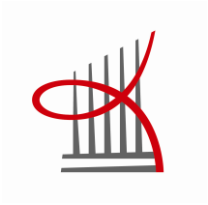

# Rogues of the Void

## Design process of a space board game

Riku Heino

Bachelor's Thesis
April 2014
Degree Programme in Media

TAMPEREEN AMMATTIKORKEAKOULU
Tampere University of Applied Sciences

**ABSTRACT**

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This thesis is about the design process of a space themed board game and board game design theory in general. The question is: do thematic games require some design sacrifices for the sake of gameplay and what are the ways of avoiding doing so. The purpose of this design project is to study these phenomena and prove if these problems are avoidable in general. Secondly, this thesis is meant to introduce board games and their functionalities to readers who are interested in board games and board game design.

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Keywords: thematic board games, game design, production, board game production

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## ABBREVIATIONS AND TERMS

| | |
|---|---|
| Co-op | Cooperative gaming, players versus the game |
| Thematic | Theme-heavy games that focus on the setting |
| Ameritrash | Mechanically heavy games, often with immersive theme |
| Eurotrash | Mechanically light games, usually with little or no theme |
| Classic games | Classical, purely mechanical games e.g. Chess |
| NPC | Non-player Character |
| 1D6 | One six-sided dice |
| 2D8 | Two eight-sided dice |

# 1 Introduction

This thesis mainly focuses on the design process of a space themed board game called “Rogues of the Void”, and secondarily on thematic board games, where the players are given a setting that they can relate to and feel connected to. The reason why I chose this topic is my professional interest in game design, and a personal interest in board games. As my real desire is to work in the games industry, I thought that having this project as a design experience would be very beneficial in the future.

The main goal is to introduce some of the most common ways to ruin otherwise good board game design. There are a lot of common mistakes that are being made every time someone is designing a board game, most of the time due to lack of experience. However, sometimes these mistakes are being made simply because they exist in other games too. Traditional board games used a lot of these mechanics and gimmicks, but as game industry is supposed to be a very iterative field of business, most of these mistakes simply refer to poor judgement and bad design habits.

This thesis will introduce and analyse many game mechanics that were considered to be inventive ten, maybe twenty years ago, and also some of the later mechanics that are iterative, but not very good in terms of playability of the game. Also, we will try to find alternative ways around the problems that these game mechanics are trying to solve, and ultimately design a board game that follows these presented guidelines.

## 2 Thematic Board Game Design in a Nutshell

Board games in general are games that consist of moving physical representative items, most often around a board, according to the rule set of that particular game. The rules of a board game define how the game is played, what physical actions it requires and how the game ends. The definition a thematic board game, in another hand, is just an extra layer of information about a certain board game. If a board game is thematic, it means that the game has a very strong theme with a lot of backstory, or that the theme is very involved in the game mechanics, however it can also be a combination of these two.

*"Game design, in its most pure sense, is the creation of the rules that govern the gaming environment. At the base of every finished game is a game design. Strip away the techno-geek graphics and the ambient sounds. Strip away the marketing hype. You are left with a set of rules driving minimalist iconic representations."*
'Evolutionary Design: a practical process for creating great game designs' (http://lunar.lostgarden.com/evolutionary_game_design.htm, Daniel Cook, 2000)

Board game design in its essence is a matter of finding a way to represent the setting and the actions of a game in a mechanical way, that makes the players feel connected to the game. However the execution of these principals is what truly makes a difference. Thematic games not only live around the theme and setting of the game, but they also require the mechanics to be connected to the theme. It would be quite absurd to roll a die in Monopoly to see if the player is able to roll a die for movement, but for example, having to do that in a space game would make sense, perhaps because your engines are so badly damaged that they don't work properly. Not a very well thought analogue, but see what I mean? The spaceship has a setting based reason for not being able to move, the hat in Monopoly really does not.

If the game mechanics can connect the player to the setting they can be considered believable. After that comes in the idea, that the players need something interesting to do in the game. This is not necessarily about the things that players can do, more about the ultimate goal, winning conditions so to speak. There are a lot of board games that rely heavily on the journey instead of the goal, but having setting related a purpose for your journey makes it much more interesting to play. Think about having a great journey, and then add in an interesting goal, a purpose for the journey. It makes a huge difference without really ruining the journey itself.

Shortly put, thematic game design is mostly about connecting the players to the game world through believable and engaging game mechanics that connect to the theme. There are games that are all about mechanics, but this thesis's focus is on the thematic side of things. The image below (Image 1.) illustrates how different games have different amounts of components and details to them. The game on the left is '*SiegeStones*' by Live Oak Games and the game on the right is '*World Of Warcraft: The Board Game'* by Blizzard Entertainment.

Image 1: Components (Photos by in order: Live Oak Games, Blizzard Entertainment)

# 3 Cross-section of Board Game Design

Shannon Appelcine wrote about how a board game can be defined by just breaking it into five rudimentary elements: components, activity, decisions, luck and victory. This division should be considered more as a generalization instead of a rule.
(Shannon Appelcine, 2006,
http://boredgamegeeks.blogspot.fi/2006/03/theory-of-board-game-design.html)

## 3.1 Components

Components are divided into four types of subcategories, which are environment, tokens, markers and randomizers. In most cases, these act as a physical representation that help connecting the players to the game.

### 3.1.1 Environment

Environment generally is the game board itself, which in Rogues of the Void I wanted to represent 3D space on a 2D plane, which is basically impossible. However, a hexagonal grid visually represents the feeling of space quite well, which is much more important than anything else in a thematic board game. The feeling that the board gives must represent the setting well. A good example of a very good environment in a thematic board game is '*Arkham Horror*' by Richard Launius & Kevin Wilson (Fantasy Flight Games, 2005), where the board is a basically a drawn map of Arkham, a fictional city in North-American soil, in which a lot of H.P Lovecraft's horror stories take part. The game itself is based on these stories so the connection here is exceptionally strong.

### 3.1.2 Tokens

Tokens represent pieces or game elements that are part of the game world, usually used for representing items and objects. They often cause problems in the activity part of a board game if they are not easy to handle and keep track of, however it can be an issue of authenticity as well if they are not connected to the theme. However, these can be often considered as a minor issue that will be overcome by realizing that the production cost of authentic tokens.

As a playful but very understandable example using real diamonds in '*African Star'* by Kari Mannerla (Various Publishers, 1951), will grow to such amounts that it will be impossible to keep the cost around industry standards. Not to mention the vast amount of tokens some games require to function. All in all, making sacrifices in tokens is just plain wise and often impossible to avoid.

### 3.1.3 Markers

Markers are items that represent values and other abstract things. They are mostly used for tracking progress, such as experience, combat values, amount of money and so on. Basically they are like a written number on a piece of paper. Along with tokens, markers are what causes most problems in usability of a board game if they are not very practical and easy to keep track of. A good example of this is a game called '*Eclipse*' by Touko Tahkokallio (Various Publishers, 2011). While this game is otherwise very good, with an average user rating of 8.16/10 at BoardGameGeek (http://boardgamegeek.com/) the sheer amount of tokens and the fiddly nature of how to players track their progress and statistics is just terrible. Most of the negative feedback given by users in BoardGameGeek are related to use of Markers. By an accident the player can easily lose the track of their progress, just by slightly nudging their tracker board.

Image 2: Use of markers in '*Eclipse*' by Touko Tahkokallio (Photo by Adam Shaftoe)

### 3.1.4 Randomizers

Randomizers are game elements that bring an element of luck or randomness, or some may even argue, fun to the game. More related to the luck portion of a board game in general, but the physical representation of this luck, or the items that make luck happen, are the randomizer components of a board game. Most common ones are die (dice in singular), which are most likely familiar to almost everyone. A deck of cards is often used instead of die, or in some cases, a pile or a bag full of tokens, from which the player randomly selects one. Dice rolls are always linked to game mechanics or charts, where as a deck of custom action cards or a pile of tokens can have the chart and the randomization combined in one. In some cases it is much more efficient to have a deck of cards with actions on them rather than making a dice roll and consulting a chart each and every time something happens.

## 3.2 Activity

Activities are component interactions that represent actions in the game world. Moving your character to the next square is an activity, more accurately it's a token activity. More widely put, activities are the actions by which a player plays a game. Activities can be broken down into token, environment and marker activities.

### 3.2.1 Token Activities

Token activities are direct interactions with the game. Moving a character on the board in '*Monopoly'* by Charles Darrow (Various Publishers, 1933), is the most likely the best known board game token activity in the world. Token activities most commonly represent interactions between the characters and the surrounding game world and characters. Easiest way to describe any board game is to use token activities, for example the game 'Monopoly' could be described as a game where players move around in a city and buy properties.

### 3.2.2 Environment Activity

Environment activities are what the player does in relation to the game board, or more thematically put, in relation to the game world. Games often tend to have location based interactions, where certain squares in the game board offer different interactions. These interactions can be generally considered as environmental activities. Interactions between players are considered to be part of environmental activities, at least in games that have a player character that travels around the game board. These kind of environmental activities are more dynamic, since the location of the player constantly changes.

### 3.2.3 Marker Activity

Shannon Appelcine divides marker activities to two groups, marker collection and marker placement. These activities are not often thematically related to the game, as they are more about mechanical functions that make definitions about the player's possession and resources. Real world physical actions to make the game work, so to speak. This is also one of the key areas where some games have problems, and in some cases marker activities can ruin the whole game.

Most commonly the problems with markers are born from the activities they have to be used for. For example, in '*Eclipse'*, the components themselves are not the problem, but it is how they are used. In the game, the markers must be carefully aligned on the tracker sheet, and even the slightest nudge can basically make the players lose track of their possessions. One easy solution would be to use numbered dice for this, while knocking them over still being an potential issue, it would be a lot easier to keep track of numbers instead of counting wooden blocks.

### 3.3 Decisions

Essentially decisions are the meat of a game. Decisions combined with randomization represents around 90% of a board game. There are a wide range of popular games that focus only on decisions and randomization. For example ‘Settlers of Catan’ by Klaus Treber and ‘Agricola’ by Uwe Rosenberg. One could argue that a game without decisions is not a game at all.

However, it is very important to keep the amount of decisions manageable, or otherwise the players can be overwhelmed, or as Shannon Appelcine calls it, players will be victims of analysis paralysis, which means that there is just too many options available and it becomes almost impossible to see best course of action. According to a quite widely known psychologist, George A. Miller, an average person can handle around seven objects at a time in their working memory. (George A. Miller, The Magical Number Seven, Plus or Minus Two: Some Limits on our Capacity for Processing Information, 1956)

### 3.4 Luck

Luck exists generally in every game, however the form it takes varies. Most commonly luck is known as chance, which can be either generated and controlled by randomization actions, such as rolling dice, or players generating chance by their own actions. For example in one of the most classic board games called ‘Chess’ players themselves generate the chance by their own actions. A game without any kind of luck or chance would be a measurement of values. Where there are players with choices, luck most definitely exists at least in the form of chance generated by decisions. (Darran Jamieson, http://gamedevelopment.tutsplus.com/articles/a-look-at-luck-in-game-design--gamedev-14195, 2014)

In board games, luck has always played a huge role. Almost without exceptions, luck is used to determine the outcome of a certain activity. As mentioned before, luck may exist even without any randomization, but in those situations it is arguably less related to the game itself, and more related to the players. Perhaps the most common way of using luck in board games is the use of randomization for player movement. This is perhaps the first thing that comes in mind when discussing board games with other people. Luck can, and very often is, used as a powerful design tool, not only to even the odds for players of different skillsets, but also to increase replay value of games. Often randomization is also used to represent real life situations in board games. The actor of a certain scene is not really in direct control of the situation, it is more reasonable to think that a chain of events is a sum of the participants and their actions. In other words a character in a scene cannot predefine the outcome purely based on his/her own actions and skills. This works exceptionally well in co-operative games where players are actually competing against a simulated environment.

### 3.5 Victory

Victory is as important element as decisions and randomization. Essentially, a functional board game requires nothing more than decisions, randomization and a victory condition. How the victory condition is applied varies from requiring a certain set of conditions, actions or even some external requirements for the game to reach an end. In some games there are some dynamic victory conditions that change during the game. Victory conditions are always achieved by a set of game action. In games that do not have a winner there is ending condition instead, which is fundamentally different but mechanic wise exactly the same thing.

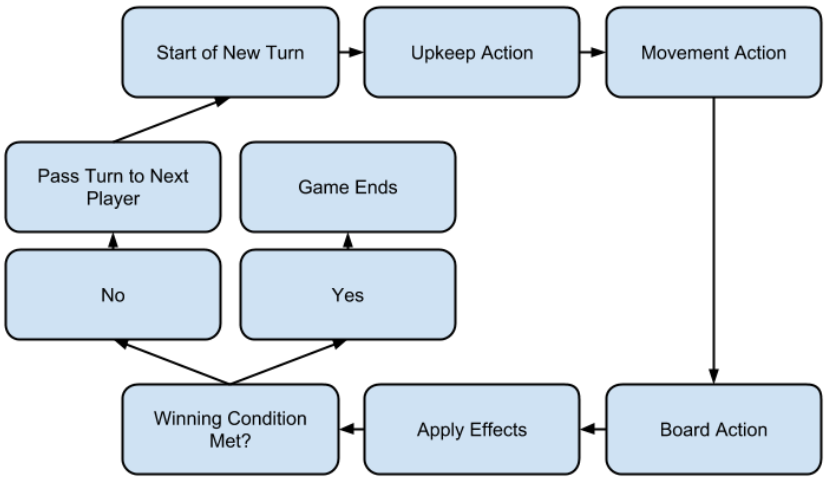


Image 3: Generalization of Flow and Victory Condition In Board Games

Specifically in board games victory conditions can be divided in four main categories. Find an answer, achieve a position or a goal, destroy something and accumulate or get rid of something. (Lewis Pulsipher, http://teachgamedesign.blogspot.fi/2007/11/victory-conditions-summary-for.html, 2007) Finding an answer mostly used in board games revolving around mystery solving, such as '*Clue'* by Anthony E. Pratt, whereas achieving a position or a goal is the most commonly used victory condition in board games. Many classic board are focused around a single goal or position, for example making patterns in '*Tic-Tac-Toe*', whereas less classical games are often using a combination of these, for example in 'Talisman' the player who gains, in this case accumulates, the talisman and is the first to use throne of command to kill other players is the winner. Destroying something and accumulating or getting rid of something are most commonly used with strategy oriented board games, for example in '*Risk'* by Albert Lamorisse and Michael I. Levin is all about getting rid of your opponent´s units and destroying your opponent by successfully doing so.

# 4 Bad Examples Across-the-Board

In some cases bad design choices can be considered subjectively bad, but in many cases these flaws are objective. For example when a game encourages or allows players to work against the common goal in a co-op game or when a player is not allowed to do actions that would make total sense in a certain situation. These flaws often work against connecting the player to setting and therefore work against the idea of a thematic board game.

## 4.1 Ruining the Game for Others

The first thing that kills a potentially good game is the fact that someone is able to ruin the whole experience for everyone. This does not mean that some playable character is just overpowered, but it means that in some games the rules encourage or allow players to do things that completely ruin the game for everyone. Mainly this is a problem for cooperative games with a winner, which in itself is a bit bizarre combination, but has proven itself on several occasions and audience.

'*Terra*' by Bruno Faidutti (Days Of Wonder, 2003) is a prime example of this. While being fundamentally a cooperative game where players work together trying to save the planet, there is always one player who wins the game through points. This more than often results in a situation where other players actively try to fail in their mission saving the earth, forcing everyone to lose at the end of the game. Having something like this in a cooperative game that tries to be thematic is just terrible design.

## 4.2 Immersion Breaking Mechanics

One of the worst things a designer can do is implement a mechanic that makes no sense in the setting. Think about having a stamina bar in Tetris or something as ridiculous. Luckily enough, the next example is not that radical, but yet breaks the immersion and leaves the players wondering what on earth is going on with this game.

‘*Witch of Salem*’ by Michael Rieneck (Mayfair Games, 2009) is a thematic game with nice looking components with a bit of eurotrash -style mechanics in it. It might be considered to be quite a good game, if only the designer would have put a little more thought in it. The game itself is based around the idea of players working together to defeat an evil witch, but at the same time players are not allowed to share important information about the witch’s location. Way to break the immersion of working together against evil forces. This can be countered by simply allowing communication to happen, but fundamentally the design of this game is flawed. It is possible the designer was trying to achieve the idea of 1920’s, and not being able to contact each other all the time, but he could have thought something else because the limitation works against the cooperative nature of the game. It is just absurd that investigators, as they call the players, could not share vital information about their common enemy.

### 4.3 Randomization of Important Actions

This is more of a problem regarding the traditions of board game design. For example rolling a die for movement makes sense in a game that is about moving around the board and trying to be the first to reach the goal. However, this is way too commonly used in games just to make it play slightly different every time, therefore artificially increasing the replay value of the game. For example it makes no sense in the game world having your spaceship with certain type of engine randomly move at different speeds every turn, even when it might make the game a bit more unpredictable, while this could be done so, that what you happen to encounter are different every time. When this type of movement mechanic is introduced in a competitive game, it’s a disaster in terms of balance and it’s often the first thing that breaks immersion, making the game feel less believable.

‘*Talisman’* by Robert Harris (Altar Games, 1983) is a very interesting example of this. Movement by rolling a die breaks the immersion of the setting, forcing your character to do only whatever the die roll allows. However, some forgiveness is in place, mostly because of the original release was back in 1983. However after many revisions and the latest being in 2007, the game still hangs on to the idea of moving with die rolling. Some might say that they are respecting the original vision, but they could have done more than just revise the visual representation of the game.

Yet there still exists something that goes beyond this, breaking the immersion and balance completely. Some less popular games, and no need to wonder why so, use die rolling for how many actions a player can take per turn. Even if the game would be less thematic and more about the game mechanics, it is utterly horrible considering the idea of competitive play and in cooperative games it might actually make some players be able to play less than the others.

### 4.4 Artificial Restrictions

Some game designers have the habit of making restrictions just because, and of course in some of the cases there is a logic behind all that. '*Survive – Escape From The Atlantis'* by Julian Courtland-Smith (Stronghold Games, 2011) is an example among the others by having artificial restrictions for no apparent reason. Well maybe the designer thought that the game would be more difficult this way. Surely it makes it more difficult to play, but the game still remains the same. Players control a group of characters, which each have their own value, which makes some of them better than the others. The rule set restricts the player from actually looking up which of his characters was of the highest value. The numbers are not so conveniently placed under the figures and the rulebook tells you that you're not allowed to see them once the game has started. Honestly this is just a matter of dumbing down tactical play, and introducing randomness through the tendency of people to forget things.

It is of course in some of the cases justified to do artificial restrictions, but only if the game really uses them to create more meaningful play. In many of these cases the designers might have had an idea of something that's a bit different and maybe a bit more difficult than the usual, but the execution of this extension is often game breaking, or at least immersion breaking.

### 4.5 Overly Complicated Gameplay

This chapter is not necessarily about the idea that complicated games are bad, as they require so much attention. The problem lies in the idea, that in many cases board games tend to be mechanically solid, but playing the game requires too much work, e.g. moving around parts and bits constantly and managing hundreds of small components just to play the game. In some cases the massive amounts of bits are justified, but there are way too many games that could have worked even without all the components. If they only would have been streamlined  a bit more further. Playability is an aspect of board games that needs way more thought than these games usually get.

'*Arkham Horror'* by Richard Launius & Kevin Wilson (Fantasy Flight Games, 2011) is a second revision of an excellent board game that is dripping with Lovecraftian theme. However when Fantasy Flight Games picked up the title, they didn't bother changing the way the game is. While being an excellent game in it's genre, it has some design flaws when it comes to the components. There is just so much component management, which by the way is not related to the game itself in any way, that the game is just too much of a burden to play for some of the players. The way the game works and looks is just beautiful, but playing it is just too much work for majority of the people. Again this can be seen by observing the user ratings at BoardGameGeek, where most of the negative feedback is about too complicated gameplay. Fantasy Flight Games could have streamlined the game a bit more, which they actually did with the spiritual successor of '*Arkham Horror*', a board game called '*Eldritch Horror*' by Corey Konieczka and Nikki Valens (Fantasy Flight Games, 2013). This can be observed by comparing the average user rating of '*Arkham Horror*', which is 7.49 out of 10 against '*Eldritch Horror*' with average user rating of 8.07 out of 10. While the game is essentially almost the same, the gameplay itself is much more streamlined and enjoyable.

# 5 Goal, Vision and the Basic Concept of Rogues of the Void

## 5.1 Goal

Initially I had an idea to create a tactical space board game where the theme of space would be delivered to the player through actions and decisions. I also wanted to avoid doing any design choices that would make the game more difficult to play without really benefiting the game in any way. A good board game is a sum of its parts, and even a minor detail can sometimes make a game undesirable to play after a couple of sessions. The game also needed to be rather quick to play, in terms of turns, as I have played many games that are just too cumbersome to upkeep, and where the game actions themselves require only a portion of the total amount of energy spent actually playing the game. Players don't want to manage the game, they want to play it instead.
Also, this project would focus more on the game design and production design. The final production would be left out from this thesis, at least for now.

## 5.2 Vision

I was originally thinking about a space themed board game that captures the feeling of space combat, like the tv-series '*Battlestar Galactica'* by Glen A. Larson, 2003 did. The idea was not to be influenced by the series itself, but the actual loneliness of empty space and desperation that the show delivers exceptionally well. I wanted the game to capture the feeling and the survivalistic nature of combat in space. The idea was to create the game that I have always wanted to play, with game mechanics that connect well to the space setting. In other words, I was going more for thematic mechanics, and less for the actual backstory and lore.

### 5.3 Components

There is a quite wide selection of hexagonal pieces, which each represent a sector in space. When inside a sector, the player can access any of its locations and can directly interact with any other players that are in the same sector. Moving between sectors happens by players being able to move to a connected sector once per turn. Also it is possible to move through multiple sectors using a warp drive, however the player skips any of the sector in between the starting point and the destination. The idea is that jump drives can move the player across multiple sectors at once, but it consumes energy and is inaccurate, sometimes resulting in a jump where the player moves to a sector they did not intend to move to.

After researching plenty of games that have major usability problems with counters, for example the earlier mentioned problematic cubes and tracker sheets that could be easily knocked over in ‘Eclipse’, I decided to use separate tokens for measuring and tracking player values. Some values would be stored in the tokens in themselves and some would be represented by the amount of tokens. This way there would be no information lost if the player accidentally knocks some of them over. For example damage to the player ship would be represented by damage tokens, where one token simply means one received damage. On top of the easy handling all combat related information about would be easily accessible to the other players as well. This would not be the case with items and such, but that is intended, as the players can decide not to share this information at their will.

Each player would be represented by a large plastic miniature space ship to make the players more connected to the game. I wanted to use large miniatures specifically for two reasons: they are easier to handle and they can be more easily seen and distinguished from a distance. If game components are easy to handle and the information on them is easy to perceive, they give a huge usability and enjoyment boost to any board game.

### 5.4 Activity, Decisions and Luck

Each player is represented by a miniature ship, and are given a collection of action cards, from which they can play two actions per round. Every player has exactly the same selection of actions, however the selection can be expanded during the game by acquiring new spaceship modules and so on. The most interesting mechanic is that the game goes in rounds, where all the players choose their actions at the same time, in secrecy of course, and then after everyone is ready, all the planned actions are revealed. The first action of every player has to be played, but the second can be cancelled at will. All the actions are executed in order, first players first action, second players first action and so on. This creates an interesting setting to the game, where the players cannot really know what the other players are up to. Mainly this idea is about allowing the players to do surprise attacks and unexpected things.

Each player has a set of basic actions which can be expanded with new cards:

1) Move one space (from sector to sector)
2) Fire Weapons (engage enemy on same sector)
3) Use Jump Drive (move X amount of sectors, where X is energy spent)
4) Explore (interact with non-player object)

The main reason for this approach was to create a feeling of quickly escalating situations and keep the players constantly guessing what the opponents are up to and what countermeasures they should take. Based on the studies of George A. Miller, the amount of decisions would also be well within the limits of human capability. At most there would be seven actions to choose from.

Additionally I wanted to simplify the game rounds as much as possible, to keep downtime, the spare time that players have when they are waiting response from other players, as short as possible. Games with a lot of downtime tend to be quite boring, especially when there are a lot of players.

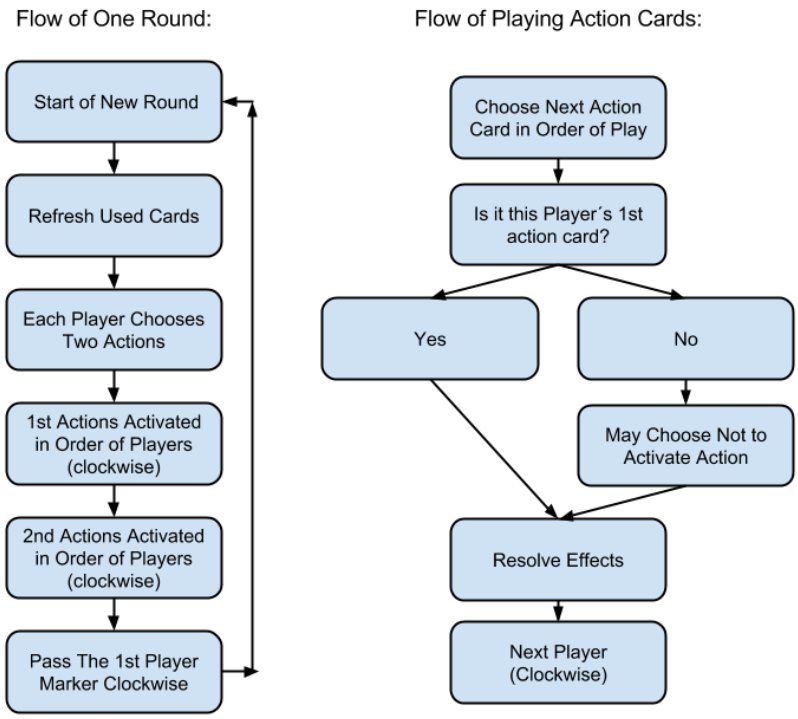


Image 4: The Flow of Game Rounds and Action Cards

## 5.5 Victory

This game uses two types of victory conditions: achieving a goal and destroying your opponents. Simply put, the last player standing wins, however optionally the players can use agenda cards, which give each player a secret goal that allows them to win in an unique way. That way the players won't know what they are up against. I think this creates a very interesting setting for a tactical space board game. This similar approach, although in a slightly different way, has been used in various critically acclaimed board games. For example the board game '*Shadows Over Camelot*' by Bruno Cathala & Serge Laget (Days of Wonder, 2005), with an average user rating 7.15 out of 10, uses a so called traitor mechanic, while being fundamentally a cooperative game, one of the players might have a secret goal to work against the other players and win the game alone. This is particularly interesting since there actually might not be a traitor, but players would suspect each other for being one anyway. I wanted to make the players suspicious not about the idea if there are traitors, but when and how they are going to go for the offense.

# 6 First Draft, Production Cost and Play Testing

## 6.1 First Draft

Once I had the rough idea I started to create the first prototype. I printed some large hexagonal shapes on a standard A4-paper, cut them into separate pieces and put them on a table. I quickly realized that the game board itself would most likely require some placement rules, maybe even a set layout of some sorts. I took some spare card sleeves that I've been using in other games to protect the cards, wrote some ideas about action cards on pieces of paper and put them inside the sleeves, and then took some dice to act as a player tokens. There it was in front of me, now all I had to do is try it out.

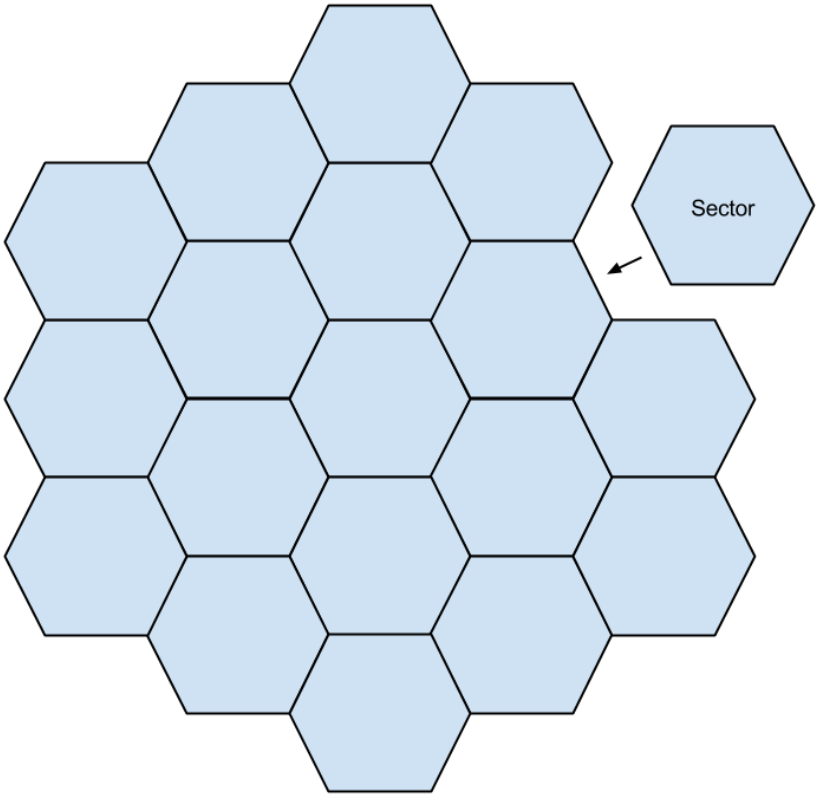


Image 5: Original Idea for Game Board

After trying out multiple styles of assembling the game board out of big, about 10cm wide hexagons, I realized that the game would most likely need too much space, and it wouldn't be justified by the amount of information on each sector. The idea was to have one point of interest, or a detail, per sector. However, I was hoping to make the game use very large plastic space ship figures, so maybe they would need space.

## 6.2 Investigating the Production Cost

After the first draft, I realized I had to do some research about production cost of these kind of games, especially because I had an idea about using very large space ship miniatures. I quickly realized that, considering the scope of the game, it would only be beneficial from the aesthetic point of view. The large ship figures would definitely be easier to handle when playing the game, which  but in this case I had to sacrifice some elegancy because of the limited resources and budget.


Image 6: Scale of The Miniature Space Ships, around 75mm (Photo by: John Halter)

With each of these ships costing around 20 euros without shipping, and realising that I would need at least four, maybe even six of these in different forms, not to mention the cost of possible printing and other components, the game would become effectively too expensive, for the scope of the game. The idea was to  make a relatively small game. I ditched the idea of using miniatures and decided to go with tokens of some sorts.

### 6.3 Play Testing and More Design

After first rounds of testing I noticed that there is a problem with the action cards. The problem was related to the movement of the ships to be exact. The game could easily develop a situation, where players are essentially playing cat and mouse around the board, but the cat would never reach the mouse. This was a problem that made me actually reconsider the whole action card system. It had its benefits, but I figured that the flaw would be too major to handle. Therefore I decided to completely rework the flow of the game.

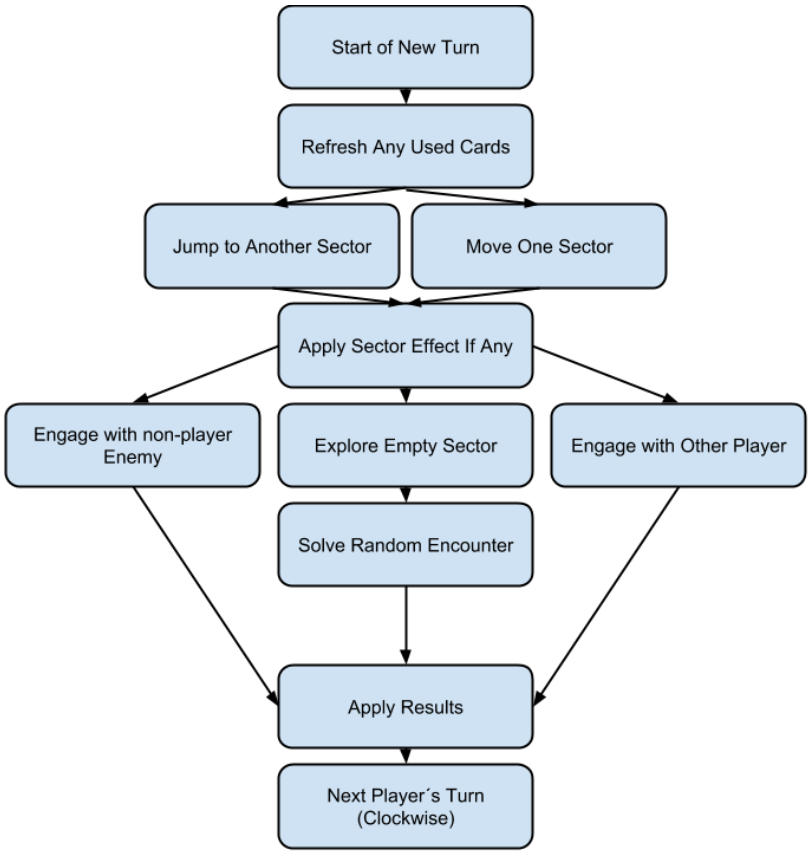


Image 7: Reworked Game Flow of One Turn

At that point I realized that changing the way actions and decisions are handled will require redesigning the combat and possibly removing the idea of action cards altogether. Even with these major changes in the core loop, I figured that I could still keep the amount of decisions almost intact. However, it was clear to me that I was moving towards a more traditional way of designing a board game. Also this made me realize that there is a reason why this way of flow is very popular. It works.

At this point, some changes had to be made to the board layout as well. I realized that the original size of the game board was too small, or rather would take too much space if it was to be enlarged. Then I had an idea. Instead of making the board pieces smaller, I could just make the pieces have more information. I could divide the hexagonal piece in seven smaller segments. Thematically speaking, one larger section of the board would then have seven sectors. This would also make the game easier to play, since there would be more information in fewer pieces that could potentially get knocked over and ruin the game experience.

The summary of major and minor changes:

1) Reworking the game flow and actions (MAJOR)
2) Condensing the board pieces (MINOR)
3) Decision against miniatures (MINOR)

Image 8: New Board Pieces

# 7 Final Design

The game is for two to four players (four recommended), one play session takes about an hour. The game is set in a fictional space setting and whoever survives to see their enemies fail, wins the game.

**Game Components:**

1 Rulebook
7 Hexagonal Sectors
4 Ship Tokens
40 energy tokens
40 damage tokens
8 Secret Agenda -cards

49 Two Sided Random Encounter Tokens
26 Subsystem Module Cards
4x standard 8-sided dice (D8)
8x standard 6-sided dice (D6)

**Objective of the Game**

In '*Rogues of the Void'* players are opportunistic space pilots, trying to survive and of course backstab their way to the top of the food chain in a distant corner of the universe. There are no friends or foes here, only shady opportunists who dare to take advantage of the misfortune of others. Each player has their own secret agenda, that is kept hidden from the others. The first one to complete their agenda is the winner of this game. Be wary and show no mercy.

**Game Overview**

Players start their journey to might and wealth with just their ships and a bunch of energy cells as their cargo. These are the energy source and the currency of the game. These can be spend to move very fast or to purchase useful upgrades for the ship.

Players go around the board exploring hidden secrets, fighting pirate ships and all other sorts of unpleasant things, while at the same time trying to work their way towards completing their agenda. But who knows when the player next to you might jump next to you and open fire. Keep your eyes open.

Towards the end of the game, players will have a better idea of what their foes are trying to do and perhaps a plan on how to stop them.

**Component Overview:**

**7 Sector Board Pieces and a Station Token**

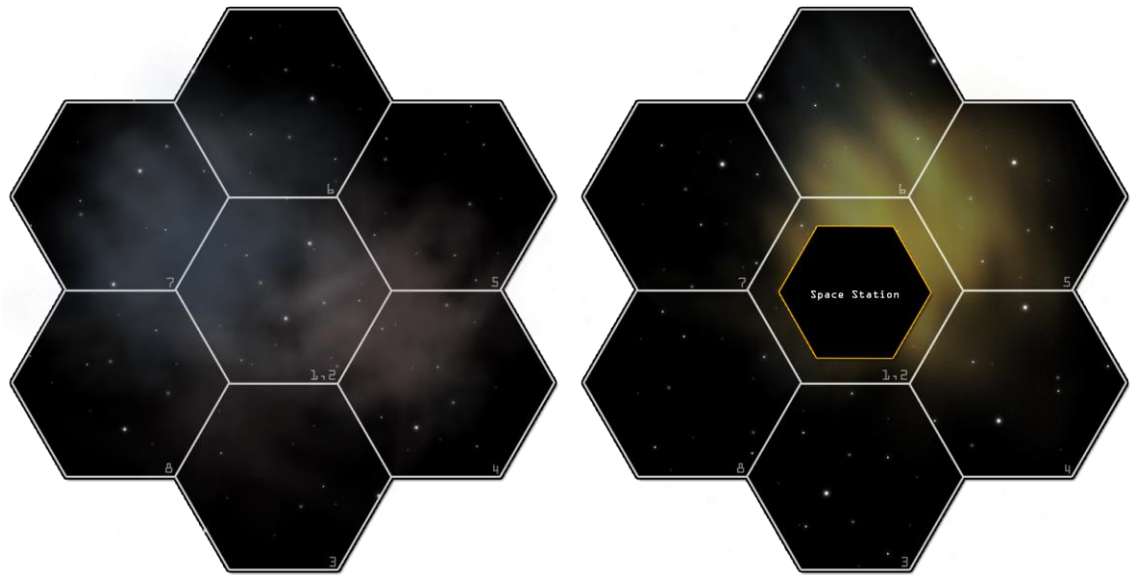


Image 9: Sector Piece Concept Art (Diameter 130mm)

Seven sector board pieces with slightly different set of visual and a space station token that represents the trading hub in the middle sector.

**Player Ship Tokens**

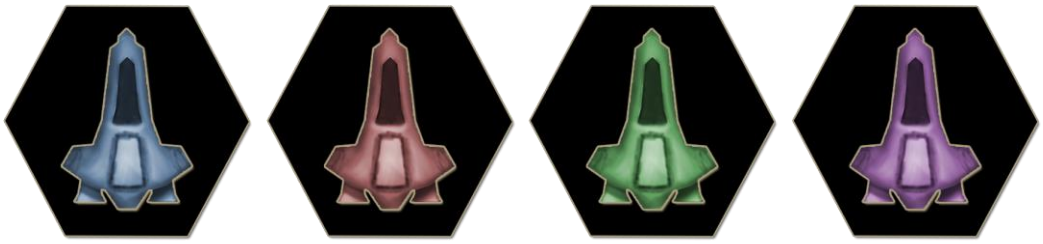

Image 10: Player Token Concept Art (Diameter 30mm)

**Secret Agenda Cards:**


Image 11: Secret Agenda Card Concept (41x63mm)

List of agenda cards is as follows:

1) Mercenary – wins when everyone is dead
2) Enforcer – wins when has 6 pirate tokens
3) Scientist – wins when has 3 alien materials
4) Gold Digger – wins when has 20 energy
5) Recoverer – wins when has 2 lost cargo
6) Mechanic – wins when has 2 drone parts
7) Machinist – wins when has 6 sleeper drones
8) Trader – wins when makes a single trade worth of 20 energy

**Energy And Damage Tokens**

Energy and damage tokens represent modifiers that are applied on player ships. Taking one damage in combat equals one damage token and are used to track the amount of damage to the player ship. Energy tokens are used for tracking how much energy player has in reserve.


Image12 : Energy and Damage Tokens Concept Art (Diameter 30mm)

**Random Encounter Tokens**

Random encounter tokens represent encounters in space. Each time a player is required to get a random encounter, he/she then draws one random token from a bag of tokens.

4x Gas Cloud (+1 Energy, Static)
2x Electric Storm (-1 Energy, Static)
2x Elektron Nebula (+2 Energy, Static)
2x Magnetic Storm (-2 Energy, Static)
2x Lost Cargo (Value 1E)
2x Drone Parts (Value 1E)
4x Alien Materials (Value 2E)
2x Alien Artifact (4E)
10x Sleeper Drones (1D6/1, Value 1E)
10x Space Pirates (1D6+1/1, Value 2E)
5x Alien Frigate (1D6/2, Value 3E)
5x Alien Scout (2D6/1, Value 3E)
6x Dead Space (Static)


Image 13: Random Encounter Tokens Concept Art (Diameter 30mm)

**Subsystem Cards**

Subsystems cards represent various upgrades that the players can buy from the space station. They give various effects and bonuses to the player.

4x Tracking Computer Mk.1 (+1 to attack roll) (Value 5E)
2x Tracking Computer Mk.2 (+2 to attack roll) (Value 10E)
4x Shield Generator Mk1 (D6(5-6) to deflect 1 damage) (Value 4E)
2x Shield Generator Mk.2 (D6(5-6) to deflect 2 damage) (Value 8E)
4x Graviton Computer (Roll 2D8 for jump, choose one) (Value 6E)
2x Cloaking Device (May evade encounters before combat) (Value 8E)
4x Missile Launcher (+1D6 to combat) (Value 8E)
4x Armor Plating (Reduce damage by one to a minimum of 1) (Value 5E)

**Game Setup**

Place one sector piece in the middle of the board and then place the rest of the pieces in a way, that all other pieces touch the one in the middle. All the pieces together should now form a circle shaped game board. Place the station marker in the middle subsector (numbered 1,2) of the middle sector piece. Every player then gets one ship token and three energy tokens. All the random encounter tokens are shuffled and put face down on subsectors so that each has one. Put the damage tokens in a pile, so that every player can easily reach it. Decide the first player by rolling a six-sided dice, player with the highest score is the first player. Place the deck of subsystems somewhere in the players reach. They do not need to be shuffled.

**Game Turn**

1) Refresh any used cards
2) Movement Phase
    a. Move one space to any direction
    b. Use jump drive to move to another sector
3) Action Phase (choose one action)
    a. Engage enemy target at will (player or token)
    b. Trade with other player at will (both must agree)
    c. Explore subsector if it has a token
    d. Interact with space station
4) Turn Ends
5) Next player’s turn (clockwise)

**Movement**

Players have two ways of moving during their movement phase. Players may either move one space to any direction, or use their jump drive to move quickly for longer distances. However using jump drives is proven to be a bit inaccurate and the end position is not consistent. To make a hyper jump, player spends X amount of energy, where X is the desired jump distance from sector piece to another. When a player has spent energy, he/she then rolls for 1D8 and lands on the corresponding subsector (numbers on the sector pieces). Graviton computers lets the player choose from two results.

**Combat**

Combat may be against NPCs (non-player characters) or other players. Combat always happens during the action phase. If the player explores a location and finds aggressive npc, the player is forced to solve at least one round of combat, after which the player may evade at will. Evading always causes the combat to end. Combat may never happen in the same subspace as the space station.

1) Attacker rolls for attack (by default 1D6, 5-6 to hit)
2) Defender may choose to evade (move one space to any direction)
3) Defender rolls for attack
4) Attacker may evade or start another round of combat

If at any point the received damage is equal or more than the structural hitpoints (for players 5 by default) the player is killed and removed from the game. When there is only one player left in the game, that player wins. It may be appealing to just start shooting in the very early stages of the game, but often completing your own agenda goal is actually easier to do. However, others might not want you to get it done once they figure out what you’re up to.

Destroyed NPCs are gained as trophies that can be traded at the space station for the amount of energy that they are worth. (See the values in encounter tokens)

**Exploration**

Exploration happens always in an empty subsector (no markers of any kind). When exploring, a player draws one random encounter token from the pile (or bag) of encounter tokens and then resolves it.

1) Static environmental effects are applied and the token is then placed on the board to the subsector where the player is
2) Aggressive NPCs always start combat and if not destroyed by the player, they are left on the board to the subsector where they were encountered

**Space Station Interactions**

When players are in the same subsector as the space station, they can

1) Sell trophies for energy
2) Buy subsystems with energy
3) Trade with other players at the station

The amount of these interactions are unlimited. Player may choose to do any combination of these. Also combat may never happen in the space station subsector. Ever. It is not allowed, there are guards patrolling the surroundings of the station and trying to perform any sorts of aggressive actions is technically a suicide.

**Winning the game**

Whenever a player completes their secret agenda goal and then travels back to the space station, he/she wins the game. Also, if there is only one player left, he/she wins. Make sure to keep your goal to yourself, as it makes your life easier and the life of your enemies more painful.

# 8 Conclusions

First of all designing a mechanically solid game requires a lot of attention to the market, mostly because you don't want to waste your time by accidentally cloning a game, and also because the field of business is very iterative and what would have been the game of the year ten years ago probably won't reach the same status nowadays. Designers should always think about new ways to do things or even better, ways to implement familiar mechanics in better ways.

Playability is definitely a huge factor in board games, and yet it doesn't seem to get enough attention from designers. From time to time games are published that are insanely innovative and a blast to play with friends, but they just lack in terms of playability, making them lose audience. The idea is not that games should be dumbed down to be suitable for everyone, it's about innovations in the field of playability. Complicated and challenging games with components that enable them to be played easily, there haven't been too many of those.

Designing a thematic board game is quite challenging, and requires the designer to think through the setting of the game. A good questions to ask often is that will this make any sense in this setting? Would this be believable in this particular world these characters live in? Of course there is and should be a lot of creative freedom, but when designing something that people should take seriously, you need to keep asking yourself a lot of questions and spend a lot of time making the game feel believable. Your game won't be able to carry a very believable theme if the mechanics simply don't support it. It's a matter of finding explanations that justify mechanics

This project in particular was very interesting to me personally, as I have always wanted to design a space themed board game and tackle all the possible problems along the way. I started with a faulty thought that the first design would be solid. Of course I was wrong on that aspect. I realized from the very beginning that some things will change, as they always do, but I did not really foresee the major change in the general game flow I had to do to make the game work better. There are some things that a designer can foresee, but there are also some things that just have to be experimented with before they can be proven good or working mechanics.

Generally there are two ways to analyse if a board game, or any game in general, is good. If a game is mechanically faulty in a way that it doesn't work as intended, it is objectively bad. Instead, if a game mechanically works as intended but is not fun, it can be considered as a subjective view. This is mainly because different people tend to like different things, and if a person does not like a particular game, or a type of game, it's not necessarily a bad game. It's just not a game for everyone. For example, some people really do enjoy simulation type games, while others see playing them as work. If a game is objectively a good game, it can still be subjectively a bad game at the same time. This is what in my opinion makes games to be art and craftsmanship at the same time.

In this thesis I previously stated some problems with thematic board games and the pitfalls in ways to design them. What comes to ruining the game for the others, the problem is not present in Rogues of the Void, because there are no ways for the losing player to drag others down with him/her. This is because in this game there is always a winner, either by achieving goals or being the last survivor. Of course this is more related to cooperative games, but this decision helps with the issue that the losing player could slow down the end game.

There are really no immersion breaking mechanics or randomization of important actions. Everything was designed from a space flight point of view, rather than a traditional board game view. The only action with real randomization involved, aside from combat accuracy randomization for the purpose of creating a feeling of dynamic space combat, is related to the operation of jump drives (a way to move faster at the expense of extra energy). But even in that case, the consequences of getting a bad result from a dice roll are very minor, and in most cases provide the players more excitement, as they know that such technology can be sometimes slightly unreliable, especially in space where there are various phenomena that affect electronic systems. I think I truly avoided any artificial restrictions that I mentioned before.

What comes to the problem with overly complicated gameplay, mainly related to the actual physical functions of playing a game, I ended up with slightly more complicated gameplay that I originally wanted, but I feel the sacrifice was acceptable. I wanted less components and more straightforward turns with simultaneous turns, but this proved to be a bit of a problem for this type of a game.

From this project I learned important lessons about design, a bit about development costs of board games, the theory of board games and about myself as well. To summarize, I would say that never have blind faith in yourself, know what you really do know and what you don't, and don't hesitate to question your own ideas, because it is very important to be able to improve your own ideas without any external feedback. External feedback is important as well, naturally, but always think twice and question your methods. The results will surprise you.

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