliminated through the game design. All the preferred possible actions should be emphasized, and other actions should be made un-rewarding on impossible. When talking about the making of the game Journey, Chen (2013) stated that the players are like babies, and they will do actions that are not desired by the game designer, if the game “rewards” them with any kind of feedback. The
undesired action was either made impossible (like killing other players), or it did not offer any feedback (like jumping against the other player to harm them), and focus was given to give feedback only for the desired interactions.

4.3.3. Aesthetics

Hämäläinen (2018) presents, that the aesthetics are emotions emerging from the dynamics. Using the desired aesthetics, it is possible to define models for the gameplay. These will help in the developing and describing the gameplay dynamics and mechanics. Games succeed, when the players are emotionally invested in them (Hunicke, LeBlanc & Zubek 2004, p.4.).

Fun is a term often used in describing the positive outcome of the game experience. Hunicke, LeBlanc & Zubek (2004, p.3.) ponder on the topic of what makes a game “fun” and how to separate different types of fun. I am not eager to use that word, as profound experiences can be strong, memorable and enjoyable in many other than “fun” ways. For example, uncomfortable gaming experiences were studied with the coffin game scenario by Karamnejad et al. (2013), and they found out, that restricting players physically by placing them to a real coffin contributed to the player experience, and the discomfort experienced was also enjoyable for the players (Brown et al., 2015). Furthermore, horror game scenarios have been successfully used to help people overcome their fears and phobias – surely not fun or even enjoyable, nevertheless the aesthetical goals were achieved (Karamnejad et al., 2013).

Also, Hunicke, LeBlanc & Zubek (2004, p.3.) acknowledge, that the vocabulary to describe the aesthetics is limited. They want to move away from words “fun” and “gameplay”. I understand not wanting to use the word “fun”, but I do not agree for not using the word “gameplay”, as it is not word for aesthetics. I use it for describing the playability of and/or playing the game, how it works, feels and flows, and on how the players are interacting with it and possibly with other players. For me it relates more to the mechanics and the dynamics than the aesthetics.

The game can deliver different emotions, or like Millán (2012) puts it, answer the question “Why am I playing this game?”. The answer is the aesthetics. Hunicke, LeBlanc & Zubek (2004, p.3.) present a list of eight aesthetics components, that act alone, or as combinations. Millán opens these more with nice examples. The game can stimulate our senses, for example with a unique style of art. The game can place the player in a role that is not possible in the real world. The story of the game that the player is witnessing, without taking part in it, is about the narrative. The game can feed the primitive need to belong to a group or a to a community. The game can offer ways to make discoveries inside the game world, as well as trying out different possibilities with the game mechanics. The sense of self arises from the need of expression, and the game can offer a platform to do so. The game can offer a possibility to unwind, a way to distract oneself from the real world.
Hämäläinen (2018) criticizes these proposed aestheticss for the lack of any evidence. However, he states that five of these: the sensation, the challenge, the fellowship, the discovery and the expression, are confirmed in the psychological literature and can be considered as the core aesthetic. Having said that, Hämäläinen continues that the three unconfirmed aesthetics: the fantasy, the narrative and the submission, are merely emerging from the core aesthetics or supporting them. Millán (2012) states, that the “Core Aesthetics is the main reason you play a game, but also the best way to describe it. You often could describe a game using one, two or three Core Aesthetics.” But I think that, for example the main reason why casual games are so popular, is that they offer an easy escape, a break from the reality. Therefore, the submission would be a core aesthetics, especially if that would be the only reason to play. Also, I think that just following a narrative and not taking part of it goes into, or mixes together with, the category of the submission, as then the player is just observing, relaxing and doing nothing while “not being in this world”. I think this is the reason why, besides playing casual games, watching tv-series seems to be such a popular activity.

Schell (2008, p. 117) is not satisfied with this list, and proposes the “additional pleasures”, although he acknowledges that the list will still not be complete. The additional pleasures are the anticipation, the delight in another’s misfortune, the gift giving, the humour, the possibility, the pride in accomplishment, the purification (for example clearing the level), the surprise, the thrill, the triumph over advisory and the wonder. These feelings are from a more wider range of human feelings, but there are still something missing, in my opinion, like the pleasure from the displeasure, the pleasure of having feelings of being sad or of the misfortune, the anger or the wallowing in self-pity, the pleasure of having an ego, the pleasure of not having an ego, the pleasure of being proud of one’s moral, the pleasure of standing behind one’s decisions, the pleasure of the unknown future. And does the fellowship presented earlier include all human social emotions, like does the pleasure of the friendship also include the pleasure of a romance, or the pleasure of passion, the pleasure of feeling love and being loved, the pleasure of intimacy, the pleasure for being loyal, the pleasure being able to help and being helped, the pleasure deciding not to help… Even to aspects like the pleasure of teasing someone, either friendly or harmfully or the pleasure of observing a revenge, of revenging, being revenged or receiving revenge.

The human mind is quite complex, and I think it is quite arrogant to even try to list all the possible pleasures with few words. There are quite commonly shared pleasures, that at least
most of the human population shares, like the pleasure of feeling loved or valued, but yet again, there are people who get pleasure from the most peculiar things. If Schell was attempting to create a list of universal pleasures, he already mentioned “delight in another’s misfortune”, a trait I strongly disagree to be considered as a universal source for pleasure.

4.4. Elemental Tetrad Framework

The Elemental Tetrad is a framework created by Schell (2008), that is often used in the teaching of fundamental principles of the game design, along with the MDA framework (Ralph & Monu, 2014). I maybe agree with this more, as Schell includes more to the mechanics and he also adds the actual game, the building blocks of which the game is made of, to his framework.

Like I was raising a question about the mechanics and that they should consist of more than just mere actions, Schell (2008) also gives a broader definition for the mechanics. He writes that they are procedures and rules of the game, but then he also presents six mechanics: the space, the objects, the actions, the rules, the skill and the change. The space is where player engages with the game, consisting both of the virtual and of the physical space (but does it also include, for example, the player’s location, like their home, when he/she is playing a computer or a mobile game?). The objects are tools used by the player. The actions are how the player use the objects. The rules govern the game environment. The skills are the physical and psychical abilities that the player uses. The change is the randomness in the game. Like Ralph & Monu (2014) point out, these six mechanics are not simply rules and procedures like Schell suggested. I wonder why there are mixed statements and meanings, not just in the field of game research, but even by the same author?

In the Schell’s Elemental Tetrad, besides the mechanics and the aesthetics, there also exists the technology. It means any kind of resource needed for the game to be playable, from the cards and dices to the game engines and consoles. They are the tools and systems used to deliver the gameplay. I think this is a valid point about the MDA, that it is missing something crucial, as I was also trying to find the same thing from the MDA paper, with cats and dogs and magnifying lenses. It was the first thing that I did not agree with the MDA. But I would name it otherwise than the “technology”, as it reminds too much of the digital technologies. On the other hand, I later realised, that I disagree with all of the MDA terms.

As an addition to the Elemental Tetrad framework, with the technology, Schell (2008) also proposes the story. The story is a chain of events that happen in the game. He proposes three kinds of categories for stories. The embedded narratives are the stories that are told to the player when the game is being played. The emergent narratives are the stories player create using the game. The interpreted narratives are the stories that the player takes from the designer given stories, and they can differ from the stories that were actually meant to be told.
4.5. MTDA+N Framework

Born out of the confusion to have to teach two separate frameworks, Ralph & Monu (2014) propose combining the MDA and the Elemental Tetrad Frameworks. They also criticize, that both of these are still lacking important aspects. As the MDA excludes the technology, the Elemental Tetrad is not suitable to be used in analysing how some behaviours are born or reduced by certain mechanics, or how the mechanics can affect the aesthetics. Ralph & Monu named this combination as the MTDA+N framework.

![The conceptual MTDA+N Framework (Ralph & Monu, 2014)](image95)

This framework consists the actual game, the player’s interaction with the game and the player. The player interacts with the mechanics and may experience embedded narratives, if there are any (for example in Tetris), through the technology. The dynamics and the possibly emergent narratives arise from the player’s interaction with the game. The aesthetics and the interpreted narratives, if any, are born in the player’s mind.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetics</td>
<td>the emotional responses a game evokes, or is intended to evoke, from the</td>
</tr>
<tr>
<td></td>
<td>player during gameplay</td>
</tr>
<tr>
<td>Dynamics</td>
<td>emergent behavior of both the game and the player during player-game</td>
</tr>
<tr>
<td></td>
<td>interaction</td>
</tr>
<tr>
<td>Embedded Narrative</td>
<td>A meaningful sequence of events intentionally embedded in a system by its</td>
</tr>
<tr>
<td></td>
<td>creators; a plot.</td>
</tr>
<tr>
<td>Emergent Narrative</td>
<td>A sequence of events that arises dynamically from participant-system</td>
</tr>
<tr>
<td></td>
<td>interaction and is perceived as meaningful by participants</td>
</tr>
<tr>
<td>Interpreted Narrative</td>
<td>A participant’s mental representation of an embedded or emergent narrative</td>
</tr>
<tr>
<td>Mechanics</td>
<td>algorithms, rules, objects, actions and other game components, which are</td>
</tr>
<tr>
<td></td>
<td>manipulated by game designers to create challenges for players</td>
</tr>
<tr>
<td>Technology</td>
<td>tools and systems used to implement or deliver gameplay</td>
</tr>
</tbody>
</table>

![Definitions of MTDA+N (Ralph & Monu, 2014)](image96)
Even though the MTDA+N is more thorough than the MDA or the Elemental Tetrad frameworks as alone, Ralph & Monu (2014) admits that some important concepts are still not included in it. It does not include the player types, the play personas and the play motivations, or the immersion or the flow.

Yet, it still remains bit unclear for me, if for example, the objects are listed under the mechanics rather than under the technology. What is meant by the objects in this case? The game objects? Is a dice an object or a tool?

4.6. Creating My Own Analysing Tools

The field of game research is rather confusing – everyone seems to agree, that defining the genres is hard, as the concept of a genre is not concrete, but also the game terminology is still not set in stone. I later I found out, that beside myself, also some of the game academics found these different approaches and definitions for the game mechanics, the dynamics, the aesthetics and the other game elements, partly colliding, partly leaving something out.

I am now creating my own preliminary analysing tools, as I felt that I could not use any of the existing framework. To use a tool, one needs to know it well. I rather make my own tools, than use tools that do not fit to me.

**IMAGE 97:** Drafting the tools (Juju, 2018)
I aim to focus on:
- The game system, what and how are all the elements in the game (environments, pieces, rules, theme)
- The actual game session, also pre- and post-session
- The player / players
- The actions by the player
- What could affect the player or the game session

4.6.1. Asking Questions

I started by asking questions about the game. Like Hämäläinen (2018) emphasised, majority of the game analysis and design literature is about determining the most essentials questions to ask and attributes to focus on. This has also been my method, whenever I aim to create something new or if I study something that others have made.

I came up with several “why”, “who”, “what” and “how” questions and several sub-questions to explain these more. I think that quite often “who” is asked before “why”, and sometimes “how” before “why” as well, as this is occasionally used method in the game design, to start with developing some interesting mechanics and then to start building the game over them. In this case, the mechanics either have to be something totally out of the box to capture my attention beyond one or two game sessions (the how and why arising from the same source), or then the rest of the game is skilfully built around this first step (the how creating a reason for why). But I don’t think people play games for the mechanics, they play for the experiences. Of course, a good game can be something, that is consisting only one entertaining or interesting mechanic, but they often seem to offer limited possibilities to play the game - for example it offers endless grinding to master this mechanic, or it can be some funny random party game, or it is something played only to pass time or unwind from stress, without having to think about anything. But these are not the games I want to make, although I hope I would like to, as I think it would be bit easier to develop these games more agile than the ones I want to make.

Also, I don’t think that “why” is emphasised enough, as for me the two whys (why someone wants to make this game and why it should be made) are the most important questions. I am quite specific, that I do not want to waste anyone’s time, not mine or anyone else’s. So, it is my responsibility, for myself, and for the players, to create a game that will be somehow meaningful. “How” often seems to be thought only when determining the target group (primarily based on the age, sex, country), but this question has much more depth to it.

In my list, the questions are not appearing in a strict order, as these questions should be asked throughout the whole process, therefore the question types repeat. All “who” or “how” questions can’t be answered in the beginning, to keep the order of the questioning process logical and purposeful. As there are so many questions, the order got bit tricky, as there are so many different aspects to be thought. Also, I got buried under the flood of questions, so there might be few repeating questions, or some questions that are not in a logical order. I am trying to think of everything that relates to a game and the game session, so the list will be rather long.
BEFORE AND DURING DESIGNING THE GAME:

WHY THIS GAME?

Why is this game being made? Why should it be made?
- Why this is the best thing ever? What does it bring to this world?
- What kind of experiences would be possible to offer through it?
- What makes this game so special that it should be made?
- What is the main reason to make it? And what justifies it? Why this reason is so important?

Why do I want to make this game?
- What motivates me as a game designer, what makes me so passionate about it?
- Why do I personally want to bring this experience to this world?

Why would someone like to play this game?
- What kind of experience the players might be seeking? (And then, anticipating these and figure is it possible to outstand all possible expectations and surprise players with something they did not expect.)
- What would make others also feel passionate about the game? Is it offering something new and unique, or something that is familiar, but either with a new twist or done in a better way than anything that has been made earlier?
- What will motivate the player to play it, seeking intrinsic or extrinsic rewards or playing just to pass time?
- What kind of emotions they could experience? What makes this memorable?

→ Then we can think who would like this kind of experience most, or benefit most from it? Is it for everyone, or for someone? Is it strictly for someone or can others beyond the target group also play (for example mature content)?

Who would especially like this and why? (And which one was first, the game for the player or the player for the game? I think neither should as the game should be born out of the desire to create some sort of game experience. Then the game builds around it. Of course, it can be born almost hand in hand with the target experience, but the experience determines how it can be achieved. From the game the player actions are formed together with elements, or maybe even bit before. ... I think it is a wrong approach to determine first either the target audience (“like let’s make a game for kids”, there are many sad examples in the field educational games, as they often have a wrong approach, besides setting the target audience first they also start with the goal, not from the experience. If I would end up in this kind of narrow design alley, I would get to know kids more, what they like, what they do, what fascinates them, what they don’t like, what is boring, just who they are and how they operate in this world. After extensive research – and if the game designer would have children of their own it is not sufficient, there needs to be a quantity of children and they need to be observed for a longer time. Based on this I would map out things, whatever things, that are genuinely liked, and try to move on from there. Also, why is the game made for, if to teach something, how would the learning experience come most suitable way from the kid’s point of view?)
WHAT IS THIS GAME?

What is this game? Would be a good idea to create a compact summary out of the game in this phase of question asking? One A4 would be a maximum amount text for this. This would act as an early introduction to the game.

- The summary should start with explaining the target experience. The most crucial key points are then described:
- What is most important of the game elements (these will be deconstructed into smaller pieces later in the questions and then in its own chapter), rules for the elements, of the theme?
- What are the designed player actions (what is done in the game and in what manner it is done, or like I call it, the styles of actions. Different styles are for example actions that are active, passive, physical, relaxed, about problem-solving, creativity, social interactions, making strategies, pretending, trying, finding or learning new...). The game elements should serve the action, not that the action is made based on the elements. Something should be made, somewhere, and with something. Elements are that something and somewhere.
- What kind of emotions are wished to be induced? (Are they specific? What is the nature of these? Is it satisfaction of some sort, or for example feelings of stress and terror?)
- Target audience / audiences, if any, is also mentioned, and reasoned why the game would be best for them.
- Finally, with these, validating the desired experience.
- Now, does the game feel exciting? Do others get excited about it as well? How does the target audience respond to this? How about various different kind of people?
- Are all aspects in harmony, supporting each other? Is there something missing, or something that is not needed?
- Does it seem possible to be done? If something has to be eliminated, is there any or is everything crucial? What worries most about the creation process or in the finished game?

WHO ARE PLAYING THIS GAME?

Who might end up playing this game? (Not just the target audience, but all possible player, also the least expected. Is there a risk someone might get offended by the game, for example due cultural reasons? If so, if this issue is still decided to keep in the game, what are the validations to have it there, as instead of just few random persons being upset, it could cause a big scandal, and all the choices that were made have to be both well thought beforehand, and then explained rationally to the public. But if there comes some ruckus, it is too late at that point to start to think about explanations or excuses. (And I think that in this case an honest apology is the only option.)

.... But target audience is most important:
- What might be their age, the amount and type of education, how much they have gathered life’s experience and what kind of, are they mostly females or males or equally both?
- What kind of personality they have that will be reflected on how they will play the game, what values and moral codes do they have, from what cultural and social background they come from?
- Do they have variety of skills or perhaps they are master of some specific skill – and what are these skills?
- What is the extent of their past similar experiences, and therefore do they possess some first-hand expertise on how to operate in this kind of environment? (For example, the more one plays escape rooms, the easier they will become, as they often follow the same logic. Here the gap between seasoned players and new players is rather big, especially as the game style differs from other games and people are not so used to this kind of game environment. If you compare that to card games that are played with a normal deck, no matter if the game is new, people with past experience with these cards know the types and amounts of cards there are in the deck, and also about scale for the variety of different kind of games that are possible to play with that deck. Normally all these games start with having some number of cards at hand, hidden from other players, and then during the game either trying to get rid of them or collect more.)

But also, who is making this game?
- What benefits, opportunities or possible constraints they bring with them to the design process and to the end product?

→ And how well do the game designers know their players? How well can they identify with them, anticipate their motivations, thoughts, behaviour...

**HOW THE GAME IS MADE TO BE PLAYED?**

*How the game is designed and made to be played?* (More about this in the next chapter.)
- How are all the building blocks of the whole game system? What kind of material and immaterial game elements the game has, such as game vessel’s interactive and passive game pieces and both the in- and off-game environments?
- How are the rules explained to the player and when, or does the player learn through trial and error? Is there an obvious goal, does the player know it?
- How players are prepared for the game session, what information and how they receive before entering the game?
- Is there a theme, does the game tell a story to the player (player as passive consumer) or create it together with the player (therefore is there some interactive elements or is it merely an illusion of co-creating?), or does the game allow player to make their own story through playing (is this encouraged and written in the game, or only in the hands of player if they want to create some sort of story for the game)?
- Are there some immersion enhancers, what about the amount and quality of details?
- Are the game vessels and the world believable? Are the rules fair?
- Is the game usable and understandable? Does the player always know what to do next or where to find this information (unless that’s one point in the game)? And if not, is there some support, like cues or helper to assist the player further? Is this made in manner that does not make the player feel failed or somehow stupid?

*How do I design it to be played?* (What are the designed player actions?)
- How do I communicate the purpose of this game to the players (rules, possible goals, limitations... - Does this happen pre-game or during the session?)
- How does the game communicate all aspects to the player (game elements, challenges, feedback (cues), rewards, theme, world, story...)
- What are all the actions possible in the game? (designed actions and all possible not designed actions? What is the main action / are the main actions? Could this determine the so-called genre of the game? What are the secondary actions, still designed for the game? What are possible undersigned actions, both allowed or not supported by the designer? If some actions that are not preferred, how to discourage them?)

**What is the whole game system consisting of?** (Material and immaterial aspects that I call vessels, as they deliver the game designer given meaning to the player.)
- How are these vessels handed to player, what kind of vessels?
- What is the game environment? (from a mobile game UI to the room of an escape room to an environment created for a VR headset to a board game’s cardboard to a table where card game’s cards are placed. Even in storytelling games people are sitting together, so it is an environment).
- What are the game pieces (either interactive, or passive)?
- How does it work (setting up, the actual game session, post-game... What are the rules...?)

**How will the game and the player find each other?** (This is more for the marketing people, but for example in one-person game company the one does, or should do, the marketing plans, besides all the other tasks).
- What audience/audiences is targeted, and how? (Aiming for everyone or for some small niche? The small niche is only a fraction of all people who play, yet if it is exactly fitting, it can get attention among that niche, maybe it can even bring people to play who do not usually play games, and maybe even broader audience might have heard about it – as games made for broader audience get easily lost like a drop of water to an ocean.)

**How does the game attract the player?** (attraction power)
- How can the game make the player feel that they want to try it? What makes it attractive? Is the game itself attracting enough, or does the player need some previous

**What are the reasons to continue playing?** (holding power)
- Do players play the game it for the sake of playing (the actual playing feels rewarding enough), or to learn new things (and in this case, is it the choice of the player or is the player made to play the game – if so, is there something the game can do to make), or to reach the goal and “win the game”, or for some other reward (like high score or some actual price)?

**How long the game session is?** Is it continuous, “never-ending”, or to be played during one session? If not, how many sessions it would require? If yes, how long this single session will be? How to be sure it is not too long, or short? (Often the problem, in my opinion, is if some experiences are too long rather than too short, except some strategy games that take time to build and plan. But if something is too short, it only leaves a hunger for me, which is a good sign).

And how to release the player from the game? (releasing power)
- Does the player make this decision, or is the game ended for them? (I think it would be nice, for example in WOW, that they would somehow nicely kick the most hard-core players out of the game if they have had too long session). If it is the decision made by the player, what are the reasons to quit? (Reasons emerging from the game session (exhaustion, boredom), or
reasons not relating to the session? Could the player be encouraged to leave the game earlier than too late, as it is a risk that they might lose interested in something they have done too much (Like I did lose interested in IRC as it was consuming so much of my time – if I could have spent there only half an hour per day, I would probably still be using it. This actually happened with my favourite game, the Ultima Online. So, no matter how good something is, too much is too much and I seriously doubt that the player could control it, especially if they feel tired after playing for a long time, it might feel easier just to continue playing than do something else, like brush teeth and go to sleep).

**PRE (BEFORE GAME SESSION):**

- Preparations made by the designer for the game session (setting up the set up)
- Preparations made by the player for the game session (if any)

**WHAT ARE THE PRACTICALITIES FOR GAME SESSION?**

- How vessels are handed to player and how they are to be interacted with?
- How does the game start?

**ACTIONS**

- What kind of actions the game enables? (Styles of action → Defines genre/genres?)
- What rules and limitations there are for actions?

**THE GAME SESSION:**

- How does the player actually interact with the game (the pieces)
- How does the player interact with the story/world
- How does the player actions differ from the designed actions (good or bad, desired or not?)

- How players interact with other players/other people (not even playing?)
- How well the game is understood by the player?
- How well it works? (bugs, usability...)
- How is the game? (enjoyable? or whatever experience goals are set...)
- Does the player achieve a feeling of flow?

- How does the game ends?
- How long the game is played? (never ending or single session - if single then how long is the session (even though could consist of several sessions), how long the player wants to/will play, how long the player should play...)
- How did the working work? Understandable, playability...?
WHO IS THERE IN THE GAME?

- Who is sharing the session, directly? (Is the player alone, or are there other players? Are they cooperating or competing? Is it possible to compete in cooperation, or cooperate in competition? Is the undersigned player interaction enabled, and if so, is it discouraged somehow, or just ignored? Is it possible that the player feels rewarded by whatever feedback gets from this not desired activity? Is the desired player interaction encouraged and rewarded somehow? Or does the game enable by the design both competition and cooperation?
  - If more than one player, what kind of groups dynamics the players have? Do they know each other beforehand? What are they relationships? How well do they know each other? Are they playing in the same room, or sharing the game virtually, or for example only sending chess moves in envelopes to the opponent?

- Who is sharing the session, indirectly? (Or is there someone present who is not playing the game, either physically or through virtual or mobile phone connection? Are they active, taking part somehow to the session even though not playing (for example giving advice or cheering) or passive and only observing? Or are they present, but not paying attention to the game? Are they physically in the same environment, or nearby (like next room / in a metro)? Are they strangers to the players, or known? If known, what are their relationship?)

- Who is sharing the session, in player’s mind? (Is there someone indirectly present in the game, like in players mind (not related to the game but while playing thinking about someone, positively or negatively, or did the game makes the player think of someone)

- In what kind of environment, the game is being played? (Is it digital, real or combining both? Digital environment also needs a real environment to "nestle in", and the level of this real world affecting the immersion varies. Immersion will be different when staring into a small mobile screen in a crowded train, when someone outside the game is trying to seek the attention of the player, to the immersive experience of being almost completely sucked into a virtual reality through a VR headset. -- What kind of elements there exists, that might distract from the game, that are not designed? These should be considered for each game, and think is it possible to eliminate these, either instructing the player how to gain the most optimal game session (as if the game designer respect the player by designing the best possible game, the player should respect the game designer by playing it with focus and respect, it should be a mutual thing), or creating game sessions in controlled environments.
  - What kind of off-game environments are involved?

WHAT CAN AFFECT THE IMMERSION (either to the story and world, or bothering the gameplay and taking focus off from the game)

- What is the mood of the player? (The mood affects the game, especially the beginning of it. Is the player relaxed, content, amused, focused? Or is there something taking focus out of the game, not sleeping enough previous night, something that had happened earlier, some pains, hunger or for example a need to go for a pee? Is it possible to enhance the mood before the game, for example relax the player using humour, offer something to eat and...
drink as well as the opportunity to use a toilet, as it is not easy to enjoy if the basic human necessaries are not treated?)

- How will the distractions affect the session? Therefore, I ask next:

- What is the desired level of immersion? Does the game require full focus and attention, sharp reflexes, rested brain and eyes, total silence and peace, or can it be played casually while walking down a street while simultaneously listening to a radio? Is this somehow emphasised in the game design? Could it be made impossible to play with lesser immersion, if that is strongly advised? Is the player instructed about the game designer’s recommendations? Of course, this requires sensibility from the game designer’s part, as it would be unreasonable to ask player to play the game in a silent darkener room and it would be a game that does not offer any, or very little, immersion.
- What are the means to enhance the desired immersion? (Has the designer paid attention to detail, if there is a theme, how it is present? What elements are delivering the story? How much there is world lore? Is the most basics designed and implemented, is there also immersion enhancers that serve no other function but to make the world more believable?)

POST (AFTER GAME SESSION):

HOW DID THE GAME SUCCEED IN DELIVERING THE TARGET EXPERIENCE?

- How was the game? (liked? or whatever experience goals are set…)
- What kind of emotions emerged? (were these intended by the designer or some others? Were these experienced as desirable and positive by the player?)
- What was the overall experience? What kind of impression it left on a player?
- What kind of memories the game created? How long the session will be remembered?
- Does the player share their experiences with others? (others who have played the game or some who haven’t? Only with and to gamers or also with and to non-gamers?)

- Is there a possibility for de-brief? Right after game in-situ, or after the session for example online? Is it curated or only left for the responsibility for the player? Is there any forum for this?
- Possibility to leave feed-back for designer? For other potential players?

MORE ON THE PLAYER EXPERIENCE

PRE:
- Knowledge on the game? (Self-discovered, told by designer, told by others who have or haven’t played the game)
- Expectations?
- Reasons to play? (boredom, curiosity, adventure, out of this world, belonging, self-expression, having a break, feeling victorious, learning new…)

DURING:
- Is the game understandable? Is it usable?
- Why it is made, how it should be played?
- Is there a goal?
- What’s the point to play?

POST:
- Was this motivation (reasons to play) fulfilled?
- What were the emotions game raised?
- Was in meaningful? Worth the time?
- Did it change anything in the player?
- Did player learn new skills or improve existing ones?
- Impression that stayed & memories it created?
- Stories & feedback told to others of the game session?

1. target experience
2. target audience
3. rules for elements
4. styles of actions
5. emerging emotions

PHASES:
- Pre
- During (the actual game session)
  (+ off game/world outside the game)
- Post

PRE
- set up
  - setting up for session
- what needs to be done by game developer
- what player is told of the game & game session (if anything?) & by who, & how?
- pre-knowledge -expectations
- other possible affects (direct /indirect)

DURING
- session location
  - ingame & offgame
- actions
- decorative;
  - purpose / goal of the game
  - understandable / usability
- emotions
- curated de-brief
  - only spontaneous, player-responsible de-brief?
  - possibility for player to share their experiences?

PLAYER
- rules
  - how to use elements
  - purpose / goal of the game
- immediate
- later memory

POST
- de-brief
- what needs to be done by the player
  (download app.)

IMAGE 98: Some visualisation on the pre-, during and post-game session aspects (Juju, 2018)

4.6.2. My Definition of Game

I tried to define the game system. What are all the elements that make a game? Of course, this is not yet so thorough, as I have made this in such a short time and this is my first attempt on the matter, but I hope to continue developing it further.

I tried to avoid using too much of the existing terms, as it is only more confusing to get more words used in the game design literary, but always with different meanings.
Some preliminary visualisation on my definition on a game system. Later I made modifications to it, but did not yet make a new visualisation, as for sure, there will be more changes coming later. But this kind of mapping helps me to group and categorize thoughts on the matter, so I leave it here as documentation of the process. (Juju, 2018)

**THE WHOLE GAME SYSTEM:**

The game system exists merely for the game session. In a sense, the game does not exist if it is not being played, or only as an intangible concept (even if the chessboard exists as a physical object, it is not a game unless it is being played). The game kind of gets born each time, when the game session starts. As each session is always different, even if repeated multiple times by the same player, the game has several unique versions of itself.

The game session has three phases, pre-, during (when the game materializes) and post-. The pre-session has two stages. The early stage pre-session is hearing about the game, getting ready for the game, maybe purchasing the game, searching for a review of it, watching a trailer of it, talking about it with friends and planning the game session. The immediate pre-session happens the same day the game is played, right before the game session, without any other activity in between. In this immediate pre-session, the rules are learned if not known yet, and in some games comprehending the purpose of the game, and what should be done, what is and what is not possible, the limitations etc. All though in some games, these will be learned during the game session.
The actual session, the during phase, only consists of pure interaction between the game system and the player/players. Post-session is for de-brief, player to think and discuss about the experience, and can last as long as the player/players wish to do so. The post-session also has two stages, the immediate post-session happens right after the game session, and the postponed post-session happens every time the session is thought or discussed, was it in the next day or after several years.

There also exists “pause phase”, whenever there is a break in the middle of the play (for example to specify some rule, or just to have a break from the game), but as it is not mandatorily present, I only acknowledge the existence of it. It is possible, that the same game session consists of multiple shorter session, being broken down by several separate pause phases. These breaks can last from few seconds to years. The game, until it is finished, will remain in the pause phase. And of course, the length of the pause phase affects the next game session. If the game session is never finished, the game will not be completed, and therefore that game session will remain forever in the pause, waiting to be concluded. Somehow, I feel like saying, that the players played a game, but not the game.

The game designer creates the game, but the players make it alive. The game session will always look and feel of its players. As the players affect the game, various aspects affect the players. Their anticipations and previous knowledge of the game. Their interpretations of it, the personal experience of the game, as well as their past experiences of that game, of other games or of other things. Their memories, hopes and fears. Their ambitions and desires. Their self-image, is it neutral, positive, confident, egoistic, lowered, or even causing indignity. Their motivations and personal goals. Their educations and up-bringing. Their morals and world-views. Their current moods, their physical and mental states. Their skill-set and ability to comprehend and learn new things. Their personalities. Are they for example more introverts or extroverts? Are they more shy or brave? Do they seek action, or prefer puzzling their brains? Do they know what they like? Are they how open for new experiences?

And for sure, if there are more than one player present in the session, what is the history and relationships between the players, for how long and how well do they know each other, from what circles they know each other, how well do they communicate, do they like each other and how much, are they friends, family or lovers? If more than two, then for example what does one player know about the connection between the other players? If the player is playing against stranger/strangers, in that case, what are the first impressions, how well and how fast do they get along, do they possibly share the same humour, other traits, how likeable they are to each other. Or if they are competing, how does the performance of the opponent affect the player? Can the player consciously affect to the gameplay of the other player by his/her actions and presence, either for bad (for example bluffing in poker) or good (pretending to be doing better than actually is, or withhold bad news, just to keep up the morale in a team)?
THE WHOLE GAME SYSTEM, IN A GAME SESSION, CONSISTS OF:

ELEMENTS (What is the game about?)

The vessels deliver the game to the player, and the rules dictate how to use these vessels. As the whole game exists just for the player, it should be self-explanatory and effortless to use.

VESSELS
(Deliver the purpose of the game)

ENVIRONMENT: (virtual and/or tangible, what senses are used...)
Both the...
- Actual game environment (“in-game”).
- Physical location, where the game is being played (“out-of-game”. Macro: in what continent, what country, what city, what culture the game is being played. Micro: in what specific location, like at home, at classroom... Also, the year, the time of the year and the time of the day are elements of the physical location.)
- And are these two environments connected how? For example, through computer, VR-headset, mobile, deck of cards, game board, costumes and deco (like in live action RPGs)?
- How is the mood in both of these settings? (For example, does it feel safe, is it carefree or stressful, what is the soundscape in both, how well the out-of-game environment gets dissolved to the in-game environment (the level of immersion, for example through not having any distracting sense simulation coming from the out-of-game environment and the ability of the in-game world to “suck the player in it”)?

PIECES:
- Interactive: Does interacting with it cause a happening in the game?
  - Yes → - Functional piece
    - The functional piece is either important or insignificance piece, depending on the affect to the game play:
      - If enables crucial happening → Essential piece
      - If only provides insignificant affect → Immersion enhancer
    - No → - Immersion enhancer
  - Also, through usability, is it obvious to use the piece at some point?
    - No → - Immersion enhancer (unfortunately, with bad design, essential pieces can accidentally turn into immersion enhancers, causing the game flow to lag)
- Passive: Immersion enhancer (aka deco), not possible to have any interaction with it even though it resembles a game piece
THEME
- The game world (visible in the game setup + the “in-game world that is not visible in the set-up”)
- The world lore (maybe even to the length, that not all of it is even served to the player. The world is more consistent and believable, even if it would only partly exist behind the actual game, as then the elements that are visible for the player, are coherent and everything leans on solid base)
- Details (immersion enhancers, acts as vessels for the theme)
- The story (acts as a sort of vessel for the theme)

RULES
(Affects the elements, restricts the use the vessels, informs how to use the vessels, may reveal the purpose of the game. Even though would not be specific rules told to the player, rules are, in every game, the underlying set of conditions, “the world order”, that dictates how everything works, could work and can’t work, in that setting.)
- Purpose for playing the game (aka goal, but not necessary revealed for the player, or even that clear → for example, can pure enjoyment be the only goal...?)
- Knowledge on how to use the vessels, either specifically informed the player of these, or this knowledge gained by the player by learning by doing
- Affordances and possibilities, constraints and restrictions (what is possible to do, what is not, what is forbidden...), also either specifically communicated to the player, or player learns these during the session.

ACTIONS
- What are the emerging actions? Primary, secondary etc? (Do primary actions define genre/ genres?)
- Is it possible for the player to create new actions in the game, that were not designed at all? Do they affect the gameplay, and to the outcome?
- Is it possible to cheat in the game? And if so, why it is possible? Design flaw, human factor, or a bug?
- Is there a change, that with all the possible actions there are in the game, the player can have a totally different kind of game experience, than that was anticipated and meant? Is this game enjoyable to the player? Is it even more fun this way?
- What skills can be improved through the game? (Both the in-game, and the real life, skills)
- Is it possible to express oneself through the actions? (Creatively, morally...)

The elements could be referred with a concept of sailing, the game session as an adventure at the sea. The vessels are the boat and the sea. The game designer crafted the boat for the player/ players to sail with, as well as the seas where to sail. Players form the crew, unless playing against each other, then most probably they each command their own ship. If there is just a single player, they are the captain of their ship, either sailing alone, or with a controllable or uncontrollable crew.

The environment is where the boat is being sailed. Are there hostile pirates and sea monsters or changing weather conditions and severe storms? The story reveals why the boat is being
sailed, and the theme determines what kind of boat it is, in what kind of world. The pieces are the actual boat, all the active and functional, and passive and decorative parts of it. Also, the clothes, accessories and equipment of the character belongs to pieces.

The rules are how the boat can be sailed and how it can’t, and how the boat operates on the waters, how fast it can go, how the conditions affect it, what are the scenarios that can make it sink. Actions are the moves player does to sail the boat. What needs to be done to get it going? The usability is how well the boat responds to these actions, and are all of the necessary actions known and understood by the player, and how obvious and easy it is to handle the boat?

The goal can be many things, for example to get the boat in some specific location in specific time, or to explore the seas as much as possible, or to plunder all other ships, or to master skills in sailing, or to find the pirate’s treasure, or to destroy sea monsters.

I have been giving some thought on the necessity for a pre-defined goal. Some games do not have specific goals, like sandbox games, creative crafting games or some role-playing games. Some games have goals, but players may change the goal for some other that they would enjoy more. Järvinen (2008) has a rather deterministic approach, mechanics seem to exists so that goals can be achieved. Therefore, if there would not be a specific goal in the game, there would not be any mechanics?

When I started my game design studies, we were taught, that all games should have rules and goals. With the mechanics, these three are the cornerstone of every game. But later, I have broadened by approach to include also games without specific goals to be games, if they are playful and offer gameful experiences. Couldn’t playing a game just for the sake of playing already be a goal by itself, without any need to achieve something or finish something? As when I was playing Ultima Online, I played it a lot, but without any specific goal. I did not bother with levelling up, I avoided the fights, I never wanted any fancy gear and clothes, I did not even explore the world. I played for the social interactions, but what would the goal be in them? Still I very much felt like I was playing a game.

4.7. Analysing Message from Venus

4.7.1. Answering Questions for Message from Venus

I can’t answer all of the asked questions, as the game is not ready yet. I can only anticipate some of the answers, but only the experiences from the actual play sessions will either validate them or give different answers.

Why this game?

I get my reward of creating something memorable for the others to experience, yet I also wish, whenever I am designing new things, that I could experience them myself. I think I only make things that I would love to experience. Therefore, it seems, that even though I am designing this for myself, at the same time I am making a game that I can never play. I don’t think there are many games like this, so there is some novelty in the concept. I get excited to
think about the possibility of my dream, since childhood, to become reality – to be on a star ship and to pilot it to some cosmic adventures. I think the most excited about this game would be the “space nerds”, especially everyone who grew up with Star Treks. Also, the escape room enthusiastic most probably would like this, new kind of, room experience. The live action role-players would have nice opportunities to experiment with the simulation opportunities, I think they could get most out of the costumes and of the detailed set-up. But I hope other people would find and enjoy it as well - I would love to see a group of 50-year olds fooling around in the deck.

What is the target experience?

Active immersion to another reality. To feel like being on an actual space ship, the protagonist of an adventure.

What is the theme?

Retro futuristic space adventure.

(What are the game elements and rules for them?

→ Will be deconstructed in the next chapter)

Who is the target audience and other audiences?

Message from Venus is intended for the “space nerds”, but suitable for other groups, from children to elderly people. The target group is wider than in the normal escape room games, as the StarScape’s room is accessible by a wheelchair.

What is the style of play?

The players communicate with each other, with a real time NPC-character and also with video clips of pre-recorded conversations. The players can choose the depth of their immersion, as they are offered a possibility for a light or serious RPG. They can also choose, if they want to follow the given storyline or to make it as their own space adventure and battle game. They can also turn into villains and destroy Venus, if they choose to do so.

What are the designed player actions?

To explore the physical and virtual ship, use it, engage in a story, being an active protagonist, handling stressful situations, co-operation and teamwork, solving puzzles, learning new skills and improving them, facing new kind of situations, role-playing enabled. The elements affect the actions, but during the design phase, the actions affects the elements. Like how the ship can be operated, how the ship enables and restricts actions. It should be designed for the action, not the other way around.
Primary actions?

co-operation, self-learning, decision-making as a group, handling stressful situations

→ If the action would determine the genre, would this be:

Fast-paced, co-operative, group-decision-making but self-improvement scenario room, in a space ship simulation?

Secondary actions?

Exploration, searching, studying, solving puzzles, operating a space ship, flying and fighting with a space ship, role-playing.

Possible other, not designed but allowed actions?

Challenging the group dynamics, becoming evil, aimless pushing and pulling everything (but carefully that they won’t break), not caring of the story or of the world...

Possible other, not designed and discouraged actions? How to discourage them?

Endangering the game room or the game elements there through whatever actions (either by claimed “in-game reasons” or no reasons), arguing with the group, giving up. These are discouraged by the fact that players know they are responsible if they break anything on purpose, the A.I. can try to intervene in possible arguments and try to save the situation, A.I. can also motivate the players if they feel like giving up.

How do I design it to be played? (What are the designed player actions?)

- Figuring out the spaceship and what have happened, using virtual elements (screens and main screen) and using physical elements (buttons, valves, books)
- Learning to operate the spaceship, both flying it and having battles with it
- Making conclusions and decisions
- Learning to/improving co-operate and do seamless teamwork

Some rules are given before the session, but the players will eventually, through trial and error, find what is possible and what is not possible in the game. The players are guided with visual and other cues towards the requited actions, and the A.I. helps when necessary.

It is possible that the players are tempted to try all possibilities, thus disabling themselves from the given story, and it can be an action that was not planned, but born out of curiosity. Depending on the quality of this action, it is possible for the player to get back to the story (for example if they are rude to Venusians, they can call again and ask for forgiveness, but if they end up destroying Venus, they can’t cancel their actions).
Does the game feel exciting in this point? Doable? Worries?

I feel excited, but I am biased as the designer. But as I have been telling other people about this game, it seems to fascinate various different kind of people, gamers and non-gamers alike. Not yet sure how doable this game is, as it is huge project involving virtual game and an actual physical setting, costumes, lights and sounds, and someone supervising it constantly. There is a lot of coding, set design and technology involved. It is possible some aspects need to be eliminated in the early phase, like the physical game pieces (buttons and valves etc). Also, I am bit worried of the understandability of the virtual game – how easy it can be made to be played, as it can be rather complex with four different interfaces. Does it need some instructions, guidance to use, or can it be made so obvious it is not necessary, even for people without any gaming experience? I am also worried of the time limit, how to make players act with the given phases, what if they can’t proceed in time?

How the game is designed and made to be played?

The game should be obvious for players to figure out how to play it. If they seem to be lost, there is always the A.I. helping them, and it is rather flexible as it is an actual person, constantly observing the session.

How players are prepared for the game session? (pre-info, telling rules...)

The players will receive information rewarding their game session before the game, including the “off-game rules”. There are no specific “in-game rules”, players will find, through trial and error, the right ways to operate in the game. The players are also greeted upon arrival; most important aspects are repeated and then they are guided to the costume changing room.

The theme, how it is visible?

The theme is visible everywhere, from the web page to the “off-game” setting of the game location (the waiting lobby, the toilets, the costume of the personnel.) The physical location, that is the game room, will be made to look like a deck of a space ship. There will be a lot of details, some that are serving some function, some that are there purely for decoration. The virtual game also has the look that supports the theme. Soundscape serves also the theme.

Attraction power?

A feeling of a “playground”, something that is new kind of, explorable, tangible. The action and promise of an adventure.

Holding power?

Lot of action and interesting things to do, learn, try and explore, both in the physical and in the virtual environments.
Releasing power?

A finished mission, a feel of accomplishment. Also, the players can’t choose to continue the session when it ends.

SESSION

How the game starts? How long is the game session? How does it end?

The game starts right after the players have arrived to the deck, as they need to figure out how to power up the ship to proceed in the game. The game session is one hour. The game ends when the players have defeated the final boss or lost against it. If the players are having their own adventures off-the-story, the game session still lasts for one hour, but there will be some reasonable, in-game explanation for it to end.

How does the player interact with the game, story, with other players?

Through physical and virtual elements. Story is interactive, especially the discussions with the Venus. The players are required to communicate with each other, in able to play the game. The players are encouraged to explore the deck, as well as the virtual game. Everything in the game can be touched and tried.

Who is there in the game? Directly, indirectly?

There are four players in the game session, plus the person observing the game session and interacting with the players through microphone. There is also another person working in the setting, whom the players might meet before or after the game. The players might see other players when they are arriving or leaving, although this is tried to be avoided.

What are the direct and indirect environments?

The direct environment is the game room. The indirect environment is the surrounding spaces of the game room, like the lobby, costume room, toilets. Also, the building, the street, the area of the city, the transportation possibilities to the game location, the city and the country are all influencing the indirect environment. The current time of a year and the time of a day are also aspects of the indirect environment.

What can affect the immersion?

Various possible risks: The change of seeing and talking to the previous players before the game. If the player knows a person who is working in the setting, especially as the A.I. What is the mood of the players, a personal and as a group? How tired are the players? Are they hungry or thirsty, or need to go to a toilet? Did someone bring a phone with them, and it is breaking immersion? Does something unexpected happen, some game piece gets broken or the computer crashes? Does the player get negative feelings of the game, of themselves or of their group? Do the players end up in an argument, or can’t make decisions in a group? Is someone dominating others? Does the game embarrass player or players? Is someone
thinking other than the game related matters? Is there something troubling the player or the players outside the game, like in the personal life?

I would love to see people engaging in a full role-playing mode, or at least attempt it, as the set-up offers such a good possibility for this. But even without role-playing, I wish the experience to be very immersive, and even if the players would just play themselves, they would still feel like being in the space ship.

**What are the means to enhance the immersion?**

Lots of details, both important for advancing the game, but also only purely for the decoration (immersion enhancers). A lot of world lore, that is visible pre- and during the game session.

Everything that could distract from the immersion are tried to be eliminated. The players are not allowed to bring their phones to the game room. Also, limiting the personal items and offering costumes and accessories for the players, to sort of immerse them more in the game set-up.

Designing for multiple senses.

**PLAYER EXPERIENCE**

**Pre-knowledge about the game?**

Has the player heard something about the game from someone else? Was it a known or unknown person? Heard or read about it from somewhere? From where, and in what tone this was told? What information was received and studied, that was offered by the game designer? How this was taken?

**Reasons to play?**

For the novelty of the game, as it is a new kind of concept. Desire to share a new kind of experience with others. Interest towards the theme or the game system. Curiosity of one’s own performance in the game, as well as of their performing as a group.

**What kind of desired player emotions there could be?**

Confusion, curiosity, desire to explore and assay, excitement, surprise, panic, stress, terror, adrenaline rush, confidence (to oneself, to others), social emotions (feel of belonging and companionship, enjoying working as part of a team), fascination, enthusiasm of learning, feeling of flow, joy, pleasure, happiness, amusement, humour, empathy, heroness, feel of victory and accomplishment, pride: Feel of pride of oneself and of the group, social bonding: creating stronger bonds to others from having this experience and having had this experience, hope.
What kind of un-desirable player emotions there could be?

Frustration, embarrassment, envy, distraction, boredom, negative social emotions.

Could it change something in the player? Could player learn new skills or improve existing ones?

Hopefully after the game session, the players are more experienced in being in new kind of situations and more capable to adapt accordingly. Maybe learning to learn new skills more easily, perhaps discovering something that one would like to practice more or a trait one would like enhance in him-/herself. Improvement in the decision-making and problem-solving abilities. Handling stressful situations better. Improving in teamwork and communication skills. Maybe the players learned new things about themselves and of their team, for better or worse. It is also possible, that the game will pinpoint aspects that are not working in the group dynamic or create a personal feeling of not being so capable for these kinds of situations.

Possibility for de-brief, feedback?

Right after the game, there is a possibility to share the experiences with the person who was supervising the game, and also with the group while changing back to their own clothes. There is a possibility to interact with the home page of the game, or in the social media. When the players are approached with the virtual memorabilia, in the same evening after the game, they are also asked to give feedback.

4.7.2. Message from Venus as Game System

ELEMENTS/ VESSELS:

ENVIRONMENTS:

Actual game environment:
- The physical room
- The virtual game

Related environments:
- The location of the game (country, city, neighbourhood, transportation...)
- The other rooms in the premises (the lobby, toilets, costume room)

PIECES:

Material interactive pieces:
- Touch screens (operate the virtual game)
- Buttons, valves (operate the virtual game)
- Transportation cupboard
- World Wiki Book (some pages to be used to gain more knowledge of Venus and solve the puzzle of the artefact)
- Ancient artefact (to solve the puzzle of it to defeat the final boss)
- Other players

Immaterial interactive pieces:
- Discussions (carries the story further)
- Space battles (has to be defeated to continue in the story)
- Alarm sound (informs of danger, can be shut off)
- Alarm light (informs of danger, can be shut off)
- A.I., person helping the players outside the room (only as a voice)

Material passive pieces:
- Walls, table, chair
- Decorative stuff on the deck (like coffee mug, personal notes, some random clothes...)
- Buttons and valves that do nothing (either designed so or then interactive buttons that are in passive state)
- Most pages in the World Wiki Book
- Venusian newspaper page
- Costumes and props of the players

Immaterial passive pieces:
- Video material (for example the video in the beginning)
- Smoke (informs of danger)
- Smells (upon entering the ship, during battles)
- Temperatures (cold in the beginning, heat in during battles)

RULES:

Limitations / Restrictions:
- Time limit
- Players can’t leave the room
- There are some delicate things, so using force is forbidden
- Operating the space ship requires four persons working together

When these are told?
- Necessary rules are told in the home page, upon reserving the game and the most important ones verbally before the game session
- Other limitations and restrictions are just players to be discovered in the game

Goals:
- In-game goal in given story: to save Venus
- In-game goal in player’s own adventure: defeat all battles
- Off-game goal: to enjoy the room with other people
THEME:

World:
- Visions of the space age future in around the years of 1940-1960’s, with added pirates and touch of steampunk. In this world aliens also exists, known and unknown. With some species there has been more interactions. Travelling in space is quite common, and there are human population in other planets and moons.

Story:
- Making players feel like protagonists and heroes

Aesthetics:
- Retro futuristic feel and look in everything, in physical (the shape of the room and table, the World Wiki Book and artefact…) and immaterial elements (like the voice of the A.I., soundscape, videos…)

Believable:
- Attention to details: amount and quality of details
- Everything in the game supports the theme
- Lot of world lore

Tone of voice:
- Playful, humorous, light, respecting players

DESIRED ACTIONS

Communication:
- Communication between the players (to operate the ship and other co-op actions)
- Communication with the “A.I.”
- Communication with the Venusians and the hostile aliens.

Taking action:
- Operating in new kind of situations
- Operating in stressful situations
- Working together as a group
- Active participation in the game (being both mentally and physical, present in the situation)
- Trying different solutions. Creating different solutions.
- Decision-making
- Puzzle-solving

Learning new / improving existing skills:
- Being curious and openminded
- Handling stress
- Operating the space ship
- To work together as a team
- “Learn to learn”, being more open to new kind of learning situations as this
- Learning something new from oneself and from other players

4.8. Analysis Conclusions

When I started doing research on the existing analysing frameworks, I was first confused with the limited amount of aesthetics that were presented, both in the MDA Framework and later in the one that was extended by Schell. When I started to think about the topic, already in fifteen minutes I came up with several different pleasures and about the nature of these, and not any of them mentioned anywhere.

Then I got confused by the mechanics and the various meanings given to it. I came to a conclusion, that there probably might be as many meanings as there are game designers and academics. And the more I read the MDA Framework paper, the more confused I got. So, the mechanics were the rules and the game contents, but what about the game devices (mobile phones, computers, dices...)? Millán (2012) points out big difference with MDA and Schell’s Elemental Tetrad, as in latter Schell separates technology from mechanics.

The more I thought about these two lenses, the more I started to disagree with the names. For example, the technology that was mentioned, is a confusing term to be used of dices and cardboard. Maybe I would call it a medium. Then the mechanics would be just the ways the game is to be played and the rules. That, how well everything is balanced and working, I would call the dynamics. The old dynamics I would call the (player) actions. The aesthetics is also misleading, I would call it the (player) experience, where the motivation and anticipation is met with satisfaction. The aesthetics would be more the look and feel of the game, maybe even the usability.

In the end, I got so confused with all the different meanings and the terms I do not agree with, that I ended up crafting my own methods. I know it was not the task, but as a learning experience this was quite an adventure, as well as a first spark of interested towards academic world.

These are the very first drafts, raw, bare, and changing constantly. I am challenging myself to think further, to try to uncover the most essentials and then continue broadening the vision from there. But it is hard to explain everything with words, especially as I am arguing with myself, feeling all confident and lost at the same time. I was weirdly motivated and passionate, but also, occasionally frustrated for not being able to make a better sense, and knowing that this is just a mere beginning of this work. Which I intent to continue, as I want to clarify and simplify it, yet still cover all the most important aspects.

As Ralph & Monu (2014) point out, some important concepts are not addressed in these three frameworks that I studied, and they almost seem to sympathise me in my struggles: “Indeed, developing a unified theory of the player is extremely challenging (cf. Canossa 2009) and is best left to future work.” I like the challenge, and I am quite surprised, that academic world is so interesting. It is about trying to drill into a core of things, to understand them and their interplay with other things. Finding the right words, or develop the right terms, to
describe what, how and why things are. Uncovering the reasons behind everything, and maybe even sensing what could be, that does not yet exist. Contributing in the forming of the common knowledge and practices, through a debate between different perspectives, opinions, ideas and world views.

I am not sure, if I got the correct notion of the nature of the academic research, but whatever the vision that I currently possess is, it excites me. I thought, that the days of the explorers were gone, but here, to my surprise, there still exists other worlds to explore. I kind of always thought, that everything was already invented, thought and figured out, but like Hämäläinen (2018) pointed out, the field of game design research is not ready, it is being created constantly by the researchers. I was bewildered, that the game design literature is kind of ancient – not in years, but when compared to the progress of how fast the games and game industry is evolving, it seems to be lacking behind. A valid point, stated by Millán (2012), is that the academic game design discussion is quite limited, due our inability to define the concepts and create new game design theories, and he proposes the reason for it being - and I think quite on the spot - that game developers are probably more into creating games, than contributing into the academic game design and research field.
5. REFLECTION AND FINAL WORDS

In this chapter I present reflection of the personal process and of the process in general, both for the production of this Thesis and for the production of the Message from Venus, and the lessons learned from both of them.

5.1. Producing this Master’s Thesis

If I would now start with this Thesis, I would start with the most important aspects, and move from there to surrounding areas. Now I started from another direction, first trying to cover all the surrounding elements and then move towards the main points. I kind of got worried, if I would manage to have enough material, and now, in the end, I got too much of it. I hope that the reader can pick the most interesting points for them, as for me trying to edit this monstrosity shorter, turned out to be impossible task. As I can’t pinch out tops from the chilies I grow, even if it would do good to them, I can’t pinch out words already poured here. At some point I wanted to start over, but I already had around 70% ready, and to make more coherent Thesis, it felt quite a big work to start again from the scratch. I am also aware, that almost hundred pictures are quite a lot for one work, but I think they make this much lighter to read and they also offer visual guiding to the structure of this Thesis and its content. It is now what it is, and at least I can say I am proud of it. The fruit of working hard for over a year.

Writing this Thesis was incredibly interesting project, and I hope I could do another one in a row. I got really interested on academic world, which is surprising that this passion did not born during the seven years I’ve been in the Medialab, doing academic game and other design courses. I think I was more into just making games, but now I am also interested on analysing the core of games and finding words to describe them.

I know I am bringing too much of my own opinions and thoughts into this, also instead of using the tolls existing in the field, I started defining and creating my own. But like I have stated before, I can’t use something I do not agree with. I found it constantly hard to use the academic literature, as I found it often to be confusing and, in some cases, misleading. Also, using words like “things” in a credible scientific discussion seems quite vague, as a thing can be anything, it does not clearly point out to something or act as a relatable nominator for something. Besides disagreeing with the meanings and wordings, I often find the definitions not to be complex, too ambiguous, hard to read and difficult to understand.

Next, I would love to focus on game experiences, and how to better design them. Also, methods for inducing emotions, both in games and other design work, is interesting me. I would like to look into game experience evaluation models, and maybe develop my own.

5.2. Producing this Game Project

The game project has moved smoothly, before starting this Thesis in early spring 2018 to this day, one year later. We are working on with a demo, that would include around 15 minutes of playable content.
I have learned many new things on the way, for example what it means to actually start and run a business. Later it also was bit exhausting, as my main task switched from design work to writing applications for funding as a full-time procession. Being a CEO is not all fun and play, as I am enabler and facilitator, I need to make sure the project will have a future, and ensuring its continuity is my main task for now. Also, I’ve got to do things like soldering and constructing alien power adapter puzzle, so the tasks has been various.

I still need to think of various things, like the final assembly of the team: what kind of skills we still need and do we include these in the team, or do we outsource them as a service. For example, someone to focus on the applications and running the required operations of a start-up, and the expertise in branding and marketing.

As the project is still unfinished, it is hard to say what could be done better next time.

The feedback we have gotten from people, when we talk about this game, has been enthusiastic. People seem to really want to play our game. So, I can’t just wait to deliver it for them.

5.3. My Thoughts on Experience Design

As experience design played such a big part on the thesis, I will tackle the matter more here. For quite some time I was under the impression that I had created the term “experience design”. I had taken one step back from the user experience design and made my own definitions for the field. Later I found out that it was an existing field, not that old, but still distinct (see: 2.2. Field of Experience Design). The problem is that experience design as a field of its own is not so widely known, and often it is mixed with relating fields (see: 2.2.2. Relating Fields).

I constantly observe my surroundings and the environment, whether it is real or digital. I examine buildings inside and out, public and private spaces, events, products, services, interfaces and games from different viewpoints. I don’t only think what is good or disturbing in these experiences, but I also have ideas how they could be made better. Unfortunately, in many cases, I have found the experience to be successful in only for not being annoying. So, I created this field out of my own observations and needs. As I did not know that the field of “generic experience design” already exists, I started to make my own definitions and comments for it in 2016. Below are some of my preliminary thoughts about the matter.

To understand experience design, first it is crucial to try to understand the nature of an experience and of all the aspects that affects it. Experience can arise from the natural or human-made physical environments, from other people or from various design products. Everyone forms their own, personal and subjective experience. The affecting areas of an experience are all connected, through senses and the cognitive processes, on both conscious and subconscious levels.

Experience designers can work with public or private places, indoors or outdoors, with various services, concepts, digital platforms, physical devices, wearables, consumables, art, media and so on. They can actively try to create certain experiences or improve the existing
ones. How do the experience designers want people to feel when doing or using something and while moving through the whole experience process? What feelings do they want to raise? What impact and memories do they want to create? How can they invite a person to do something, to use something, be somewhere in a desired way? Can it be done by offering cues to ease the process? What feelings are tried to be induced, but acknowledging the existence of various other feelings that are present, either playing passive or active part? How much of the experience can be handed over to the hands of the experiencer? How about enabling or even encouraging the use of design product in other ways than what it was designed for, thus making the experiencers to become designers of their own experiences.

I think it is rather poor design, if the majority of these possibilities have not even been considered. Of course, there probably will always be somebody, who will surprise the designer with their creative mis-use, but most probable ways should be mapped out and be encouraged, discouraged or their possibly existence only just acknowledged.

I was wondering how experience design could be separated from the relating fields and came to the conclusion that in those, often only the smaller fractions are designed, not the whole experience, even when the experience is said to be in the centre of the design. There are so many variables and affects, that it is a huge task to take them all into consideration.

For example, a book offers an experience due to the story it contains, but there are several other factors affecting it, like the cover, the binding and the thickness of the paper. Is the book heavy or light? Is there a picture in the cover and what kind of picture? How about some text on the back, and what does it say about the book? How much of the story it reveals, or does it create some sort of expectations or anticipations in the reader? Is the cover fabric, leather or cardboard, is there a protective paper cover? With what font and font size is used? Does one use a bookmark, maybe provided in the book, or simply fold the page corner? Is the book new or used? How does it smell like? Is it read with some electronic device? Who is reading it? What preliminary knowledge the reader has about the book or of the author? Has someone praised the book for the reader? Where the book is being read? Is the book being read voluntarily or obligatory? Does the reader own it, or has he/she borrowed it? What is the mood of the reader? And so on.

Another example I have on the matter is a concept of visiting a restaurant. The main product is the experience of eating out, and the aspects of this experience are as follows:

**The customer journey:**
Pre-experience is checking the restaurant reviews, looking at the restaurant webpages to see menus, and booking a table either online or by phone. Actual experience is getting in, hanging coats, being greeted and guided to the table, browsing the menu, ordering, getting the drinks and food, the actual eating and drinking, ordering more or for a bill, paying and leaving. Post experience is the discussions of the experience afterwards with people who were there and people who weren’t, and maybe writing a review or giving feedback straight to the restaurant.
The Consumables:
The plating of the food, its smell, taste (sweet, savoury, salty, umami, use of spices etc), the mouthfeel of different textures and temperatures. Are there free samples from the kitchen or bread and spreads? How are the drinks, what is the temperature of water (is there ice cubes)? Is the water provided without any need to require for it? Is it already poured when customers are browsing menus?

Physical Setting:
General atmosphere like music (no music, live music, radio, records, what style, how loud), lighting (are there soft lighting or bright lights, where are they pointing), colour scheme, temperature, smells, loudness of other people, environment or the kitchen. What kind of mood is in the room, and what matters affect it (is there lot of stressful sounds like baby crying, mobile phone ringing or too loud discussions, or maybe someone quarrelling? Are there annoying or attractive people)? How comfortable the seats are (sturdiness, softness, size, height, armrests?), the height and shape of the table (and is there a tablecloth, what kind of, what kind of serviettes, paper or fabric?). The tableware, the look and feel of the plates and glasses, the feel of cutlery in hand (how heavy they are, how round is the handle, how balanced they feel in the hands, are the knives sharp enough?). Where is the restaurant located, the neighbourhood and even the city? How easy it is to get there, to find and access it (with personal car, then is there parking places nearby, free or cost? How well does the public transport get there? Is it easy to get there and back by taxi?) Is there a view to the kitchen? Where is the table located? (By the window, then what is the view? Is there a draft coming in? Or maybe near the toilet? Does it bother then? Or middle of the room, can it make the customer feel somehow unprotected and vulnerable, or like being on stage?) Does the customer have to wait in line for a toilet? How clean and pleasant it is? (Is there toilet paper, hand towels, cold and warm water, soap? Some decorations?)

The Customer Service:
Efficiency of the staff, time spent with a customer, their mood and attitude, their knowledge of food and drinks, the right level of formality and informality. How often the waiter takes contact, spontaneously or by waving? What is the time from ordering to receiving the consumables? Does the staff please the customer, are they getting along naturally or is the communication stiff and uncomfortable? What kind of clothes are the waiters wearing? Are they relaxed or hurrying? Are they serving by professional standards or more casually? Do they spill or drop something?

The Experiencer:
Alone or in company? (What kind of company, work mates, relatives, spouse, friends, combinations of these? And how got the idea to go there, how excited is the experiencer before going there?) Current mood, how good the day has been? Level of hunger? Likes and dislikes? Expectations and anticipations (heard of it from someone either known person, secondarily known person or totally un-known person, like through an amateur or professional review in the internet or magazine?) Previous experiences of the same restaurant or other similar restaurants, other restaurant in the same location (in the same neighbourhood, city or country?), or even restaurants in general? Is the restaurant new to the experiencer, or familiar? The level of expertise of the experiencer, either gained by
profession, interest or just the belief of the expertise of oneself without any background? Also, the cultural aspects, from what background the experiencer comes from?

The Memory:
How was the quality of food? How good was the service, how professional, efficient and friendly? How was the general atmosphere? What is the impression that was left? How satisfying it was? Was it as expected, less, or over expectations? How was the pricing, did it felt according or was it too pricy, or felt too cheap? Is the food received in different manner if it would have been more expensive – either with higher expectations or making it taste better as it is something regarded as luxury? And after some time have passed, what will be (if any) the final, long-lasting memory of that experience? How detailed it will be? How often recalled?

The service designers might probably focus more on the efficient customer journey, but are all the aspects taken into consideration? In some design fields it sometimes feels to me as if only the trees are being designed, but not the whole forest. Anything that is being designed should be observed holistically, as things often are more than just collection of parts, and their properties should be viewed as a whole. Too often the focus is in the smaller parts, not even all of the parts that create the entirety, and as there can be many experts from various fields designing these, but I think there should be also someone keeping an eye on the big picture.

For sure some parts cannot be affected with the design, like personal experiences, different expectations and the current mood of the experiencer, but by acknowledging these gives broader means to make a wholesome excellent experience.

I defined these as important elements in experience design:
- Physical Experiencer, designing for senses
- Psychical Experiencer, designing for feelings and emotions
- Human Interaction, enabling genuine, relaxed and positive contact
- Spatial Experience, designing all aspects of atmosphere
- Physical Environment, familiar or new place? Level of exoticness? How supports spatial experience goals?
- Location, in the experiencer’s own backyard or in a distant country
- Intangible Experience: the theme, the story and the world
- Surprise Element, going beyond what could be expected/ wow!
- Attention to Detail, enabling immersion and also giving people a feeling that something “extra” was done for their experience, not a minimum viable product, but a maximum viable product
- Humour, if possible but not forced, to create positive tone for the experience, to relax the experiencer

I defined these as factors that may affect the experience:

The Experience Designer:
- Ability to feel for others (have empathy)
- Ability to deliver the meaning for others
- Past experiences
- Their personality and behaviour (how curious and open for new experiences they are?)
- Cultural and educational background
- Collaborative or individual design work
- Knowledge in experience design and on the relating fields

The Experiencer:
- Current mood and ability to pay attention (tired? stressed?)
- Past experiences
- Expectations and anticipations (pre-knowledge or open mind)
- Their personality and behaviour (how curious and open for new experiences they are?)
- Cultural and educational background
- Are they with company, and if, with whom? Or are they alone?

The good experience is something that is not fulfilling expectations but exceeding them. The experiencer may hope for something he/she can anticipate, but it is impossible to hope for something which may not exist or that its existence is not known. Also deliberate bad experiences go to the field of experience design. For example, as it is possible to make people stay and enjoy, it is also possible to make them go away as quickly as possible. Also, a good experience does not necessarily mean pleasant experience, I would not say a good horror movie is pleasant, but it can be a good experience. Bad experience is when some experience other than the intended one, either unpleasant or just genuinely lame and uneventful and therefore not a memorable experience, is experienced. Well-designed experiences create meaningful memories.

As I had no previous knowledge of the field of experience design, I considered this as an emergent phenomenon. My goal was to use multidisciplinary research on relating fields to create my own transdisciplinary approach. Or maybe in this case a term “antidisciplinary”, coined by the MIT Medialab, could be used, as in my opinion experience design as a design field is not just a bunch of relating disciplines but something entirely new. Probably experiences have been designed as long as there has been humans, but how established experience design is as a design practice, with acknowledged definitions and principles? I thought I was first to make these definitions, and even after finding out that the generic experience design exists as a field, I am still not sure how established it is. Are the principles and practices well-known and generally accepted and used, or is there still something unknown? Are there still new methods to be developed?

5.3.1. About My XD Principles

So, when I started making my own definitions for the field of Experience Design, I came up with these (see: 2.4. My Experience Design Principles)

- Enabling experiences through Environment Design
- Creating strong Themes
- Creating strong Stories & Creating actual Worlds
- Designing and Enhancing Immersion with various means
- Feel and Look & Flow and Usability
- Designing for Senses
- Designing for Human Interaction
- Attention to Detail & Making it Believable
- Creating right kind of Anticipation
- Including Emotions, possibly also Humour
- “To Feel that something Great is about to happen”
- Never Underestimating the experiencer
- Keeping the Overall Experience in mind, from the very first to the very last moment

I was surprised how close I was with the key experience design principles presented by Pine & Gilmore (1998, p. 102-104) (see: 2.3. Designing Emotional Experiences). They stated that the most important element is the theme, and all other design elements should support it. I had “creating strong themes” in my list. The second principle was the positive cues that form impressions, in my list it could go under the “attention to detail”. The third principle of eliminating negative cue relates to my “designing immersion”, as they are something that extracts from the experience and distracts the theme. The last principle was engaging all five senses, which I had there as “designing for senses”. I did not have the memorabilia in my list, but for Message from Venus I had an idea from the start to hand players a physical memory, a print of a Venusian magazine with their picture on an article about great heroes saving their planet. Also, I want to provide digital memorabilia, in form of pictures or a gameplay video.

My example with the concept of the restaurant eating experience is quite close to experience mapping, where the whole customer process with all the interactions and aspects are listed.

5.4. Future Work

I wish to both deliver means to deepen the escape room genre through my experience design points and principles, by showing an example and by bringing something new to the field, which I hope that is to be found inspiring. I hope to see more escape rooms that offer stronger stories, coherent worlds, lot of details, logical puzzles that fits and furthers the narrative, genuine co-operation possibilities and smooth overall experiences.

Also, I aim to develop this new adventure room genre further, hopefully to create another kind of settings for various different kind of adventures and experiences. For the Cosmic Crew we have already planned outlines for several sequels, and I would also like to, either under this title, or under some other title, design adventure rooms to address a wide range of specific emotional states.

I am ready to conquer the world, although I am not sure if the world is ready to be conquered.
5.5. Received Recommendations for Message from Venus

I will to end this Thesis with the two recommendations it has received. The first is from our game design lecturer Miikka Junnila, and the second one is from our game design professor Perttu Hämäläinen (in Finnish). As the name changed from StarScape to Cosmic Crew, there is a different name for the same game in these.

☆☆☆☆☆

“The Cosmic Crew project sounds very intriguing to me - as somebody who likes escape rooms and improvisational theatre and social games, there is a lot to explore in this intersection. Many in the team are my students and have been involved with many game projects earlier, so that will surely help them too in chasing this vision. While the escape room business has been getting more competitive lately, this sort of approach that enriches the gameplay from mere puzzle solving into new directions might be the key of getting new customers interested.”

- Miikka Junnila, Lecturer in Game Design and Production, Aalto University, 23.11.2018

☆☆☆☆☆

“Starscape on mielenkiintoinen avaus, joka luotaa digitaalisen ja fyysisen vuorovaikutuksen uusia muotoja. Starscape kehittää nousussa oleva Escape Room -ilmiötä eteenpäin uusilla elementeillä.

Escape room -kokemusten digitaalisella täydentämisellä on hyvät mahdollisuudet luoda uusia, menestyviä ja vaikuttavia viihteen ja yhdessäolon muotoja. Yhdessä pelaaminen kehittää sosiaalisia taitoja, etenkin kun ryhmä ratkoo yhdessä ongelmia ja pelaajat auttavat ja tukevat toisaan läpi pelin.

Peliala on yksi Suomen harvoista kasvavista vientialoista. Starscapen kaltaiset kunnianhimoiset ja innovatiiviset hankkeet ovat oleellisia pelialan uudistumiselle. Escape room -pelit luovat myös uusia yhteyksiä kulttuurin eri muotojen välille - koska kokonainen huone tai huoneisto toimii pelimaailmana, tarvitaan paitsi käskirjoitus ja pelisuunnittelu, myös lavastusta, valaisua, ja Starscapen tapauksessa digitaalista sisältöä, joka laajentaa tilaa virtuaalimaailmaan.”

- Perttu Hämäläinen, Professor in Game Design and Production, Aalto University, 31.10. 2016

☆☆☆☆☆
REFERENCES


Ludography


PULSAR: Lost Colony. (2014). [video game] Leafy Games, LLC.


Space Squad in Space. [escape room] Two Bit Circus. Los Angeles, California.


List of Images

**IMAGE 1**: Juju, Noora. (2016).


IMAGE 44: Creature from the Black Lagoon. (1954). [movie]


**IMAGE 74:** Space Escape. Mission Accepted. [escape room picture]. Available at: https://mission-accepted.de/en/space-escape/. [Accessed 27.3.2018].


**IMAGE 77 & 78:** Juju, Noora. (2018).


**IMAGE 80 & 81:** Juju, Noora. (2018).


**IMAGE 83:** Juju, Noora. (2018).

**IMAGE 84:** Juju, Noora. (2016).

**IMAGE 85 & 86:** Erkkilä & Juju. (2016).

**IMAGE 87:** Juju, Noora. (2016).


Appendix

Game Design Document

“StarScape 1: MESSAGE FROM VENUS"
– Scenario Room / Experience Room Concept

Noora Juju

Spring – Summer 2018
# Table of Contents

1. INTRODUCTION ........................................................................................................ iii
2. GAME EXPERIENCE .................................................................................................... v
3. GAME ELEMENTS ........................................................................................................ vi
   3.1. Physical Game Room .......................................................................................... vi
   3.2. Immersion Enhancers & Tangible Objects ......................................................... vii
      3.2.1. Meaningful/ Significant / Important Elements ............................................ viii
      3.2.2. Irrelevant Elements AKA Immersion Enhancers ......................................... viii
   3.3. Big Game Screen ............................................................................................... viii
   3.4. Personal Interfaces / “Game inside the Game” .................................................... viii
   3.5. Physical Game Pieces ....................................................................................... ix
   3.6. Pre-Recorded Videos ....................................................................................... x
      3.6.1. Pre-acted Scenes ...................................................................................... x
   3.7. “Alien Google Translate” – Mechanic for Limited Discussion Style ................. xii
      3.7.1. Known Words and Expressions in Venusian Language: .............................. xii
      3.7.2. How to Build Conversations ....................................................................... xiii
   3.8. A.I. - Personal Helper ....................................................................................... xiv
4. GAME SESSION – FULL SCRIPT OF THE GAME .................................................... xv
   4.1. Following the Given Story Line .......................................................................... xv
      Act 1: “From Confusion to Control” ....................................................................... xv
      Act 2: “Call for Heroes” ....................................................................................... xviii
      Act 3: “The Venusian Trouble” ............................................................................ xix
      Act 4: “Time for Heroes”..................................................................................... xxi
   4.2. Taking an Alternative Paths ............................................................................. xxii
5. INSTRUCTIONS AND PRACTICALITIES ............................................................... xxiii
   5.1. Customer Service ............................................................................................. xxiii
   5.2. A.I. ........................................................................................................................ xxiv
   5.3. Marketing ............................................................................................................ xxiv
   5.4. Durability Concerns ........................................................................................... xxiv
   5.5. Accessibility ........................................................................................................ xxiv
   5.6. Other Stuff .......................................................................................................... xxv
6. THE RULES ............................................................................................................... xxv
   6.1. Rules for the Game Session .............................................................................. xxv
   6.2. In-Game Rules .................................................................................................... xxvi
   6.3. Goal, Reward & Victory / Failure Condition & Alternative Endings ................ xxvi
7. FUTURE POSSIBILITIES WITH SAME SET-UP ..................................................... xxvii
1. INTRODUCTION

Message from Venus (“Viesti Venuksesta” in Finnish) will be the first game in a series of games, all being episodes of StarScape. This will be a new kind of game concept, called “a scenario room” or “an experience room”. Message from Venus combines various game elements and genres, and has elements from video games, escape rooms, live-action roleplaying games, movie-like storytelling and retro-futuristic popular culture.

Four players, dressed up as retro futuristic pace pirates, are controlling a space ship in a room that looks like an actual command deck. The players operate four touch screens and the main screen, but they also use physical game elements, like buttons and valves and some tangible objects. All four touch screens have a different interface to operate the same digital game, which is sort of “a game inside a game”, and the players have to work together verbally and virtually to make it work. There is an operator supervising the game from outside the room, and acts as the voice of the ship’s artificial intelligence whenever assistance is needed.

The story in the game consists of four acts. In the first act players get familiar with the ship and learn to operate it. They will witness their own ship being destroyed, and battle against this hostile alien ship. In the second act the players explore their current ship more, and study what had happened to its crew. The story develops in the second act when they receive a distress call from Venus, and the act ends in a battle against a hostile alien ship. In the third act the players arrive to the orbit of Venus and have conversation with their representative. They receive an ancient alien artefact, that is studied with the help of the World Wiki Book. The fourth act starts with the final battle, and if the mystery of the artefact is solved, they get more power against the seemingly impossible adversary.

The players can choose the depth of their immersion, as they are offered a possibility for light or serious RPG. They can also choose, if they want to follow the given storyline or make it as their own space adventure and battle game. They can also turn into villains and destroy Venus, if they choose to do so.

Message from Venus is a combination of various game genres, like action, role-playing, cooperation, verbal communication, space exploration, escape room and puzzle games and it has both digital and real-life environment. It is an immersive adventure to be shared with four players and it includes interactive storytelling. The players communicate with each other, with a real time NPC-character and also with a video clips of some pre-recorded conversation models.

The game encourages active and social approach, and probably attracts more people who are motivated more by the intrinsic than the extrinsic reasons. It is a good platform to study group dynamics and one own social skills, as well as problem solving and logical thinking abilities. Message from Venus is intended for “space nerds”, but suitable for other groups from children to elderly people. The target group is wider than in normal escape room games, as the StarScape’s room is accessible by wheelchair.
The world is heavily influenced by the retro sci-fi genre. The players will get some information on the world before starting the game, both when signing up for it, and verbally in-situ before the play session.

Besides being in the actual deck, the immersion will be enhanced more through costumes and lore. The players will be wearing futuristic-looking space pirate costumes and accessories, created for this game. There will be a wardrobe accessible to the players before the game, to choose items of their liking to wear in the game. There are jackets, pants and skirts, jumpsuits and overalls, cape and scarves, hats, jewellery and random accessories like eyepatches and tattoo stickers.

There will be more lore of the world in a World Wiki Book, containing both information and pictures that are relevant for the game, or just to deepen the immersion. The players need to check information on Venus before arriving there, and also crack the code for the ancient artefact with the help of the book.

Besides the World Wiki Book there will be other books (both created for this game and also “antiques”, like books about space). Also, random items will be laying around, as personal belongings of the previous crew.

**IMAGE 1:** Draft illustration of a game session. (Juju, 2018)
2. GAME EXPERIENCE

The game experience is designed to begin even before the actual game. For this, special attention is paid to the web page and pre-game communication with the players. Not just the game room, but the other premises will be decorated accordingly, to set the players to the right mood.

Before the game:

- Hearing about the game, from where, by whom, what kind of information?
- Website (the look, the content and usability)
- Booking the game, receiving pre-info
  → Guidelines for what kind of information the players should receive before the play session?
- Anticipations of the game
- Arriving to the location of the game
  → The style of other rooms in the same premises should be decorated accordingly. There will be at least a lobby, a toilet and a costume changing room.
- Arrival, meet & greet, friendliness of the staff
- First impressions
- Verbal Instructions, by who and what kind of
- Selecting and putting on costumes and accessories, do they feel fresh or used?

During the session but beyond the actual game:

- How the game starts
- How the game is ends
- Is it clear what to do, is it usable, is there something that is not working?
- Are the costumes uncomfortable?
- Is it too hot or cold in the room, or too loud noises?
- How is the newspaper print handed, in-game or after the game?

After the game:

- Meeting with the A.I., possibility for de-brief in-situ
- Leaving and parting pleasantries. Is there still time to reflect the experience before departure?
- Visiting the website for the digital memorabilia
- Leaving feedback, talking to others about the experience

Player emotion and experience goals:

I have refined the desired emotions, for the players to experience, in to curiosity, fascination, excitement, joy, stress and panic, enthusiasm to learn, feeling of togetherness, feeling of accomplishment, proudness (of oneself and of the group, also the feeling that others respect
oneself back). I hope, that the game would permanently change something in the player, for example enhance the feeling of ability to handle stressful situations, make social bonds stronger through working together as a team and having this experience together, maybe improvement in communication skills and discovery of new things from oneself and from others, for better, but can also happen for a worse.

I defined my target experience to be active immersion into another reality, “an escapist experience”. To make player feel like they would be on an actual space ship and feel like being the hero, the protagonist of the movielike adventure.

3. GAME ELEMENTS

3.1. Physical Game Room

The game room is an actual deck of a star ship. The fluid set design consists four flat screens embedded on either one big table or four smaller tables, and there is a big screen on the wall, that the players will be facing from their work stations. The players won’t be sitting in chairs, as I want the game to be accessible with wheelchairs. It is also a natural position for players to operate the screens, while standing, as they can move around more freely. Also, the game, at least to me, feels like a more activating concept if played while standing, rather than sitting more passively in chairs.

There are walls surrounding the room, so that it can be built to any kind of room, it just needs to be big enough, to enable passage to the game room.
IMAGE 2: Draft of the game room. This floor plan is designed so, that it fits to most rooms. The location of the door to the outer room does not matter, as the game room can be accessed through the corridors left between the room walls and the game room walls. (Juju, 2018)

Beside the touchscreens, there are haptic controllers that also affects the game. There is also sort of a “transporter cupboard” that will activate later in the game. There will also be lose items on the room.

Some things are hidden behind the wall, like all the electronics, the cables and wires and the speakers. There is only one door to room, and behind the walls there are space for locating all the things that needs to be hidden.

Everything in the room is supporting the illusion of being in a retro futuristic spacecraft. The shapes are round and lightly coloured and looking like plastic. There should be some details that serve no other function than just deepening the immersion.
3.2. Immersion Enhancers & Tangible Objects

3.2.1. Meaningful/ Significant / Important Elements

World Wiki Book

Physical passive object. Contains information on Venus, Venusians and their language, some vague mentions of the hostile aliens, and lot of world lore that is not relevant for the game. The World Wiki Book will be helpful when decoding the artefact.

Ancient Alien Artefact

Physical interactive object. There is a code, that is a puzzle made with alien hieroglyphs. It can be solved with the World Wiki Book.

3.2.2. Irrelevant Elements AKA Immersion Enhancers

Clothes and Wearables

Various clothes and wearables and accessories for players. Styles vary from retrofuturism to historical pirates to steampunk.

Random Items on the Deck

There are some personal belongings of the previous crew, that has mysteriously disappeared from the ship.

3.3. Big Game Screen

The big screen has six functions. It acts as the front camera window for observing the space in front of the ship or past shooting stars when travelling in space, it can show a model of the ship viewed from the above in the close distance flying mode, it shows discussion partner and reply options in the discussion mode, it can show the star map when planning routes or observing the processing in long-distance flights and it can also display video log files of the previous crew.

3.4. Personal Interfaces / “Game inside the Game”

The Pilot’s View: The pilot uses star maps to navigate in space for the longer journeys between planets and solar systems (often portrayed also to the main screen). In short distances, the view is changed, so that the pilot can do more specific and quick.

The Tactic’s View: shares the same closeup view of the ship as the pilot, but there are also different radars, weapons and shields visible and to be used.
The Mechanic’s View: The mechanic has an overall picture of the ship. He commands robots that move around different sections to direct power manually from the generator to different systems of the ship. The robots can also move the positions of the shields and cannons also repair possible damage and put off fires. But there are limited number of robots, so some tasks need to be prioritised, and that is the job of the captain.

The Captain’s View: The captain will observe everything, so there are all of the screens in the captain’s screen, to create a better understanding of the overall situation. During conversations, the captain operates the replying from his view. He can also access the ship record files from his interface.

IMAGE 3: A first mock-up for the four different views and actions to the “game inside a game”, the four-person space ship operating game (Juju, 2016)

3.5. Physical Game Pieces

There will be various physical interactive game elements, like buttons, switches, wheels, valves and levers. They will be used in various tasks that the players perform in the deck during the game. Sometimes players need to coordinate their actions, for example all the players need to press the same button on everyone’s work station, at the same time. When the players get to the space ship, it is in a power safe mode, and they will turn the power on by pulling down a big lever.
3.6. Pre-Recorded Videos

There will be pre-recorded videos, that are used in simulating the “real-time” conversations. As the players’ choice matter, the narrative is not settled and therefore there is a need to make more videos, than what the players will see during their game session, for various outcomes.

The videos will be recorded filming the actor standing in front of the camera, against a greenscreen. The background will be drawn with a computer, and the actor then implemented there. As the style is low-budget goofy vintage science fiction, most probably the actor is painted with body paint, has extra body parts and tacky clothing. The style of acting can be bit overly dramatic, but not too much. The colour world, as the clothes, possible hair and make-up, should have a 60’s feeling in it. The shades of colours will be adjusted to have a vintage effect.

**IMAGE 4 & 5:** Drafting the Venusian and the evil alien for the video calls (Juju, 2018)

3.6.1. Pre-acted Scenes

**From their mother ship at the beginning**

This is only a short video file. At first, they are greeted by a jolly pirate, joking something but in mid-sentence the alarms in both of the ships goes on and the video is shut off. The interiors of the pirate ship have a mixture of high-tech, old-tech and a lot of mess.

**Discussions with Venusian**

There are various different videos, when they are talking about words understood about distress, they seem distressed, when there is word help they look pleading etc. Can be shorter or longer talks, as the computer cannot translate all.
After each video there is room where the alien is still there but waiting for a reply. There is left about 1 minutes for each, when the alien is just sitting or doing something like moving around a bit or brushing her hair nervously with fingers and so on.

Flickering in the video effect is applied during transitions, so the videos would look more coherent together. It is also used if there is a need to continue the waiting video, if the players take longer to reply than what is the length of the video file, so there are few extra files made for this purpose that starts playing and looping over and over again.

1.1. explain and ask for help
1.2. tell more about things
1.3. artefact
1.4. thanks for helping

2.1. great heroes, thank you
2.2. feast, come down
2.3. make statues and spread their pictures in Venus, can you pose for a picture

3.1. ending loop file 1 hopeless, scared
3.2. ending loop file 2 nervous, restless
3.3. ending loop file, sad

3.4. ending loop file, excited and happy
3.5. ending loop file, smiling
3.6. flirting

→ to create authentic feeling, the A.I. can also play around with the discussions. There are also video recordings of single words, expressions, and sentences. There will be more disturbance in the video, so that it would not look like clued from variety of different video clips. This will create more realistic conversations and can be great fun, both for the acting A.I., as well as for the players.

There is a lot of details in the video, silhouette of a futuristic alien city is portrayed behind the Venusian lady, and there are also some interesting objects around. Room is nicely light and the costume and expressions of the Venusian are carefully thought of.

**Discussions with Hostile Alien**

There is really no discussion, there is only one video clip of the alien, first just looking at the players ominous under the shadows of the hood, then saying something that sounds scary and otherworldly, only few words said slowly and sounding like a loud whisper, before shutting off the connection. The whisper still stays to echo inside the ship of the players. There is not much environment to be seen, the picture is dark and somehow bit creepy.

**Animated Scenes on and of Space**
- The battle between their own and the enemy ship
- The enemy ship looming ahead and repairing itself
- The space fight with enemy ship & it is destruction
- Space map
- Flying in space (kind of star screen saver view)

**Captain’s video logs from their current ship** (done if time allows, not essentials for the game)

The players can access captain’s video logs and try to figure out the reason why the ship was abandoned. (They escaped the aliens? They were kidnapped by the aliens? The aliens set a trap? They had some horrible space sickness that just vaporised them into the air slowly? The reason why the ship is abandoned will be decided later, if there is any point to make these videos, as the players already have their hands quite full and it is not crucial to the storyline, it would be rather for curiosity.)

3.7. “Alien Google Translate” – Mechanic for Limited Discussion Style

The conversation with aliens will go by selecting, from among the known words and expressions of that language, words to form a sentence of some sort, and hope to be understood. The algorithms behind the conversation system will recognize meanings tagged to words, and based on those, the Venusian will reply from a variety of pre-recorded possible replies. For the constructing of a sentence, there is a basic model structure of a sentence that is just filled. For each part of the sentence, there is an empty slot, in which the players add the desired word from that slot’s category. The list for each slot consists of suitable words to be used in that part of the sentence, all translated Venusian words. When the Venusian replies, she is speaking in an alien language, which the computer translates, using these known words, to deliver the meaning for the players. But there is also a risk for miscommunication, as the language is not yet so known, and the aliens think with different logic.

3.7.1. Known Words and Expressions in Venusian Language:

**SUBJECTS**

**Places**
place, Earth, Venus, planet, space, sky, land, ocean, star, galaxy, air, gas, liquid, solid, plasma, gravity, black hole, here, there,
(example: somewhere = no here and no there)

**Someone (beings)**
human, Venusian, me, you as one, it, we, you as many, us, they, other, thing, god, ruler, slave, animal, plant, alive something solid and air, dead something solid
(mine = me own)
Something (not physical things)
no solid something / air something, no solid thing / air thing, hope, despair, language, peace, war, danger, language, knowledge, power, time, time that had been, time that will be, time that is, result of something, what something is called/name, story, all that is no solid, dead something, air, something to hear

Something (physical things)
this, that, solid something, solid thing, present, weapon, vessel, shield, engine, book, face, mouth, eye, nose, all that is solid, something to eat / drink / smell / see it?
(spaceship = space vessel)
(the ancient artefact = much old solid thing from time that had been)

VERBS
am, is, do, go, can, will, own, eat, drink, smell, hear, sleep, harm, help, fight, destroy, repeat, slow, fast, hurry, wait, laugh, cry, like, meet, search, look, speak, learn, trade, buy, sell, give, understand, try, know, use, stop, sit/lay, stand
(get out of here = you go not here / come here = you go here)
(I have a problem = me own bad air thing)

ADJECTIVES
unknown, known, bad, good, wonderful, horrible, careful, big, small, many, little, more, less, old, young, happy, sad, safe, dangerous, on, off, sorry, free, fun, fast, slow, soon, late, close, far

NUMBERS AND MATH
0, 1, 2, 3, 4, 5, 7, 8, 9, 10.
+ - ÷ x
(108 = 10 x 10 + 8)
(1012 = 10 x 10 x 10 + 10 + 2)

OTHER WORDS
and, but, if, no, yes, then, from, by, to, as (therefore, that?) (for? of?)
very, maybe, again, for sure
sorry, please, thank you as one/ many
hello, good bye

QUESTIONS
why, what, who, when, where, how, what kind of

3.7.2. How to Build Conversations

Who/what does how/what kind of / object
- Subject (who/what – can be sometimes also be an adjective like unknown, evil...)
- verb (does/is)
- adjective (how, what kind of)
- object (another subject: what was made/ used/ created)
And then, possibly
- reason (why is subject did so: because) OR cause (what happened as a result: therefore, and then, causing, as a result)
+ one or all of these:
- adjective (for the next subject - the mood of maker, the quality of the result: angry, evil, catastrophic)
- subject (the used in the beginning or something that happened because of it: he, the test, the flight)
- verb (happened, wanted to, exploded, laughed)
- adjective (to describe the verb, how was it)

EXAMPLES (Basically, just adding words together very simply! Using negative if needed)

“Thank you many human solid thing, you go here! We are many thank you. Me is (name), Venus planet ruler.”

“We need help many, bad alive something solid and air will come and try make us slave.”

“They make us space vessel go to time that has been, all that is solid space vessels be no solid. We have no Venus planet shield. We like peace. Them no like peace. Them is soon go here.”

“This is much old solid thing from time that has been. We learn this, know that much power have. No solid space vessel no can try. You as many learn and try and use?”

“You as many solid thing from earth, go close, stand good. Close! Slow, slow. Look, here. Laugh! Happy! “

3.8. A.I. - Personal Helper

A.I. takes action whenever needed. A.I. is responsible for curating the game, seeing that the players manage everything under the time limitations. A.I. can also narrate the discussions with Venus, if players don’t seem to understand or just to make them more interesting.

The person acting as the A.I. will be speaking through a voice changer, or typing on a computer with a voice assistance (but in this case, the possibility for misspelling is a problem). The tone of voice is soft and pleasant, maybe a little bit dreamy.

It is a possibility, that the person behind the A.I. could also operate parts of the ship, like lights or smoke machine. Or somehow save the players from a critical hit, if they are not skilled enough to make an evasive move, or adjust the difficulty level on the go. But the need for this will be revealed in the game testing sessions with various different player groups.
4. GAME SESSION – FULL SCRIPT OF THE GAME

Below is the script for all of the game events and the story line, the required player actions, the involvement of the A.I., the room’s change in stages, the different screen views and the order of the video clips.

IMAGE 6: The structure of the game session (Juju, 2018)

4.1. Following the Given Story Line

Act 1: “From Confusion to Control”

The four players, dressed up as retro futuristic space pirates, have just landed to examine a drifting, abandoned space ship. At the very beginning they witness a fight between their ship and the hostile aliens, and see their ship being destroyed. The pirates also engage into a battle, and at the same time they learn the basics of how to operate the ship. They need to divide roles among themselves, as there is a different operational interface for the captain, the pilot, the tactic and the mechanic.
The Beginning: The players enter the deck and the doors close behind them. They notice that the room is dimly lit, and all the screens are black. The ship seems to be in a power safe mode. (See “5.2.2. Set Up of the Game Room for a Game Session”)

Room: There is a sort of metallic smell, with a hint of something bit rotten. The air is cool, and rich with oxygen. There isn’t much light, and those few sources of light are flickering. The minimal lighting has a red tone. There are some lights guiding the focus of the players to the big power switch, which also looks obvious to touch as it is huge and red.

Player Actions: Players need to find the power switch and turn the power on by lifting the switch up.

Room: The lights turn on, as well as the four touch screens and the main screen. There is a sound of engines powering up, and the lights flicker few times before fully turning on.

Touch Screens: In touchscreens there is introductory display in each, also displaying the title of the person who should be controlling the screen.

Big Screen: Video clip 1.1: front camera mode: They are orbiting some exotic looking gas planet with several moons and some other big planet rising behind it. There is a ship floating in front of them.

Room: They hear a soft sound, sort of loud but soft electronic tone.

Tactic’s Screen: There is a message flashing in the screen.

Player Actions: They need to study the tactic’s screen and see that there is a call from the other ship. It needs to be send to the captain’s screen for approval. This is also a short introduction for that there is a different game mechanic for each screen.

Big Screen: Video clip 1.2: discussion mode: The pirate captain from their own ship starts to speak to them, joking something and asking about the ship they have just landed, but in mid-sentence, before they have a chance to reply, alarm in their ship goes on, like in the pirate’s ship as they can hear through the video (but with a different alarm sound as they are different ships). They see from the video that there is also other person on the deck, who is shouting to the captain about an approaching unknown vessel. The video is disconnected and changes to video clip 1.1.

Room: They hear a disturbing alarm and the screen of the tactic is flashing again, this time with danger -sign. There is an old fashioned red light rotating like in a light house, but faster. After a while, there is also audio warning repeating “Warning, warning! An unidentified ship is approaching! All hands at the battle stations!”. The audio warnings can be muted from the captain’s display.

Player Actions: The players have a change to take positions, but probably they are just witnessing what is happening as the situation turned chaotic and quite ominous very quickly. The ship’s alarm system is distressing, as a good warning system should be.
**Big Screen: Video clip 1.3:** front camera mode: same as 1.1. but they see a huge and mean looking ship rising from the behind of the pirate’s ship and stops there in front of it for a moment. Then they witness the two ships engaging into an epic space fight, only to see a short moment later their ship getting blown to space dust and debris. They see the hostile ship still there, but it is smoking and some sparks are flying off from it. Occasionally it moves a bit, or there is an occasional bigger burst of flames and some small pieces coming off it. There comes some sort of repairing robots, that are moving around the ship. The more time that passes, the less it looks like breaking apart and slowly attempting, all the time with more and more success, to power up their weapons, which is visible from the increase of time the heating colour is visible and in the intensity of that light in their plasma cannons.

**Player Actions:** Now is time to act. Every player need to take position behind one of the screens. There are four different views, one for captain, one for mechanic, one for tactic and one for pilot. Soon the players figure out that all of them are connected and they have to cooperate to get the ship operating. Once all stations are manned, the view changes to close distance flying mode.

**A.I.:** If the players at some point seem that they do not know what to do, the space ship has artificial intelligence interface, a soft computer voice, that is giving them advice whenever it seems to be needed. The first battle is crucial, as this is the moment the A.I. is probably most needed.

**Big Screen:** close distance flying mode: The first battle. After the players have managed to get one hit to the enemy ship, it starts to move and fights back. This is the first space fight in the game, but easiest as the enemy ship is crippled. The players will defeat it.

The captain has the same view as the close distance flying mode, which is not as detailed as the same view tactic and pilot has, as they are observing the battle from their point of view. Captain has also some extra statistic in his screen, but it is easier for captain, as well as other crew-members, to observe from the big screen how the over-all situation looks like. But at any point at the game, a person can share their screen at the big screen, or captain can share their screen on their behalf.

**Player Actions:** The debris in space that needs to be avoided and the need to deliver enough hits to the enemy ship. The players need to learn how to communicate between stations to get their ship to fly and shoot. There are less chaotic cooperation elements, that will come later in the game, as players need time to get familiar with their interfaces and how to operate them. There are few verbal random instructions that needs to be given to others, to familiarise players also with this aspect in the game.

**Touch Screens:** The captain sees the overall image, and additional view for the power sources in the ship. Mechanic sees the hits they receive, tries to fix them with small robots he controls, and operates with the dividing of the power. He also needs to inform if the ship needs to be turned or the shield moved somewhere, if some part of it looks like they have taken too much damage. He also monitors that the cannons and engines do not over heat and observes the durability of the shield. The pilot operates the manoeuvring in debris and trying to move away from the hit range of the enemy ship, but tactic needs to give him
directions to be able to aim properly with the cannons. The tactic has some control of the aiming, but the ship needs to be turned for better aiming. Tactic also moves the shield around their vessel. The captain decides where the power is taken when needed elsewhere, and mechanic does this dividing by operating the valves.

**Game Room:** There are battle effects during the battle. When they get hit, there is a sound of impact in a distance and if they got more seriously hit, the sound is coming from closer and it also sounds like breaking metal and plastic. If their ship is badly damaged, there will be smoke coming until the mechanics has managed to do the repairs. Also, after the fight, before their ship is fixed, it makes creaking sounds like it would be breaking a part. There could also be heat with the smoke, if possible, and the smell of something burning.

**Big Screen: Video clip 1.4:** Once the hostile ship is defeated, it explodes. The camera mode changes to front camera mode: same as 1.1 but instead of pirate ship, there is only debris of two space ships floating around. Nothing else happens, except for the debris, moving in various speed and directions, in front of them.

**Act 2: “Call for Heroes”**

*It is time to examine the ship more and learn what happened to the crew. After some time of orientating, the pirates receive a distress call from Venus. They set a course there and on the way study more about Venus and try to find information on these hostile aliens. On the way they will encounter another fight.*

**Player Actions:** Now the players are given opportunity to relax a bit and have time to search the ship. They find random objects, that may have nothing to do with the story, like some books and personal notebooks and other random stuff. If they want to, they can access the captain’s video logs and try to figure out the reason why the ship was abandoned. They can choose to already start space exploration (explained later) or just stay at their current location.

**Room:** They hear some strange, rasping noise with a lot of disturbance coming from their speakers.

**The Mechanic’s Station:** There is a possibility to tune to voice with a mechanical tuner. There is notification and instructions flashing on the screen. A.I. Helps player to adjust the sound, if the players don’t notice the notifications.

**Player Actions:** The players need to adjust the sound so that they can make sense of it. It is totally alien. A.I. Asks if the players want it to be translated. Then tries to translate word here and there. The message cryptic, and weird, but it is obvious that help is needed at Venus. A.I. guides the players how to navigate there, if they don’t manage themselves.

**The Tactic’s Screen:** The tactic can share the space travel view with others in the big screen. It is a huge star map, and players need to find Solar System from there. It can be zoomed in and
out. A.I. helps them to draw a good course that takes velocity from passing suns, and the course is laid and engaged.

**Big Screen:** travelling in space decorative mode: The stars are shooting past the screen to create an illusion of speedily moving ship.

**The Room:** The Engines are making different kind of sound when they are moving in space.

**Player Actions:** On the way to Venus the players can study what is known of Venus. If they do not realise to check the World Wiki Book, the A.I. suggests it. They are kind, but shy and introvert race, green skinned and matriarchal. There has been some contact, but since last contact it is been decades.

**The Room:** At some point, very near the Venus, the warning for approaching unidentified ship approaching goes on with the same sounds and lights and messages as earlier.

**Big Screen:** Now the approaching ship is seen in the big map as a dot that is approaching. When the view is changed to the close distance flying mode (**Video clip 2.1**), they see a sinister looking ship approaching them in otherwise clear and starry sky. It resembles the first vessel but looks slightly different.

**The Room:** Without any action from the players, a scary sound fills their ship. It sounds like untuned, both high and low howling, both organic and metallic, both silent and loud. Few times it breaks completely silent, and then there are rasping, weird sounding words.

**Big Screen: Video clip 2.2:** The approaching ship starts the fight without any other warning.

**Player Actions:** The players need to fight the ship like earlier. This time there are more chaotic cooperation elements, occasionally someone does not see their screen or cannot perform some activity they want to do in the game, unless some other player does some action in their station. These chaotic instructions are all involving the physical game pieces, so players need to be more active, both shout instructions or perform some physical activity in their station. These all activities have technobabble terms, to make the gameplay more chaotic and fun.

**Game Room:** The battle effects during the battle.

**Big Screen:** When the close distance flying mode is changed back to front camera mode (**Video clip 2.3**), there is the same view as in 2.1. but with some debris flying around.

**Player Actions:** They players continue on the course to Venus on space travel mode.

**Act 3:** “The Venusian Trouble”

*Upon arriving to the orbit of Venus, the pirates are greeted by a green alien lady who is the representative of Venus. She tells them about their troubles with the bad aliens, who are*
planning to conquer their planet and doom them for eternal slavery. The Venusian leader hands them an ancient artefact, that is some sort of a power enhancer. They need to find out how to use it against the nasty aliens.

A.I. Informs the players that they have arrived to Venus.

**Player Actions:** They need to change to the front camera mode.

**Big Screen:** Video clip 3.1: front camera mode. Their ship is orbiting the Venus, and the sun is slowly descending behind the planet.

**Tactic’s Screen:** Informs that they are being hailed from the planet.

**Player Actions:** the tactic needs to divert the call to the captain’s screen. Captain needs to answer.

**Big Screen:** Video clip Venus 1: There is a beautiful green-skinned woman, pleading for help. She is representing the Venusian people. The communication is done with delay, as the computer’s translation program tries to translate the weird talk the best it can. The reply is formulated together, captain operates the sentence formation but everyone can see the selection of words and expressions. As they continue discussion, the program offers the most suitable reply of various pre-made videoclips of longer sentences or just words (Video clip Venus 1-X, see “3.7. Pre-Recorded Videos”)

**Player Actions:** From the conversation the players need to figure out why the Venusians are in trouble and they can offer to help. The green folk at Venus are in trouble. The horrible aliens, that also destroyed the pirates’ own vessel earlier, are keeping the whole Venus in captivity. They aim to make them their slaves. They have no operating ships because they got destroyed and no weapons, as they are peace loving nice aliens.

At some point, when the players promise to help Venusians, the alien lady asks players to pose in front of the screen, for picture of their brave heroes – no matter what will happen, they will paint pictures and build statues of them.

Then the Venusian say, or what is understood of the conversation, that their history books claim, that they have encountered this kind of aliens before, a long time ago, and even though they are not entirely sure what happened, there is an ancient relic left from that time, that the Venusian leader presents to the players.

**The Room:** The Venusians beam the ancient artefact to the player’s vessel, and there is a transportation cupboard from which the actual object is to be found, with the help of A.I. if necessary. There is an electric lock in the cupboard, that opens when the object is “being sent”.

**Big Screen:** When the discussion mode is disconnected, the Video clip 3.1: returns.
**Player Actions:** The players need to study the artefact with the World Wiki Book. There is a puzzle, that needs to be solved comparing some hieroglyphs in both items and making some conclusions based in those. There are buttons that need to be pressed, and if they are pressed accordingly, the object starts to shine, and possibly make a sound.

**Game Room:** While the players are studying the object, the warning for an approaching ship goes on.

**Big Screen: Video clip 3.2:** Soon after the warning, they can see another vessel approaching, reminding of two earlier vessels, but more intimidating.

**Mechanic Screen:** When the players solve the puzzle in the artefact, immediately the screen informs with flashing lights, that their ship is powering up with some unknown, extra power. This will affect their ships durability, speed, manoeuvrability and weapon power.

**Act 4: “Time for Heroes”**

*The pirates will encounter the evil aliens in a final battle. It first it seems impossible, the odds are not even. But if they manage to solve the puzzle and figure out how to use the power-tool, they will beat “the final boss”. The Venusians are delighted, they ask the pirates to pose for a picture to be presented around Venus and they invite them down to their planet to celebrate.*

**Game Room:** Almost right after the players manage to activate the artefact, another warning goes on for an approaching vessel.

**Big Screen: Video clip 3.3:** Behind the Venus, players see a huge planet destroyer emerging from behind the planet, multiple times larger and mean-looking than the first ship.

**Big Screen: Video clip 3.4:** The huge ship stops at some point, and the first ship, that earlier looked worse than their earlier encounters, looks shrunk next to it. The planet destroyer is so big, that it is almost blocking the Venus from their view. The sun had disappeared behind this vessel, only the sharp black edges are somehow glimmering in a blood red colour.

**Big Screen: Video clip 3.5:** Without any action from the players, an ominous looking, hooded alien is looking at them from some unknown darkness. They don’t see the face of the alien, but sometimes glimpse from an evil eye or just quickly a small bit of a scaly skin. The alien is saying something to them, but it is hopeless to understand, even the A.I. can’t help the players. The alien is whispering slowly, only few words at a time, but there is something threatening, even haunting, in that cold, empty voice. This is only a short video, and as the alien shuts the communication Video clip 3.4 comes back.

**Game Room:** After the alien shuts the video, the threatening whisper still echoes in the room for a while.

**Player Actions:** The players fight, now against two ships, like earlier in the game. The smaller one is easy to defeat with the enhanced vessel, but the larger one is more difficult. It is
possible to lose even with the artefact, but with good teamwork and steady flying and fighting, it is possible to defeat.

**Game Room:** The battle effects during the battle. If the smoke has not been present earlier, in this fight there will be smoke as well, also all sorts of sounds of impact and breakage, also ones that have not been heard before.

**The Ending:**

**If the fight is Won:** The players see the planet destroyer exploding to billion pieces. They are hailed from Venus, and the lady asks them to join for celebrations. During this, A.I. prints the “Venus Daily Magazine” frontpage with a picture of the players that was taken earlier and partly translated article of great heroes, and places it in the transportation cupboard. A.I. helps players to get the print and to leave the room by instructing them to head towards the transporter room that is located outside of the deck, if they don’t realise to open the door by themselves. A.I. wishes them pleasant celebration.

**If the fight is Lost:** The game ends with loudest bang ever heard in the game, and all lights turn off. There is only the sound of A.I., which says some punch line to end the game. A.I. comes to the room with lights, and thanks the players. He/she hands the print of the “Venus Daily Magazine” frontpage with a picture of the players that was taken earlier and a partly translated article of the fallen heroes and the misfortune of Venus.

4.2. Taking an Alternative Paths

The game inside the game has to be so entertaining, that taking the alternative path is also enjoyable during the one-hour long game session.

There will still be an artefact to be found, from some wreckage of a ship they destroyed, or floating in space, so they will still have some elements from the actual game.

**The Endings:**

**WINNING**

To the transportation cupboard the players receive a print of a “Wanted Dead or Alive” poster, where is a picture of the players, secretly taken by the A.I. during the gameplay, and some story of the pirates that has stolen a ship and causing mayhem on space and there is a reward promised of them.

**LOSING**

The A.I. comes to the room at the same time as the lights turn on, and thanks the players. He/she hands them a print of the “Cosmic Times” magazine frontpage, with a picture of the players, taken secretly by the A.I. during the gameplay and a story of the wretched life of the space pirates, moving from misfortune to another, and an advice to all the good citizens to avoid the life of pirating and benefits of choosing law and order.
IF PLAYERS DESTROY VENUS
To the transportation cupboard the players receive a print of a “Wanted Dead or Alive” poster, where is a picture of the players, secretly taken by the A.I. during the gameplay, and some story of the horrid pirates that have destroyed planet Venus, and that there is a galactic reward promised of their skin.

These newspapers and posters could also be in some weird alien language, written in some mystic hieroglyphs and have a weird layout.

5. INSTRUCTIONS AND PRACTICALITIES

One game session is running every 1,5 hours. In between each session there is 0,5 hour to set up the room, as well as time for the players to take off costumes before the next players arrive. There is also around 5-10 minutes flexibility in the schedule to give a little extra time, if it looks like that the players are enjoying the room a lot and almost finishing it, but this something to be of thought later.

5.1. Customer Service

The customer service needs to be top-notch to ensure maximally enjoyable experience. Genuine friendliness has to show in all actions with the customers, was it from the answering the phone or emails, meeting and greeting the players, giving instructions and later ending the game, de-briefing and saying thanks and goodbyes. Tone of voice is warm, caring, joyful and happy. All questions are to be answered without any hurry, and with all the focus on the other person. If there are any problems affecting the quality of the customer service, like the time schedule is too tight for this, then the problem needs to be resolved so that the customer service experience will never suffer.

5.2. A.I.

The A.I. monitoring the game also helps the players without them needing to ask, of course not too much, but maybe if the players look like they have got stuck. Then the A.I. can ask if they need any help: “You seem to be wondering something. May I offer you some assistance”. The help can either be tips, or concrete information on what to do, depending on the level of the players and of the remaining time.

The A.I. can also narrate the replies of the Venusians by overriding the algorithm and taking over their replies. This may make them more accurate and interesting, although part of the fascination comes from the totally strange language and the use of it, and the computer-generated replies are good for this purpose. If instead of the pre-recorded sentences single words are used to build reply sentences by the A.I., there needs to be more distortion added to the video clips, to make them look more coherent.
The A.I. during the game session prepares the print handout (was it the magazine or a poster), this requires a photo taken of the players during the game play session (there will be camera in the room). The picture is added to the frame in a computer, and printed out before the game ends. The video and photo recordings of the game session will go automatically to photo folder, which link is sent to the players after the game.

5.3. Marketing

The brand image needs to be thought with a marketing specialist. I kind of would like to embrace the awkwardness, be somewhat fool but very cool, and emphasise the ability to laugh at ourselves, the playful attitude and not taking everything too seriously. Would be nice to have more right humour to this world. Something bit silly, so that people can together be also bit silly in that silliness.

For the first players a free game session is provided with additional gift cards, if the videos and photos taken from their gameplay can be used in the marketing materials.

The community will be built with a plan, and players feel like they matter and they are heard. Most excited players can also contribute to the next episodes.

5.4. Durability Concerns

The materials used in the room needs to be durable enough to handle most possible use scenarios. Spare parts need to be available. The room is checked after each session, naturally while it is being set-up for the next player group. The clothes, wearables and the gear should be made of durable materials and all washable. The methods of theatre costume design and sewing should be studied, as the clothing to stages have to handle a lot of stress and washing. There should be plenty of items to choose of, possibly duplicates, as the clothes that were on the previous game session are taken to “cool off”, so that they are not sweaty or warm. The clothes are washed often, and other materials cleaned. The room is kept tidy as well.

5.5. Accessibility

Accessibility with a wheelchair is already in the plans, but of course a lot depends on the type of building the room will be located. The youngest active players are probably around 10-years-old, so the surface of the table should be low enough to be accessible both with a wheelchair, or with the hands of a 10-year-old. There should be an additional small stand available, if there are shorter players than anticipated. Maybe if some people would like to bring their small kids with them, there could be toys that fit the theme and the space ship, for the kids to play while the adults play. Not sure yet if this would work, but keeping an open mind. The various language versions are easy to translate, as the videos are mostly in alien language.
5.6. Other Stuff

All the interiors visible to the player, besides the game room, should all express the theme. They don’t necessarily have to be space ship or even space related, but the 60’s vibe is very strong everywhere, even in the toilets.

The Message from Venus could also could act as a teamwork simulator. Maybe teams, were they work, school, sports, friends or family related, could come there to test their ability to work together as a group. There could also be possibility to play with strangers through a matching up service provided. And it could also offer interesting venue for various events, like double dates or even blind date or a game session just for singles. Also, for gamers, especially for live action role-players, Message from Venus offers interesting gameplay possibilities. They could rent the space to arrange games there, as the environment is so well done, or indulge themselves fully in the offered game scenario, “in character”.

6. THE RULES

6.1. Rules for the Game Session

- There are 60 minutes to finish the game. It is possible that the game is bit shorter, if the players don’t defeat the final boss, or if they choose to go off for their own adventures and lose in a space fight before this. It is also possible to lose in a battle before reaching Venus, if the players are passive and let themselves to be destroyed, in this case the game will be much shorter. The StarScape is not responsible for shorter game sessions than 60 minutes, as it is designed so that for normal players, no matter what the basic level is, it is doable to reach the final boss, if they are motivated and work together. If the game session is shorter than 60 minutes, or the players do not defeat the final boss, a discount is given for the next game session.
- The game requires communication, cooperation, logical thinking, observation and active approach. Trying and error is emphasized.
- Players are asked to leave their belongings outside the room. No mobile phones are allowed in the room, unless there is a heavy reason to do so.
- “Touch everything but break nothing!” Physical power is not required. Also climbing on things is not necessary. There are also delicate objects, that should be handled with care. The player who intentionally breaks something is held responsible to pay for the damages.
- The players should not take anything from the room with them, either the costumes and props they get to wear. The only physical item they get to take with them is the memorabilia, newspaper print they get after the game.
- There is an emergency exit in the room, the player can leave the room and return, although it is not recommended.
- There is a person observing the game play to help them when needed. But only it is revealed to the players that the person observes, not that he/she also interacts with them.
- The game session will be recorded, but this is not told to the players beforehand. The players will only see the video and can share clips of it / the whole gameplay if they choose to
do so. The video will be uploaded and link sent to players, they can also make short edits in the webpage in a simple editor and send them to social media. The picture that is taken after game is posted to StarScape’s social media, unless the players wish otherwise.
- There is possibility for flashing lights, loud sounds and smoke, players are warned of this beforehand. If this could cause a health issues, players are asked to contact StarScape beforehand for adjustments for their game session.
- Children under 15 years are asked to be accompanied with an adult.
- The players should arrive at least 15 minutes before the game session starts, to get instructions and to dress up. The players who arrive late will either get no time to change outfit, and if they arrive too late they will get a shorter session (the game might end before the story ends, which would be unfortunate). In this case, the players have an option to book another game session, as the whole experience is recommended, with a reduced price. In this case they still need pay for the session that was not held.
- Players need to be sober to play the game, being under influence of alcohol or other drugs is forbidden.
- StarScape reserves the right to refuse entry or remove from the room during the game, if player poses a risk to the room, other players or themselves. In this case there will be no refund or other compensation.
- The players are playing the game at their own responsibility. StarScape is not responsible of any physical or mental damage that may happen in the room. The room is safe, and the game should not be shocking, but in the end, the players are responsible of themselves.

6.2. In-Game Rules

- Players divide the roles among themselves as they choose, or can rotate between them.
- Players choose how they want to play the game.
- The players are told about the A.I., artificial intelligence, that helps them whenever they need. They just need to ask the computer whenever in doubt, on how to operate things or in the course of action.
- They can decide whatever course of action, they don’t need to follow the story, they can also just explore the space. During conversations, they can also choose whatever course of action, but should know that their actions count.

6.3. Goal, Reward & Victory / Failure Condition & Alternative Endings

The goal is to beat the final boss, that requires “unlocking” the puzzle of the ancient artefact. The reward will be a physical print of a Venusian newspaper, with a story of the brave heroes. If players fail to do so, or do not beat the final boss in the given time, they are destroyed and lose the game. Still they get the newspaper print, but the story in the newspaper will be different from the victory story.

At any point, the players can choose to lose - if they won’t fight when someone is fighting them, they will eventually lose. The game ends earlier. But this would require doing nothing and therefore giving up.
The players can decide not to go to Venus and instead explore space on their own. There will be random space battles. When the time is up, the ship either is destroyed due some reason (surprise attack, space junk / asteroid) or just shuts down (out of fuel) or the crew starts to hallucinate and they will die like the previous crew (with some special effect!). The most satisfying alternative endings need to be research with play test sessions, and if there is a need of pre-warning of some sort 10 minutes earlier.

The players can also attack helpless Venus, destroy the main capital. In this case the hostile aliens arrive and are really, really upset. As the players do not have the ancient artefact, they will lose against the hostile aliens.

If the players choose to do space exploration instead of aiming to save Venus, they will still get a newspaper print, but in this case, it will be a story of Earth magazine and of the mighty pirates beating unknown hostile aliens on their adventures. If the players lose the game before the 60 minutes is up, then the story is about fallen heroes, but if they succeed to stay alive for 60 minutes, the story is about their unknown location and last point of contact. And if they destroy Venus, they will be presented as villains in the newspaper. In this case the picture is either in-game photo taken from the crew, or they will pose for the picture after the game session.

7. FUTURE POSSIBILITIES WITH SAME SET-UP

After Message from Venus, StarScape will have more episodes that are done in the same set up, all using the same game room and the virtual game. The stories will be different, with different content and goals. The gameplay is similar in each, in all the players are acting as heroes, but instead of being pirates they can have different roles. It would also be possible to engage the audience and co-create stories with passionate enthusiasts.

It is also possible to make alternative versions for Message from Venus, various language versions and also adjust the level of easiness or hardness of the game. The game also works as a cooperative space fighting simulation, and for players returning to play it, it is possible to leave the story out and enable them just to enjoy the room as a space ship battle game.

The game is already accessible by wheelchair, but in the future, it would be nice to make adjustments or special editions for people with limited sight or hearing. The senses are already involved with different sights, sounds, smells and skin sensations. There is not yet nothing to taste, but in later episodes that could be a possibility. Also, a vibrating room would be great, so the players could feel through the floor when their ship got a hit from an enemy ship, perhaps in a more hard-core version the room could be shaking and moving even more.

As I am enthusiastic about offering possibilities for people to meet new people, the players could also be matched with random players, if they apply to do so. They could apply for more casual, or serious RPG play sessions, alone or with a friend.
It could be possible to attach other rooms to the commanding deck to broaden the game area, for example to have a landing vessel that has screens as windows and players sit inside, control it mechanically and use it to examine planets and moons closer.

Virtual reality (VR) could be implemented. There could be one VR-headset abroad, and players would take turns to do small missions with it. Like controlling a robot that spacewalks outside their spaceship, or does some missions down at some planet. It could be also possible to enable all four players to simultaneously experience a VR-adventure during the game.

Also, including augmented reality (AR) would be relatively easy. There could be a handheld device on the deck, and it could be used to scan gas leaks or unknown lifeforms and organisms, that are not visible otherwise. They would show up in the screen as added, moving elements.