



Gameplay Design for Role-Playing Battle Systems Master of Science Thesis

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Cover: A battle in the role-playing game Final Fantasy 13.

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### ABSTRACT

This thesis explores role-playing games, an existing genre within the current game industry. Role-playing games have many different parts which together create the whole game experience for the user. However, this research has focused on what arguably can be said to be the core gameplay feature of role-playing games: The battle system.

This was mainly conducted by analyzing existing games using different methods, primarily by identifying gameplay design patterns in the games, and comparing them using a cluster method. The use of patterns allowed basic elements for observing and analyzing the relation between different role-playing games while the clusters provide overviews of the subcategories of the role-playing genre.

This thesis presents view of the role-playing genre from the perspective of combat systems through two main results. The first result is the trees created by the clusters which explain subgenres through the presence of specific gameplay design patterns. The second result is four categories of patterns: those which illustrate patterns found in nearly all role-playing games; those that define the tree result; those that can have strong impact on gameplay but without affecting subgenre membership; and those that link combat system to other parts of the gameplay.

Through this, the research has established a view on the design space of role-playing games and created visualizations of how different role-playing games relate to each other. From this relation a designer can further understand how to design for different gameplay experiences for the user.

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# **1. INTRODUCTION**

The digital game media is today a big entertainment industry. However, this industry is quite diverse since the different genres of games vary both in how they are developed and what gameplay they contain. One of these genres is the role-playing games (RPG). These are complex games with many different game elements. In RPG there can be said to be three different type of gameplay that can be available to the player, the narrative gameplay which progress the story of the game, the battle gameplay where the user faces the obstacles of the game, and the exploration of the game world where the user will explore the in-game world. Battles in RPGs are different from other genres, their core depends on which abilities have been developed or chosen for the character(s) the user is controlling. This give battles in RPG have both a before battle gameplay (often called meta gameplay), where the user plans out how his/her character will function, and the actual battle gameplay. Furthermore, the battles themselves can be very different from one role-playing game to another, but usually focus heavily on strategic decisions. The user has to be both, be strategic in how he/she develops his/her character(s) and strategic when utilizing the character(s) in a battle.

I have played RPGs since I was 5-6 years old, my first RPG that I can remember I played was Secret of Mana 2, which was an interesting experience for its time as it was a multiplayer RPG. After this I did not play many RPGs until I got a PlayStation 1, when I played Final Fantasy 7 and Wild Arms 1 (I was 10 at this time). This made me fall in love with the genre of RPG. Since then I have played most RPGs released to console and backtracked the RPGs I missed during my youth. Furthermore I started collecting games, in particular RPGs. I focused especially on getting the games which unfortunately was not released in Europe and/or U.S.A, usually sequels to personal favorites. For this reason I own, two PlayStations 2 (one NTSC, one PAL), luckily modern game consoles are region free. Furthermore, I own two titles of several games, one to play and one to keep in mint condition. I would describe myself as a real hardcore gamer, and perfectionist, I always aim to fully complete each RPG I play which have left me with a thorough understanding of the battle systems in the game I have played.

I approached Staffan Björk, if there were possibilities to research the role-playing genre as a master thesis. With the help of Mr. Björk a research goal was created, and that the main work process would be to use gameplay design patterns. In the beginning I wanted to analyze each part of every game, but this was early limited to that I would focus on the games battle systems.

## 1.1 Purpose

This research aims at understanding variations in battle systems in role-playing games. This is planned to be done by analyzing the game mechanics of the games and comparing the game's gameplay to other role-playing games. This to describe the design possibilities of the design space of role-playing games for game developers. Based on this, the following research question was decided for the thesis:

How can a designer affect the gameplay by the usages of mechanics and dynamics that affect a role-playing games battle system?

## 1.2 Limitations

Role-playing game is a very broad term, and to create a feasible frame of work space, some necessary characterristics needed to be identified to determine which games should be included and which should not. These limitations are described in more detail in section <u>2.3</u>.

- 1. The user has to be able to develop his/her character(s). Basically, each RPG have the user being able to improve his/her character(s).
- 2. Only games which the user can complete the game himself/herself, this to limit the research from including multiplayer RPGs.
- 3. Player has a party of characters, or an army of characters, this is to limit, the research from genres of games.
- 4. The Game needs to have a clear end of the game, this is to remove the genre Massive multiplayer online role-playing games.
- 5. Battle gameplay emphasize on strategic decisions from the user. To limit of the research from other genres which are more action-oriented but might have a lot of RPG elements. Games which are based around action (have less story development, combo focused etc.) will not be considered in this research. For example Devil May Cry, Onimusha or Scott Pilgrim against the world: The game.

Furthermore, there are some additional sub genres of RPG that have not been analyzed. First, games which are based on trading card genre will not be considered in this research, e.g. Baten Kaitos, or incarnation of existing Trading card games such as Yu-gi-oh or Pokémon. Second, games which are based on the first person shooter genre will not be considered in this research, e.g. Mass Effect or Borderlands.

# 1.3 Language Explanation

Gameplay design pattern (explained in section 2.2) are given in Italic with the first characters in words in upper case, e.g. *Chess Battle System*. They will not normally be explained in the text, instead explanations can be found in the appendixes (B-D). Some patterns are not explained in detail (mainly from lack time), however they can be found in <u>Appendix F</u>, in their relation to games. Some gameplay design patterns are formerly established Patterns and can be found at the <u>Gameplay Design pattern Wiki<sup>1</sup></u>

<sup>&</sup>lt;sup>1</sup> <u>http://gdp2.tii.se/index.php/Main\_Page</u>

Game groups establish during the work is given in *bold and italic.* These groups are explained in <u>Chapter 6</u>, the Work Process.

Game References can be found in section <u>10.2</u>. The reference list is written in order of game names, to make it easier to follow a game franchise. Only the first time a game is referred to will there be references, otherwise the full reference for a game is to be found in the mentioned 10.2. 10.2 furthermore have references for games referred to in the appendixes, making it a very extensive list.

#### 1.3.1 Genres shortening

Genres describe in section 3.2.

RPG = Role-Playing Game CRPG = Computer RPG WRPG = Western RPG JRPG = Japanese RPG ARPG = Action-RPG TRPG = Tactical RPG MMORPG = Massive Multiplayer Online RPG

#### 1.3.2 Game initials shortenings

Many games are sometimes referred to with their initials.

Breath of Fire = BoF. Chrono Trigger = CT Dragon Age: Origins is shortened to Dragon Age or DA. Dragon Quest 8 = DQ8Final Fantasy franchise games are shorted to FF. Furthermore, FF Tactics is referred to as FFT. Front Mission = FM Ogre Battle = OB Phantasy star = PSResonance of Fate = RoF Rogue Galaxy = RG Romancing Saga, Saga Frontier 2 etc is referred to as the Saga Franchise. Seiken of Densetsu 3 is referred to as Secret of Mana 3. Sometimes people call this game Secret of mana 2, but it's really the third game in the Mana franchise. This research uses the English naming Secret of Mana instead of Seiken Densetsu. Furthermore this is shortened to SoM (Secret of Mana). Note: Secret of mana 1, is called Mystic Quest in Europe and Final Fantasy Adventure in America, not to be confused with SNES game Final Fantasy Mystic Quest, which is another game not in the Mana Franchise.

Shin Megami Tensei: Persona 4 is referred to as Persona 4. Shining Force 2 = SF2 Tactics Ogre = TO Tales of Phantasia, Tales of the Abyss etc is referred to as The Tales Franchise. Vagrant Story = VS Valkyria Chronicles = VC Wild Arms 3 = WA3

# 2. THEORY

## 2.1 What is a game?

There are several different definitions on what a game is. Most definitions covers a topic, which is that a game is something people do outside the normal daily routine of life, which will give them Zero profit and the activity is confined by rules. But many definitions don't really work for digital role-playing games, they require more than one player.

According to Huizinga (1938), a game is an activity that is "not serious" and outside the player's "ordinary" life, but even if it's "not serious" the player can devote huge amount of efforts and be totally absorbed by the intense experience of the game. Furthermore Huizinga talks about a group of people, the "magic circle" that plays the game together which each other's. Abt's (1970) definition of what a game is, pinpoints that agenda of the users strive to accomplish something, this is very much what a role-playing games usually is for a user, one the same time Abt's definition requires "two or more independent decisions makers". Abt's definition requires strife between at least two individual persons.

E. Avedon & B. Sutton-Smith (1979), further emphasizes that a game is a "contest between powers", which will create an unequal outcome between the powers. Salen & Zimmerman (2003), has a very similar definition, using players, conflict and an important outcome as main characteristics.

Fullerton, Swain & Hoffman (2008), definition covers the same characteristic, a game is a "closed formal system", players are in a conflict and this will create an unequal outcome. These different definitions of what a game is works for many genres of digital games and works well for most board games, but there is other definitions that fits the digital role-playing genre more accurate.

von Neumann & Morgenstern (1944), emphasizes on the decision making of the agents (user/player) of the game. Their model focuses on the interaction of the agents inside the game system (created by the game rules) and how each agent strives to maximize their own outcome by taking the most favorable decisions. Von Neumann & Morgenstern definition is more correct on what a role-playing game is then the other definitions mentioned.

If the MMORPG genre (subgenre of RPG) is ignored, all parts about a competition or strife between players/agents/users do not work. There is very few examples of role-playing games with more than one player outside the MMORPG genre, and if there is a multiplayer availability in the game it's usually that the users are on the same side, a party against the evil forces (computer) similar to classic role-playing board games, for example the Mana Franchise. However, depending on the view point these definitions works. If the computer, the AI, is viewed as an independent player, in this sense von Neumann & O. Morgenstern, definition is more accurate as it speaks about the agent, which more easily can be translated as an AI

(agent).

Then is not a problem in the context that the Computer (AI) takes the role of an opposition (enemy) towards the user and is a decision maker of it on. Especially with today's AI advanced intelligence. But there can still be problems with using any of the mentioned definitions because even if the AI is viewed as an active player, striving for its goals. It do exist games where the AI does not actively play to win, or the AI just takes lousy decision, which for the user (the actual player) is an obvious state of pseudo intelligence at best, for example the Pokémon franchise, Game Freak (1996).

When describing role-playing games, the definition need to be broader and cover the basic state, of single player games. Arguably, another problem some definitions have is the nonprofit statement, for example according Caillois (2001), a game is an "unproductive - creates no goods or wealth", Huizinga's (1938) definition is also against profit from a game. This is very debatable, is it truly playing a game, when the user makes money from it, it could be said the individual is working. But nevertheless specifically digital role-playing games of different genres with Internet functionally tend to be the most prolific genre for virtual goods. One of the problems is that the older definitions from example Huizinga, points to gambling when its profit involved, but games especially in role-playing games. The player can make money from just playing the game with no actual aim to earn a profit.

Digital role-playing games have some fundamental gameplay mechanics (*Loot/Items*) and gameplay design patterns such as *Character Development*, which creates a situation where the user can play a game for entertainment. But from serendipity gain a virtual good and sell/trade, to earn a profit as an extra outcome of an entertainment game season, for example the Diablo Franchise.

From this a more open definition of what a game is, suits the digital role-playing genre. Suits (1990), "Playing a game is the voluntary effort to overcome unnecessary obstacles". Suits, definition works well for the RPG genre, an RPG game is about tackling different goals. The goals will be harder and harder and the user will gain more functionally over time and playing is then about the effort to use different tools presented in the game world to overcome unnecessary(and increasing unnecessary) obstacles. Crawford's (1984) definition is similar to Suits but further adds the point of "safety", this is particular good point for RPGs which usually has dramatic elements, topics of war and murder, etc. The user is experiencing danger as the most common obstacle, and the danger is solved with the user using violence. But the user is physically safe from the danger.

A last part of what usually an RPG is, can be found in Juul's definition, which is "the player feels attached to the outcome", normally the user of any interaction design product will have an affection of the outcome, and in games the affection is a lot higher than in other occasion of the users live according to McGonigal (2011). This is further strengthened in role-playing games, where the user plays a character an avatar with storyline and character development, the user will have a high attachment to the outcome of the game.

Based upon the discussion above, Juul's definition, "A game is a rule-based formal system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels attached to the

outcome, and the consequences of the activity are optional and negotiable ", is the definition this research is using to define a game.

## 2.2 How can we speak about games

There is several ways a person can describe a game, from the game mechanics or it can be done from an aesthetic perspective.

First of all, a person can describe a game as a generic system in how it can be implemented, how the game world, game rules, etc. should function, and what will be the intended user experience of the game. A person can also describe a specific game, how it works, what the rules and constraints are, and what the user's gameplay experience is. The first approach is related to how different people has in a more abstract way analyzed games, as described in section 2.1, while the more practical approach of analyzing specific existing game and how they work and what the gameplay as done in section 3.2.

If a person focus on the game's narrative, and analyze RPGs he/she will likely reach a result more oriented towards the storytelling or the narrative parts of the game. If a person instead focusing on analyzing the games from a mechanical perspective the result would likely be something else.

The perspective is further different depending on the individual's context, anything from the semantics to complete game experience is depending on which person does it. This is has to mainly do with the individual's different mental models of how a product works. Copper, Reimann and Cronin, (1995, Chapter 2) describes three different models, the Implementation model (called system model by Donald Norman), the user's mental model (or conceptual model) and the Represented Model (or designer's model).

The users of the product will have one view, in this context the players will usually have a specific way to speak about games. Normally semantics that has been developed between users on Internet forums and in-game chats. Furthermore the developers have the implementation model and they usually have one idea how the users mental model is. And they will create a representation model for the user to have. The media usually have a mix between the users' model and a representation model. And lastly, the game researched usually has the represented model. According to Copper, Reimann and Cronin humans usually try and simplify complicated objects. In the end, what this really means is that, any presented semantics and view on a game, will first of all have some subjective reasoning and probably individuals with another model of how the game works will have issues with the presented view.

There are some different examples on how games can be viewed. Hunicke, LeBlanc and Zubek (2004), presents their framework called Mechanics, Dynamics and Aesthetics (MDA). Mechanics, are the components of the game, with these mechanics dynamics is created. A dynamic is what happens in the game when the players use the mechanics to play the game. Aesthetic is the desired emotional, the designer would like the player to have when he/she is interacting with the game.

Furthermore Hunicke, Leblanc and Zubek have 8 fun factors, these fun factors cover different aspect what a user can enjoy in a game, for example "Final Fantasy: Fantasy, Narrative, Expression, Discovery, Challenge, Submission".

These fun factors are one way to describe what a user wants, in a game. This is similar to Kramer's (2000)<sup>2</sup>, list of requirements of what a game needs to make it appealing for a user. Kramer says, people have different taste on what makes a game fun, for example a game offering social interaction or a game offering strategic planning. But there can be made objective reasoning on what makes a game good. Kramer has several different requirements for example "No early elimination" (image 3.C), meaning a player should not be able to lose until the late stages of the games game time. Kramer requirements mainly work for board games(he is board game designer), but can be applied as an opinion of how to describe games, and what the user would like to have/not to have in a game.



Image 2.A: Diablo 3: If a user dies at Hardcore in Diablo 3, he/she is permanently eliminated from playing that specific character. According to Blizzard3 most deaths at Hardcore

<sup>&</sup>lt;sup>2</sup> http://www.thegamesjournal.com/articles/WhatMakesaGame.shtml

<sup>&</sup>lt;sup>3</sup> <u>http://us.battle.net/d3/en/blog/6018173</u>

occurrence at the beginning of the game, and game is often played with 2-3 friends creating a clear Early elimination as the individual who died have to replay the game.

As a game is a software interactive artifact there is different interaction design terms which can be used. A game can be described from its use qualities. Use qualities are described by, Löwgren and Stolterman (2004), using the different use qualities, another perspective on what a game offers can be determined. For example the use quality, "anticipation", which is about the user's feeling of exciting things that can happen in the game, typically this use quality will be existing in a JRPG, from the dramatic elements of the game. While the use guality "social action space", which is about how much social interaction the artifact, offers, and is typically a very strong use quality in a MMORPG. A similar way to describe a game is to use Lundgren's (2011), Properties of Interactive Artifacts. These properties can be used for example to describe how good a game's overall experience is to the user, not necessarily purely if the game is entertaining or not, but it can indirectly affects the users entertainment value of the game. For example how the property of "Difficulty" is in a game, this property can be further split into different user groups. For example how difficult is it for a new player, compared to a user with experience of the genre (intermediate user) to learn the game. Another property that can affect the user's game experience is the "Robustness", how well the game will handle users abusing it. which is a common problem if a game lacks for competing gaming.

Another way to talk about games, is what and how the user is playing. This can be done for example from an aesthetic perspective of the gameplay, as done by Lundgren, Bergström and Björk (2009). Their gameplay ideals can be summarized as, what the user's behavior creates or an intended behavior the game designer wants to evoke in the user. For example, the ideal "Varying Strategies", as explained in section <u>3.2</u>. The user of an RPG, usually expects the game to offer a challenge when it comes to preplanning, the usages of the different strategies. A similar way to approach how the gameplay experience is for the user. Is to analyze the gameplay in combination with the characters of the game. In MMORPGs there is a common view of "the holy trinity" (Green 2009), that the three Functional roles of Tank, DPS, and Healer should be present. While there can be more roles in an MMORPG, e.g. World of Warcraft, will expect to play one of these three functional roles, and this will determine what fundamental gameplay experience the user will expect to have.

There are different frameworks that different group of individuals have been working on to create a language for how to communicate what a game is, the game's gameplay and the general behavior or emotion a game can evoke for the user. One of these frameworks is the "Game Ontology Project". This project started with Zagal et al., article "Towards an Ontological Language for Game Analysis", 2005. This framework is about hierarchies of concepts which exist in games. The project aims to identify structural elements of games, and how they relate to each other. The project differs from game taxonomy by organizing from the game elements and not from the common way of using game terminology to create concepts. This can be used to design games, and gameplay.

Another project is "The 400 Project". This project started at Game Developers conference 2001 with Barwood's speech about game design. This has been further developed by Barwood and Falstein (2003). The 400 project is about defining 400 rules that a game designer should follow. For example, "Provide Clear Short-Term Goals". This rule means that the user should always be aware of what the short-term objectives are. This is something that has been very common in MMORPG genre, where the map will show the users next location to travel to and has been taken to other genres for example FF13 (JRPG) has the same kind of map system as an MMORPG.

Another Project describing gameplay, is the gameplay design pattern collection started in 2003, by Björk, Lundgren and Holopainen (2003). This has been further developed, in the book Patterns in Game Design by Björk and Holopainen 2004)

Gameplay design patterns are patterns that can be used to explain the specific gameplay a game can have for the user. How a pattern affects the users gameplay experience can be very varied, for example the pattern *Choke Points*, will have a huge effect how the user play in a real time strategy (position of units etc.). While the pattern Casual Gameplay is more about the general gameplay experience or rather the attitude of the user, when playing a game. Gameplay design patterns can be used as a language for how a game works, in several aspects. The patterns can be used to explain and describe different groups of existing elements and dynamics in a game. Game mechanics can be described with a gameplay pattern for example Loot, a typical RPG pattern, which means the users will receive some sort of items when they defeat enemies or the user can find them in the game world. Gameplay design patterns also have negative patterns, which at first might appear useless but can be a good knowledge for a game developer on what not do to. An example of a negative pattern is "Player Elimination", which is a very similar pattern to previously mentioned Kramer's (2000) "No early player elimination". But other gameplay pattern can be harder to understand their effect on the game, for example "Grinding" is negative pattern, which is very typical gameplay experience a user of MMORPG will have. But it is also common in JRPG and some TRPG. This pattern means the user will do something repetitive to gain Loot, and it's usually a not very entertaining gameplay experience but on the same its' possibly a needed one in some genres. And this is one of the other points gameplay design pattern brings, each pattern has its connection to other patterns. Patterns can instantiate other patterns, have conflict with others and/or need other patterns to be meaningful, all this can be described by using the gameplay design pattern system.

## 2.3 What is a role-playing game?

Section 2.1 explained a very simplistic view on what a role-playing game is. This will be further explained in chapter  $\underline{3}$ , as the role-playing genre is one of the genres with the most subgenres, if not genre with the most diversity. One reason for this is because since the fourth generation era of consoles, which began ca. 1987 and lasted to ca. 1996, more and more game developer started to use role-playing gameplay patterns in other genres. Around this time, many of today's sub genres of the RPG started to gain their current shape, for example Secret of mana 2,

Square (1993) to SNES, an action RPG went a more action oriented gameplay then the otherwise traditional turn based RPGs. Fire Emblem instead combined tactical elements, units and environment gameplay patterns etc., with the RPG elements, and become a Tactical RPG, since then more and more mix of role-playing game elements has been put into other genres (it was also during the fourth generation Phantasy Star was released in Europe being the first RPG to be released in Europe to console, Sega, 1987)

During the fifth generation (PlayStation, Nintendo 64 and Saturn) of consoles, RPG gameplay design patterns and overall game elements from RPG started to become used in other genres, e.g. Castlevania Symphony of the night, Tony Hawk's Pro Skater, Neversoft (1999) and Panzer Dragoon, Team Andromeda (1995)



Image 2.B: Panzer Dragoon Saga: Is a mix of Rail shooter genre, and the RPG genre. The user develop the dragon rider and the dragon to be a stronger airplane.

This becomes an issue, as it creates too many games that can be researched and still be said is about role-playing games. As stated in Limitations (section <u>1.2</u>), some of the sub genres and especially games with RPG elements but, which are not RPGs had to be ignored to be able to perform the work in the time frame.

The 5 characteristic used to limit the research is this research definition on what a digital roleplaying game is. There is a need to further describe what these characteristic means to clearly define what the research will focus on as today there is such a large number of games with RPG elements.

#### 2.3.1 The user has to be able to develop his/her character(s)

According to Brathwaite, Schreiber (2008), the most fundamental part of a role-playing game is *Character Development. Character Development* is first and foremost an important "Meaningful Choice" (Lundgren, Bergström, och Björk. 2009) which means that the user will have to take decisions that is important for how the game will progress. Usually in a RPG, this happens each time the user reaches an arbitrary limit of some sort. It is important to understand that *Character Development* has to do with planning, the user will perform this gameplay inside the game but normally outside the actual challenges of the game, and furthermore this leads to that the user actually can perform these choices outside of the game seasons. (A common behavior of MMORPG users is to discuss their meaningful choices considering their *Character Development*)

Character Development mechanics is the main reason for some of the definition problem of what an RPG is. As many games today have character development. To be more precise on what an RPG is, in RPGs the user will develop the character(s) from an in game value gained through playing the game, this is typically called experience points or EXP for short. Furthermore the game will let the user improve the character by equipment together with gaining experience points, and many game features more ways for character development. Experience points of some sort, and some kind equipment is basically in every RPG. It is important to understand that Character Development is implicit in a RPG and how important it is for the user. As Barton says(page 8, 2008), the game franchise Warcraft (1-3 not the MMORPG) Blizzard Entertainment (1994) is not an RPG game as the units cannot gain experience nor do they become stronger from any kind of battling. This is a very important difference, as otherwise especially Warcraft 3, Blizzard Entertainment (2002) has a lot of similar game elements to standard RPGs, fantasy setting, statics, random variables and it do have the "Hero Unit" that does actually develops through experience. Still in the end, the user will win the game by relying on building the right kind of army not by leveling the hero. Another franchise that is very close to be an RPG is the Heroes of Might franchise, in this series the user can spend huge amount of time developing her/his heroes, both from gaining experience and from equipment, making it at seems like an RPG. But in the end the user can't win without units, and these units does not become stronger themself from any means, they become stronger from the user gaining more of them. Making Heroes of might and magic, and Warcraft to be Strategy Games (Heroes being a Turn-based strategy and Warcraft a Real-Time Strategy).

Furthermore in RPGs the users gameplay experience can be further combined with the narrative parts, as the games offers much more dramatic elements than other genres. As described by Janlert, and Stolterman (1997), an artifact can have a specific character and an artifact can be described out from mentioning its characteristics, for example a car being fast as a cheetah. And as described by Salen and Zimmerman (2003) in Rules of play (Procedural Characters, chapter 27), a user can have a much more meaningful experience if they can relate to the characters. They describe Pai from Virtua fighter 4 and how her background story has

impact on her actual gameplay fighting style. This is very common in RPGs, but often with a direction towards what kind of *Character Class* the character is. For example a Warrior type of character is often the Tank, while a small female character is often a support oriented functional role.

*Character Development* is a key part of the RPG genre, and as mentioned it is often in relation to what character the user is playing, most games does not offer a full freedom in how the character can be developed (some does not offer any freedom). The user will usually create their playing style out from the decision they can make while developing their character. For example a user focusing on building their Barbarian in Diablo 2, Blizzard North (2002) as a melee style who can take a lot of damage, will develop towards the statistics of vitality (increased damage taken), and might when talking with his/her friends use languish as, "my Barbarian is juggernaut that can plow through any field of enemies". While another user might focus completely on developing a Barbarian towards ranged attacks, using the barbarians throwing weapon abilities. And then might instead say "My Barbarian looks like Thor when he moves around and destroys any enemy with his mighty hammer throw".

In most RPGs, depending how the user develops his/her character, the user will usually create a bond to the specific character and specific characters gameplay. However this differs between users as the users can often create different characters even if it's the same game they are playing, this is not how commonly other game genres are. Although as there are games which utilizes gameplay design patterns from RPGs they can also have this, for example Devil May Cry 3, Capcom (2005) features four different gameplays depending on how the user decides to develop the main character( Dante).

#### 2.3.2 Player has a party of characters, or an army of characters

Most role-playing games are single player games, this is a big change from the board roleplaying games, which are more or less impossible to play alone. In role-playing board games the users takes control and act out usually one character each in a party of adventurers, very much inspired by the fantasy literature. As the narrative parts follows typical fantasy literature or sci-fi literature, having the user have a party of adventurers is very common, rarely is the user playing only one character, and usually then it is a dungeon crawler, which also is a reason for this limitations to not go into the dungeon crawler subgenre.

The army part refers to the tactical role-playing genre, where the user can have a lot of units. This genre (explained further in <u>section 3.2.4</u>) can be very similar to strategy genre, but the units do develop individually. And TRPGs narrative part is commonly the same as in other RPGs, while the user can have more than 100 units, its only 6-10 units who have any storyline importance and they will act out as a normal party of 6-10 adventures still keeping the literature narrative part to the game.

In most RPGs the user will be able to interact with the party at different levels, games from Bioware, for example Dragon Age: Origins have taken this step very far, where the user have a huge of extra side stories from the party members and the user can build relationship values with the characters. This is the typical WRPG system. JRPG instead usually have a lot of interaction too, but is instead non voluntary and a lot more story and interaction between characters will be given in the progression of the narrative, for example FF13. In FF13 the playable characters are split up (in the start of the game) and the game delivers a lot of interaction as the character pairs talk to each other during their adventures. But a game can have both of this story systems, for example Breath of fire 3, has a lot of literature like storytelling, interaction between characters during narrative progress, and has a Camp, which is fundamentally exactly the same as Dragon Age: Origins camp, it's simply not as advanced (Breath of fire 3, was released 1997 and Dragon Age: Origins 2009)



Image 2.C: Breath of Fire 4, Capcom (2000). BoF4 as BoF3, gives further character development of the party characters by letting the user interact with the characters about their feelings or occurrence outside the progressive story.

## 2.3.3 Only games which the user can beat the game himself/herself

This limitation is because the research wants to focus on single player games. There are RPGs where the users together, usually by Internet connection. Together can create an adventure

party. Those games commonly has a less focused story development as their often is no interaction between in-game characters. Instead the users can create this, having social interaction outside the game. Making it similar to the board role-playing games.

## 2.3.4 The Game needs to have a clear end of the game

A common gameplay "feature" users experience in MMORPG is commonly called End-Game<sup>4</sup>. End-Game means that the user cannot longer Character Develop by experience gain. But normally the user can increase their characters statistics. This is done by gaining more powerful equipment, most MMORPG users are in this state and it usually involves playing the games more challenging parts which was not accessible on lower levels, in MMORPG this is usually done in raids, a gameplay which requires a lot of users playing together. But End-game is actually very common in JRPG, where the user will have extra challenging parts outside of the story of the game, and the user will be able to clear the content in an JRPG as in MMORPG by improving the characters power, a notable difference is that in JRPG the user will reach Endgame by completing the story of the game not by reaching the maximum level. For example in Wild arms 3 the user will complete the story around level 50-60 but the maximum level is 100, and the user needs to be around level 80-90 to clear the hardest boss (Ragu O Ragla, Abyss). For this research this limitation is used to not analyze the MMORPG genre, as they do not have a clear goal of the game, they do offer a narrative but it's often not end of the story merely separate storyline parts, furthermore in for example the JRPG genre there is a clear end of the End-game too. In MMORPG instead the user will be in a very long very much more advanced form of End-game then in other RPG genres.

A blurred line game is Star Wars: The Old Republic Bioware (2011).

## 2.3.5 Battle gameplay emphasis on strategic decisions from the user

RPG elements today appear in other genres. There are games with clear character development, a storyline, a clear goal, several playable characters and the user can beat the game himself/herself.

This characteristic is to point out that the game has to be a more strategy oriented game. There are many examples of action subgenre games that otherwise could be argued are RPGs. For example Scott Pilgrim against the world: the game, is not an RPG it's a beat em up game, but it has all the typical characteristic, character development, statistic values such as strength etc., unlockable abilities, different playable characters that deliver a storyline between the stages. But the game is heavily action oriented, which arguably could make it an ARPG. The difference is

<sup>&</sup>lt;sup>4</sup> <u>http://www.wowwiki.com/End-game</u>

the mechanics and the dynamics (section <u>3.2.3</u>). The Action RPG gameplay makes the user still heavily rely on strategic decisions, and use of mechanics which are defensive, healing or boosting a character. While all abilities in Scott Pilgrim is purely offensive, every new mechanic is a variation of damage dealt to the enemies in the game.

The most prominent game mechanic of why action oriented games with RPG elements not are RPGs is because they lack number values, and random values. In action games for example Devil May Cry 3 Limited edition (does not have a party arguably), the user can defeat every enemy in the game without taking any damage at all, as the user perfectly can avoid everything the computer does. In an ARPG for example Secret of mana 3, the enemy (and the user) have abilities that are 100% sure to hit, the user cannot avoid the damage. The game also has very low fine motor skill demand from the user, while most ARPGs requires more fine motor skills than other RPG sub genres, compared to for example the beat em up genre it's still very low. Note: Many RPGs have game mechanics that let the user mitigate damage, for example a game can have a shield ability that makes a character take zero damage from one attack (for example Monks ability, Serenity in Diablo 3, Blizzard Entertainment (2012)), in an action game, the user avoids the damage by moving out of the enemies attack. Which some RPG has too, for example World of Warcraft, but the game cannot be completed from start to finish perfectly, and contrary the tank (*Functional Role*) in WoW will constantly take damage.

Summary: An RPG is a game where the user will develop a user controlled character(s). The character developing process is usually a combination of gaining experience points through battle in the game, and by gaining better equipment (usually by battling) which can be equipped and enchant the character. The game will offer a story of some sort, the game world and the components of the story are often similar to fantasy literature settings and sometimes sci-fi literature (it can be other settings for example Steam Punk). In this story the game will offer some sort of dialogue, interaction between characters in the game. This can be done in different ways and commonly it differs with WRPG, which uses a more open storytelling and let the user makes moral decision, while JRPG offers a more linear storytelling very similar to a book. The user will have a lot of battles, which is the agenda of this research. These battles do not challenge the users on reflex skills or the user's fine motor skill level, but on an intellectual level. There is sub genres such as ARPG which focuses more on action, however the ARPGs mainly challenges the user's ability to perform pre planning and longtime decision making then fast reflexes.

Lastly the other two newer major subgenres of RPG genre, the MMORPG which offers social interaction, and a different RPG experience mainly focusing on the game's End-Game content, and Shooter RPGs, shooter fusion with typically Western RPG or MMORPG, neither of these 2 sub genres will be analyzed in this research.

# **3 BACKGROUND**

#### What is the role-playing genre?

Today's modern digital role-playing genre, commonly called RPG, and its many sub genres. Has it heritages from role-playing board games, the Dungeon and Dragon Franchise is the base of digital role-playing games. According to Barton (2008), role-playing board games comes from 2 different other type of board games, wargames and baseball games.

Wargames where typically reenactment games of real war, the basic combat elements of roleplaying games comes from this genre, Barton beliefs specifically that the game Chainmail, Guidon Games (1971) is a big contributor to modern RPGs, because it were typically like other wargames, however all units were inspired by the Tolkien's (1937) fantasy world, which he created with the Lord of the Rings.

Baseball games might at first sound arbitrary, how that is related to D&D, but actually as Barton points out, the Baseball games are loaded with numbers. To clarify the board game genre of baseball is not the part of Subbuteo subgenre of table board games, where the user takes control of token humans and play out miniature versions of sport games for example Soccer or Ice Hockey (Tatarsky, D. 2004). The Board baseball game genre from around the 1960's are games like Strat-O-Matic (1961) (image 3.A), which are simulation of actual sport games. In Star-O-Matic and other similar games, the user instead plays the game using the data from the baseball players. Their strikeout, their homeruns statistics etc., by this the user can stimulate a baseball game, a combination of imagination and statistics.

1	2	3	4	5	6
2-groundball (3b) B 3-groundball (3b) B 4-groundball (p) B 5-flyball (cf) B 6-groundball (ss) A 7-SINGL E** 8-SINGL E* 1-16 lineout (3b) 17-20 9-groundball (ss) A++ 10-popout (ss) 11-groundball (2b) B 12-foulout (c) plus injury	2-strikeout 3-groundball (ss) A++ 4-groundball (ss) A 5-WALK 6-WALK 7-strikeout 8-flyball (lf) B 9-WALK 10-groundball (3b) A 11-groundball (3b) A 12-lineout (ss) into as many outs as pos- sible	2-flyball (If) B 3-groundball (3b) A 4-HOMERUN 1-18 DOUBLE 19-20 5-TRIPLE 1-4 DOUBLE 5-20 6-DOUBLE** 1-10 SINGLE** 11-20 7-SINGLE 8-SINGLE** 9-SINGLE** 10-SINGLE* 11-groundball (3b) A 12-flyball (If) B	2-strikeout 3-FLYBALL (LF) X 4-WALK 5-strikeout 6-DOUBLE** 1-8 SINGLE** 9-20 7-GROUND- BALL (2B) X 8-popout (1b) 9-SINGLE* 1 lineout (2b) 2-20 10-WALK 11-GROUND- BALL (1B) X 12-CATCHER'S CARD X	13-20	5-flyball (cf) B 6-flyball (cf) B 7-GROUND- BALL (SS) X 8-flyball (lf) B 9-flyball (lf) C 10-groundball (2b) C 11-FLYBALL (RF) X 12-groundball (p) B
ATBATS DO	BATTING REC UBLES TRIPL 25 4 WALKS 64		WON LOST 25 7 HITS WA ALLOWED ALL		INNINGS PITCHED 273 HOMERUNS

Image 3.A, A typical player card from Strat-O-Matic. Showing a lot of numbers, values huge amount of statistics per player.

Barton says, that the simulation sport games, are very similar to the common role-playing board game with all its statistics. By replacing the baseball player with a warrior and replacing the rules with an adventure of a fantasy world, however still based around the same statistics. Statistics are changed for example homeruns becomes critical hit chance and so forth. Moore (2011), in his book Basics of Game design, very clearly points at the importance of math. Moore is very adamant on how important the math is for role-playing games. There is a clear relation from statistics from simulation games, to board role-playing games, to digital role-playing games. Further Moore points at a correlation between war games and RPGs.

The combination of these parts have created the board game genre of role-playing games, which also have other common names e.g. tabletop role-playing game, pen-and-paper role-playing game, or table-talk role-playing game.

The combination of the baseball statistics and the wargames as stated by Barton (2008) created this genre. There are several unique parts of playing pen-and-paper role-playing games from other type of board games for example Chess or Othello. First of all the players, have to create their own character. This character is who the user will be during gameplay, many people

can spend several hours creating their character, and characters are often reused in later play sessions and sometimes moved over to other game instances. Simply said the role-playing games (as the name implies) is based around the users playing a character.

The character created will usually be under constraints depending on what campaign will be played, so for example one may not be able to create a character with any kind of race<sup>5</sup> or occupation. Digital RPGs are similar with the user usually have to create a character that will the games story or/and the game worlds.

After the user has picked his characters race, name, etc., some users may construct a backstory for his/her character. After this, playing pen-and-paper RPG is a lot about statics the user will place out points in how good her/his character will be at different abilities, for example Strength or Agility. This can be done in different ways, commonly the user will roll dices and depending on the roll gain different points, the user will usually take a few different abilities depending on what kind of character the user is, e.g. a Thief can take some sort of mug ability. Later on during the actual gameplay the user will be able to strengthen the character he/she is, and further improve the statics or/and gain new abilities. This is one of the very fundamental parts of the gameplay of RPGs. Digital RPGs has used many different *Character Development* systems, many which are very similar to the system of pen-and-paper RPGs.

As mentioned, RPGs often have a similarity to fantasy literature. In pen-and-paper the game will have a game leader commonly called Dungeon Master, this Dungeon Master can be said works as a narrator for the gamers, helping them progress in the pen-and paper game. There are digital games which have used Dungeon Masters too, for example Neverwinter Nights, Bioware (2002). The Dungeon Master takes the part of controlling the enemies, the obstacles of the game. She/he will also control the overall gameplay, the narrative and how the game plays out. She/he will explain how the world unfolds for the users, when they play the game. Because of this there is not a certain outcome what the game will have nor what will happen during the gameplay. Although the Dungeon Master is usually following a scenario, there is freedom how it can be played, especially since the users has a lot more freedom how they play the game compared to other genres of games. Digital Role-playing games are similar to the pen-and-paper RPGs, mainly from how the game world is constructed and how the battle is conducted, the freedom part exists but is not as all as open, but this is not a strange as it a computer program needs more constraints to function properly, overall the biggest difference is probably that the game obstacles is controlled by the computer in Digital RPGs.

Note: There also exist other type of role-playing games, for example L A R P, Live action Roleplaying game where the users physically act out their character. (Salen & Zimmerman. 2003) One example of a L A R P game is Vampire: The Masquerade.

## 3.1 Genres of role-playing games

<sup>&</sup>lt;sup>5</sup> In Role-playing games race means what species the user will belong to. Each race has their strength and weakness, e.g. Elves usually have high Dexterity but lack Strength.

Today the term RPG is an extremely blurred term in modern games (Babovic , 2000) )<sup>6</sup>. Even ignoring other genres which clearly has RPG fundamental elements but are still favorable in another genre, there is still many different sub genres. Furthermore, usually the genres differ also if they are developed to Personal Computers or Consoles.

First of all it's today a classic debate about what really is an RPG, which usually becomes debate between Western RPGs (WRPG) versus Japanese RPGs (JRPG).

Barton (2008), "Fans of American CRPGs. conversely are often unfairly critical and perhaps even biased". For example the controversial statement made by Erickson, in an interview with Strategy Informer (2010)<sup>7</sup>. Erickson works as Wiring Director for Bioware, which is the company who is probably the most prominent Western RPG producer. "You can put a 'J' in front of it, but it's not an RPG. You don't make any choices, you don't create a character".

This research has not focused on going into this debate or to come up with arguments for any side, instead the work presented uses both terms to merely make it easier to groups games as different sub genres of RPG's.

Erickson's statement is a simplistic reverse definition of what a WRPG is. A game where the user will create his/her own start character, before the actual gameplay starts. Then the user will be able to make decisions in the narrative parts, which will affect the story outcome of the game, and the user will be able to have freedom in character development. The game also uses many statistic and randomness to construct the outcome of actions, as mentioned a heritage from the board games. Typical examples of Western RPGs are the Bioware franchises, e.g. Baldur's Gate (1998), Dragon Age: Origins (2009) and Mass Effect (2007), and the The Elder Scrolls Franchise (Bethesda Softworks. 1994).

The Japanese RPG, has a very similar definition, the only usual difference is that the user can't create their own starter character, and usually can't not change the storyline outcome. Instead JRPGs tends to have a much more linear storyline and a more linear progress in the game, less freedom in game world (Barton 2008). But there are games where the user can change the outcome of the storyline, for example Suikoden 1-5, Konami (1995). The simplistic difference becomes predetermined main character in JRPGs while WRPG let the user create a character from scratch. Good examples of Japanese RPGs are the Square Enix franchises for example Final Fantasy (1987) main series and Dragon Quest (1986).

It's important to clarify what different naming mean in this research, for example Barton (2008) uses the term CRPG, which stands for Computer Role-Playing Games, this term does not work in this research for several reasons. First there is there are a lot console role-playing games, secondly the 'C' can be misinterpreted as Console instead of Computer and Barton uses the term JRPG, and that becomes mildly confusing as a typical JRPG could be released to the computer market, for example Final Fantasy 7, Square (1997).

In research the term RPG or role-playing game is referred to as any kind of digital role-playing game, it can be to any type of interaction design media. Be it computer, console or handheld artifacts. A few other terms are used as they work for a very broad view of the sub genres of RPGs.

<sup>&</sup>lt;sup>6</sup> <u>http://www.actiontrip.com/features/combatsystemsinrpggames.phtml</u>

<sup>7</sup> http://www.strategyinformer.com/pc/starwarstheoldrepublic/interview.html

There exist more sub genres of the RPG than WRPG and JRPG. First and foremost, it's very important to understand that games developed in Japan is not necessary a JRPG and a game developed in West (usually in U.S.A) is not necessary a WRPG. Different literature presents different views on the RPG genre and possible existing subgenres. This is further complicated by that the media has another one, which also can be different. Usually depending on the Medias culture background (Especially Japanese Media tends to have another view about games then the Western Media. To makes sense of this, in this chapter of thesis some different views will be presented and then this research will present one view of subgenres based on the researcher's collected analyse of the different literature, media, empirical studies and the overall work. The presented is this research definition of what major subgenres exist of the RPG genre.

Moore (2011) defines combat system in RPGs to 3 different genres:

Tactical RPGs, Dungeon-crawl RPGs and Traditional RPGs.

The Tactical RPG, subgenre is very closely related to strategy genre (Moore also has this genre as a subgenre to wargames (strategy genre)). But it still has character development and story progression. Moore's examples of a Tactical RPG are "Final Fantasy Tactics and Atlus' Disgaea 2:Cursed Memories".

Dungeon-crawl RPGs, which are according to Moore much more action-oriented then the usual role playing games. Moore's examples are the Diablo series and Gauntlet.

The genre Moore names Traditional RPGs includes both Bioware's game series Baldur's gate and Square Enix's Final Fantasy series. Furthermore, he has included both MMORPGs (example World of Warcraft) and first person shooter RPGs (example Fallout 3) into this group, although these genres are noted as being more modern incarnation of Traditional RPGS

Barton (2008) talks about a few different genres, he mainly focuses on the CRPG (WRPG) genre. Examples from Barton CRPG games Ultima and Dungeons of Daggorath. However he mentions a couple of other sub genres of RPG. JRPG, Action-CRPG, MMORPG and Adventure JRPG.

Barton's genres are:

- JRPG: Final Fantasy 1-3, Dragon Quest/Warrior, Phantasy Star.
- Action-CRPG genre examples Diablo and Nox.
- MMORPG genre, examples EverQuest, Phantasy Star Online, Final Fantasy 11 and World of Warcraft.
- Adventure JRPG genre example Zelda Franchise

The Zelda franchise is one of the harder games to define according to him, as is the whole idea of what exactly is an Adventure RPG is. Barton himself states, he is unsure if Zelda can be labeled as a JRPG but it is close at least. Brathwaite and Schreiber( 2008), clearly says that Zelda is not an RPG, "Adventure games like The Legend of Zelda are well known for exploration-based puzzles, as are RPGs". There are a lot of different views on what an RPG is.

This was just examples of what literature can explain about subgenres. As mentioned this is further blurred when observing how the media commonly uses the terms, or the users themself.



Image 3.B, these images is from an article on Kotaku, one of the Internet's most famous game blogs.

In image 2.B it's notable that the author Fahey (2010)<sup>8</sup>, does not have either of the WRPG or the JRPG. In similarity to Moore (2011), this points to that JRPG and WRPG is merely split after their narrative parts of the game and not the actual core gameplay (battle gameplay). Image 2.C (originally the same image as 2.B) explains the difference between West and East according to Fahey. In this definition, most of the WRPG and JRPG games would fall under the Turn-based RPG subgenre, similar to Moore's Traditional RPG subgenre. This possibly means the only real way to define the sub genres are from the game's fundamental gameplay.

<sup>&</sup>lt;sup>8</sup> <u>http://kotaku.com/5546807/a-visual-guide-to-the-role+playing-game</u>



Image 3.C, Is the only difference with WRPG and JRPG the story?

But there is a problem this can easily become extremely complicated, for example Castlevania Symphony of the night, Konami (1997), has *Character Development*, i.e. the user can decide the outcome of the story, statistics etc. Is this game an (J)RPG then? The game does have a story but the user will spend very little amount of the game season reading any story, meaning if the game story focus is still relevant, otherwise it might be impossible to limit the work frame. However, what really makes Castlevania Symphony of the night into an

Action/Platformer/Adventure game is that gameplay it's completely different from every genre and game mentioned (expect Zelda 2, Nintendo. 1987). The core gameplay is still the most important trait of the game, as said by Fullerton, Swain, and Hoffman (2008) "There are so many elements in a typical game that is difficult to know where and how to start. What we recommend is that you isolate the core gameplay mechanics".

Note: Castlevania Symphony of the night can be argued, like Zelda, Nintendo (1986) to be an Adventure RPG. And the newer Castlevania games for example Curse of darkness, Konami (2005) has experience points and levels, making it actually be more of an RPG then the Zelda franchise, Curse of Darkness is arguably an Action RPG.

For this research is much more important to look at the game mechanics, and dynamics that creates the gameplay experience. It's better to define the sub genres from a gameplay perspective solely. As stated JRPG and WRPG is really similar in some part, and there are examples of games that transcends the border or is at a blurry line in between. As said by Kaiser (February 2012)<sup>9</sup>, "It's not true, though. What's more, it never was." According to Kaiser, it is a common misconception that there is difference between WRPG and JRPG. And for this work how the story is progressed by the user can usually (there are a few examples where it does affect the battle gameplay) be ignored. It would be possible to put them in the same genre when analyzing from a set perspective. However, from a game mechanic and a gameplay observation of the core battle mechanic of the typical JRPG and WRGP they will be placed in different genre, they are different on a game mechanic level. They are also different on the fundamental overlaying gameplay experience as said by Theus, Floyd and Portnow (February 29, 2012)<sup>10</sup>

Note: A possible reason for the debates on what is an RPG and the whole topic of West vs. East, can very well come from that the games do have fundamentally different core gameplays, the story is usually differently presented, but it do exist JRPG which has a story as WRPG and vice versa, but commonly the games from Japan follows certain way regardless on how they actually presented the story

Note2: Another important thing on West vs. East, is the characters and storyline presented. Users from Japan are used to the Japanese culture, and will reasonably enjoy a game with a storyline which follows their own culture, on the same time users from the west (people mainly born in U.S.A) will be used to their culture and will reasonably enjoy a game which for them feels more natural. Barton(2006)<sup>11</sup> believes it can be because of the more "cute" artistic way Japanese games has, he calls the "Kawasai" affection of the culture in Japan why it is like this. (Kawaii means cute in Japanese) This is what Kaiser (2012) says too, "there are differences, primarily aesthetic ones. The graphics of Japanese RPGs tend to be more anime-based". The debate is probably empowered by the aesthetic differences.

In this research, the RPG genre is viewed to have six sub genres that can be identified.. These six are:

- First and foremost the traditional WRPG and JRPG. For example Fallout 1, Bethesda Game Studios (1997) and Final Fantasy 7.
- Secondly the Action RPG(ARPG) and the Tactical RPG. For example Diablo, Blizzard North (1996) and Fire Emblem, Nintendo (1990).
- Thirdly the more modern sub genres the Massive multiplayer online RPG (MMORPG) and the Shooter RPG. For example World of Warcraft, Blizzard Entertainment (2004) and Borderlands, Gearbox software (2009).

<sup>&</sup>lt;sup>9</sup> <u>http://www.joystiq.com/2012/02/16/east-is-west-how-two-classic-rpgs-prove-the-stereotypes-false/</u>

<sup>&</sup>lt;sup>10</sup> <u>http://extra-credits.net/episodes/western-japanese-rpgs-part-1/</u>

<sup>&</sup>lt;sup>11</sup> <u>http://armchairarcade.com/neo/node/733</u>

Further there are similarities between the sub genres, this is mainly from their inherent heritage to either WRPG or JRPG.

There exist many different ARPGs from both Japanese and Western developers, which usually affects how the narrative is progressed. Otherwise they are usually very similar and are typically called the Hack and Slash genre, which today is a very bad term to use as it also now mainly applies to action-oriented 3D beat em up games, for example Bayonetta, Platinum Games (2009) and God of War, SCE Santa Monica Studio (2005). This is the biggest reason for using the term ARPG in this research. However as mentioned this genre is a combination of both WRPG and JRPG gameplay, it's more the narrative that differs, but is then for this specific research not a concern.

Tactical RPG is clearly a child of the JRPG genre. The overall gameplay are almost always turn based and the games are extremely linear, also the characters and the character's gameplay abilities etc., has a typical JRPG touch. However the freedom in character development is arguably more close to the typical WRPG.

The MMORPG genre is derived mainly from the WRPG and also has many pen-and-paper RPG characteristic, for several reasons. Biggest one is probably that it is a social interaction between players and those players take the role of one character each, creating their adventure party together with other individuals as in the classic board game RPGs. The MMORPG features a character creation system very closely related to the pen-and-paper and from that typical WRPG.

The Shooter RPG genre also mainly follows the WRPG gameplay. Both with how the character development is progressed, and how the gameplay is overall.

## 3.2 Mechanics, dynamics, and gameplay of sub genres of RPG

Games can be described in different ways. As explained in chapter  $\underline{2}$ . This sub chapter presents the six major subgenre of RPG.

Disclaimer: This sorting of RPG genres, is not an absolute truth. First and foremost it's made from the battle perspective based on the most obvious gameplay patterns, the very basic fundamental mechanics and the most basic dynamics of the different sub genres

#### 3.2.1 WRPG

This description of what a WRPG genre is taken from Dungeons and Desktops: The History of Computer Role-playing Games by Barton (2008). However as pointed out Barton uses the term CRPG, in this research the term WRPG is instead used.

The WRPG genre, as mentioned normally starts off with that the user will create his/her own character, out from a set of limits. The user usually have a set number of points to distribute in the different attributes of the game, and later each time the user levels up he/she will receive a set number of points to further distribute. Commonly the user will pick a race, heritage and/or factions etc. This will further affect the character's distribute and in many games depending on what race the user is will affect how in-game characters will interact with the user, furthermore the user will be able to have some sort of moral decisions in the narrative. This will also affect how in-game characters will later trigger different ending of the game or trigger extra content of the game etc.

The actual battle gameplay will usually be *turn-based* or sometimes *real time*, but the real time battling will not be fast phased at all. Commonly the user can pause the battles in the game, to either decide new strategies or even give commands, removing the real time, for example Dragon Age: Origins.

The enemies of the game will be seen before battle, and the user can set up *traps* or plan out positions of his/her characters before the enemies engages the user. The enemies will usually be spread out and it's rare that a user's party is *outnumbered*. The user will instead engages with the enemies of one location separately and eventually defeat them all. The game will have a clear end, and after the user have reached the end. The game usually offers a replay value, the user can replay to experience what how other narrative decision will affect the outcome of the game. The battle system reaches its hardest part in the narrative and the last boss of the narrative is commonly the hardest boss of the game, and where the user should use all the battle mechanics to be able to beat the game.

WRPGs features extra content intent the form of *Side Quest*, often related to playable characters. These Side quest will usually have a lot of side stories from the main story, this is a way for the user have optional storytelling. Furthermore, the user might have to replay the games to be able to do every Side quest.



Image 3.D: Dragon Age: Origins, before the game starts the user creates her/his own character to role-play as.

## 3.2.2 JRPG

The story progression usually involves huge amount of text and dialogues. The user will very rarely gain any noteworthy story development outside the main narrative. (Kaiser 2008) Furthermore some JRPG don't feature much freedom for the user when it comes to *Character Development*. (Especially in older JRPGs). Then the game focus instead of having several very unique characters the user has to set up his/her party with, a good example of this is Chrono Trigger, Square (1995). But this is very varied, some JRPG features tremendous depth in character development, for example Final Fantasy 13-2, tri-Ace (2011).

The JRPG Game world exploration, is very different then the WRPG. In JRPG the user will commonly not be able to know when any enemies will appear, instead the game will randomize battles if the user moves at location where enemies can appear, this is called *Random Encounters (GameTrailers, 2008)*<sup>12</sup>. There are JRPG's who don't use this, but they are still similar with *Random Encounter* games that, when the battle start its outside of the game world exploration mode, in these games the user can see the enemies and when the enemies and the user's character touches the battle starts, for example Grandia 2, Game Arts (2000). The battle

<sup>&</sup>lt;sup>12</sup> http://www.gametrailers.com/game/the-final-fantasy-retrospective/4831

takes places as a mini game inside the exploration game. The frequency of *Random Encounters* vary from game to game, commonly the user will have a lot more battles than in a WRPG relatively same sized area.

During battles the user will typically not be able to move the characters at all, and the game will be *Turn-based* or a hybrid of turn-based and *real time* (Babovic, 2000). The battles have a heavily easy to understand *Predictable Consequences*, for example Final Fantasy 9, Square (2000).

The users set up before the battle is often very crucial, while in some WRPG,ARPG and Shooter RPG the user is allowed to change equipment, in the JRPG the user will often have to pre plan harder battles extensively and have a correct set up for the battles, for example Final Fantasy 13, Square Enix (2009).

The JRPG rarely have a replay value in itself. There is often no game mechanic that offers any new experience the second play through, although some JRPG have *a game+* mechanic letting the user replay the game from the start but with all characters kept over, or the game the second play through have extra content(usually more bosses). Instead JRPG usually features more complicated battle challenges after the last boss of the narrative, there is commonly a big difference in required skill of the user to clear the story and to clear extra bosses, for example Wild Arms 3, Media Vision (2002).

Furthermore the JRPG often features very advanced mini games(not the battles), especially the more modern games in the Final fantasy franchise are known for having numerous well designed subgames, for example Blitzball in Final Fantasy 10 (Gametrailers 2008) or for example the Iron Chef subgame in Suikoden 2, Konami (1998).



Image 3.E: Final Fantasy 7. A typical JRPG battle system is featured in FF7. The characters (enemies and player's characters) will stand still waiting for their command.

## 3.2.3 ARPG

ARPG are often called "Hack, and Slash" (Bailey 2010)<sup>13</sup> or "Dungeon-crawl RPGs" (Moore, 2011) and are always in real time. The name Hack and Slash can be a remark on the simplicity repetitive gameplay some ARPG can have (Bailey 2010). This is probably because the ARPG have less of the gameplay focused on action, compared to games who are truly 100% focused on action. It is not unusual for the ARGP to have too little demand on the fine motor skill and reaction time, leading the user to be able to only require slightly more awareness then when playing a WRPG or a JRPG but with a less requiring strategic decision, and with less dynamic abilities then in action games.

This is connected to an *optimal path* problem (Koster, 2004). When the user have upgraded his/her character too far, the user do not have to move around to avoid attacks, the user can just hack his/her way through. Another reason can be even do the user is moving around a lot,

<sup>&</sup>lt;sup>13</sup> <u>http://www.1up.com/do/blogEntry?bld=9030743</u>

and having a very high APM (action per minute), the common graphical expression of the dynamic of the ARGP is usually far lower than modern action-oriented game. Possibly creating the illusion for bystanders that the player is purely doing nothing else then Hacking and slashing.

Story-wise an ARPG is commonly viewed to be somewhat of a WRPG but with less story, but there are ARPG from Japan who have a story of a typical JRPG, it can be either. Usually ARPG are like WRPG when it comes to battles, which are fought then in the game world exploration. For example Diablo, Final Fantasy 12, Square Enix (2006) and Secret of mana 3, Square (1995) (Image 2F). But there exit games with a mini game battle system who are still ARPG, these are usually from Japan, for example Star Ocean: Last Hope, tri-Ace (2009) (these games usually have the similarity in story and narrative progression with JRPG). These games at first glance might look like typical JRPG but they focus much more heavily on the action parts, than RPGs. All true ARPG must be in real time, to challenge the users reflexes (Fahey, 2010)

The ARPG challenges the user's ability, to properly character develop and prepare for battle and how fast the user can react to things happening in the battle, still they usually achieve this from having less of a challenge on each part individually, and why WRPG and JRPG who have something of a in-between state of Turn-based or real time instead can focus more on strategy.



Image 3.F: Secret Of mana 3: The user is controlling Charlotte (sometimes referred to as Charlie) while the other characters are moving around(controlled by the AI or by other users) in real time battling the enemy monsters. The user can further build up an Energy meter(at the side of the character portrait) to unleash special attacks, a fighting game touch to it.

## 3.2.4 TRPG

TPRGs usually have zero world exploration, the game battles take place between story parts. The user usually has *Safe Haven* or simply a menu (common in older games). To clarify, in most TRGP the user do not travel around, have a story progression and face off with enemies in between the story. The user will be at his/her base where the story takes place, and then the user will be transported to a battle field of some sort, prime example Disgaea Franchise (Moore, 2011). There might be a world map, but this will usually mean the user can simply press different location on the map and the battle will engage, commonly with a story part before, for example Ogre Battle, Quest (1993). There are a few games that have game world movement, for example Final Fantasy Tactics Advance, but the movement is on lines dotted out on a map, meaning there is no game world exploration. A TRPG is usually extremely linear, much more than a JRPG, if there are any extra content outside the narrative progression is usually purely more challenging battles.

At the user's base of operation user will often have extremely complicated pre planning options, as it's a combination of character development and party composition furthermore TRPG often feature meta gameplay patterns and lastly the battles usually emphasize heavily on the environment, similar to strategy games. The user will have often had huge amount of characters, and the user will be limited to only using a spare number per battle. This combination will set the user to create several different "strike teams". Commonly the user will spend several hours, of number setting up his/hers different parties that suits different kind of battles.

The battles are set commonly on isometric panels, or on squares (Harris 2009)<sup>14</sup>. Commonly called chess battle system. TRGP is in a sense the reverse of ARGP, they focus zero percent on action, have absolutely no skill required on the user being quick witted, instead they focus 100% on strategy planning. Usually the battles are round turn-based, this means all the users characters will take their turn each, then the enemies characters will take one turn each(Moore, 2011), an example Fire Emblem Franchise (Image 2G). And Fire emblem is often seen as the first TRPG created, the mother of all other TRPGs and it came from Japanese Developers (Nintendo), following some JRPG gameplay design patterns (Harris. 2009)<sup>15</sup>Another version which is less common, is that the characters will have a speed value determining when they should act, leading to *Varying Turn Orders*, for example Final Fantasy Tactics, Square (1997) (were the user can gain more turns then the computer from a big difference in speed).

The battles in a TRPG are usually very long compared to other games, and can take several hours, usually story is also told during the battles, often with the user's main characters interaction with the enemies' characters.

<sup>14 &</sup>lt;u>http://www.gamasutra.com/view/feature/132457/game\_design\_essentials\_20\_rpgs.php?page=21</u>

<sup>&</sup>lt;sup>15</sup> <u>http://www.gamasutra.com/view/feature/4066/game\_design\_essentials\_20\_rpgs.php?page=14</u>



Image 3.G: Fire Emblem(The Sword of Flame): Fire Emblem has the typical Chess Battle System, each character has as specific number of movement squares(blue in the image) and where they can attack(red). While the game looks like strategy games, each playable character is a specific and unique character.

## 3.2.5 MMORPG

MMORPGs usually features two specific different gameplays. The first one is the Leveling, where the user will work his/her way up to the max level, the second is the End-Game (Section 2.3), where the user will take an more active role of empowering his/her characters with better items.

The games are focused on social interaction, and trading between players, creating a virtual economies, and virtual corporations of users, commonly called Guilds. Guilds will have different goals in the game (larger guilds are often active in several games), typically they will focus on clearing the much harder dungeons which requires many people to take part in. This is the

normal reason a user joins a guild, as finding people at the right time, and who can play the game correctly is hard if not some sort of network is in place (Yee 2006)<sup>16</sup> Prime example of an MMORPG is World of Warcraft (image 2H).

The battle system is a mix of WRPG, JRPG, ARPG and TRPG.

Primarily the genre is similar to the WRPG, it features the character creation part, and the battles are in real time. But not very-fast paced real time, having the closest relation to WRPG. Furthermore many typical JRPG gameplay patterns exist (Moore 2011). Most noticeable *Angry Boss Meter* takes place and the battles are heavily predictable as with JRPGs. The battles often require the user to move around and avoid enemies' abilities, or to use common ARGP patterns such as *Kiting*, which creates a similarity with ARGP. Lastly the game do features some *Character Development* and meta planning of the character the user is playing, and especially the game features a party planning but each user is playing one character each in the party, these parties are actually very similar to a normal outlay gameplay the TRPG genre offers, the guild's members will spend hours of planning and setting up strike teams and other similar behavior found in the TRPG game seasons. Blizzard Entertainment did, not create the MMORPG genre, but they definitely made it immensely popular with World of Warcraft<sup>17</sup>, which have made other MMORPG developer to try and recreate WoW but with minor changes. And as WoW toke may Gameplay patterns from Diablo 1-2, Blizzard Entertainment's older games. It's not surprising the MMORPG genre is mainly comparable to WRPG and ARPG (Harris 2009)<sup>18</sup>.

<sup>&</sup>lt;sup>16</sup> <u>http://www.nickyee.com/daedalus/</u>

<sup>17</sup> http://investor.activision.com/releasedetail.cfm?ReleaseID=647732

<sup>&</sup>lt;sup>18</sup> <u>http://www.gamasutra.com/view/feature/132457/game\_design\_essentials\_20\_rpgs.php?page=11</u>



Image 3.H: World of Warcraft: In the typical MMORPG many users will play together to overcome the obstacles of the games, at this location(Molten Core. Second Boss) of the game, the users are up to 40 players, and usually they users have divided the number of players after needed Functional Roles.

## 3.2.6 Shooter RPG

The last bigger subgenre of RPG is the newest one, can be called FPSRPG (First Person Shooter RPG) Shooter RPG, Role-playing Shooters and third person shooter RPGs. This genre is not a very well established from it being a very modern one, in this research the term Shooter

RPG will be used for coherency, this is not shortened to SRPG because sometimes TRPG genre is called SRPG, where the S stands for strategy. An example of a Shooter RPG is Fallout 3, Bethesda Game Studios (2008). There is Shooter RPGs which are not purely from the "FPS" perspective such as Mass effect, which is instead a third person shooter RPG.

From a simplistic view, this genre is basically the FPS genre but with *Character Development*, and much more *Side Quest* driven gameplay from the WRGP gameplay. It is actually very few games that exist of this genre, but some of them have been very successful in a short period of time making the general user of games be aware of this subgenre, most noticeable the Mass Effect Franchise (Fahey 2010).

The Shooter RPG is not very similar to the RPGs in the sense of how the user do battles, but the overall gameplay is similar for example Mass Effect and Dragon Age: Origins are very similar(probably because of the same developer), another example is Borderlands, a Shooter RPG from Gearbox. Which has incredibly similar fundamental gameplay as World of Warcraft and other MMORPGs, the user pick up quest (which are of the same nature, kill 10 x, find 10 y), a very similar quest oriented gameplay. But the battle is fought with ranged weaponry. The gameplay is very different but on the same time very similar.



Image 3.J: Borderlands: Borderlands, has the fundamental gameplay of an FPS, but features the Equipment pattern from RPGs (in order to create a multitude of different effectual weapons and very different type of playable characters in the game). As seen in the image, the game features a number based damage system. Furthermore, at the right of the screen, the user's current quest progress is shown, a common MMORPG UI system.

#### 3.2.7 Notes on problematic fusions of battle systems

To set a game in a specific genre, can be very confusing. But it still helps as using formal language makes it a lot easier to communicate then using informal language. It features an interesting challenge for the game researcher when trying to analyze some games. For example, Heroes of might and magic, New World Computing (1995) is not an RPG, because the user needs to also build units which will do the actual fighting. However, in Heroes of might and magic 4, New World Computing (2002) (this was removed in Homm5). The Heroes are actively fighting in the battles, making them actual units. Furthermore, the user can choice to only use heroes instead of normal units. In this case, the user is playing a TRPG.

Another good example is the Final Fantasy franchise, arguable the most famous RPG from Japan, FF1 is however more like a WRPG in that the user has to decide what characters to have before the game starts, although the user doesn't have any narrative decisions but this is probably more because the game was released 1986. FF1-3 are turn based, while FF4-9 are a mix between real time and turn based, FF10 went back to turn based, but the user can affect the turn order. FF11 is an MMORPG, FF12 is an ARPG this game's battle system follow the typical WRPG style, but the game don't let the user decide how the characters will be, although the user can control any of the characters as the main character etc, the battle systems of Dragon Age: Origins and FF12 are incredibly similar (Because of the AI player control system). FF13 and FF13-2 are back to the hybrid mix of Turn-based and Real time, but they are much more action focused then FF4-9, arguably the games are ARPGs. The spin of games, FF Tactics and its sequels are TRPGs, FFT being one of the biggest influences of the genre, another spin off, series FF Crystal Chronicles are ARPGs. And Dirge of Cerberus: Final Fantasy 7, Square Enix (2006) is a Shooter RPG. The Final Fantasy series are in every subgenre, expect the WRPG (arguably, and is probably because of the storytelling of Japanese culture). Note: Final Fantasy Legends 1-3, Square (1989) are definitely WRPG, having open story, nonlinear progress, the user creates the characters from a set of variables. But these spin offs are actually the first game in one of Square Enix's other game franchises the Saga series, and was merely named Final Fantasy outside of Japan to boost sales, the Japanese title being 魔界塔士 (Makai Toushi) SaGa, which roughly translates to Tower of Hell Saga. Furthermore Final Fantasy Dissidia, Square Enix (2008) is another spin off and it is a fighting game.

To further complicate what a genre is, there are RPGs that are in few sub genres on the same time. For example Valkyria Chronicles, Sega (2008) is first of all turn-based and real time, it's also an Shooter RPG, game features a WWII inspired battles between 2 armies where the user control his/her side first and then the opponent, this makes it turn-based RPG but the actual control of the round turn take place in real time, and this real time is a Shooter RPG gameplay. And as the game is a wargame is actually mainly a TRPG, with companionship related gameplay patterns, and gameplay patterns that mainly is recognizable as WRPG (arguably more from role-playing board games).

Another example is Ogre battle, the game has first a typical RTS type of gameplay, when the units engages it becomes a Turn-based simulation manager style of gameplay.

# **4 METHODLOGY**

## 4.1 Methods

There exist several different methods which can be used to answer the research question. There are a lot of methods that can gather the data needed to answer the research questions. There is also a need to use several different methods for this research, as the research need to acquire information from both the games themselves, from the users of RPG, from literature and from previously conducted research by other people. There are methods that can be used to analyse games, and there are many different ones. An important part is to determine what specific information one method will give and to make sure it will be more oriented towards the games battle gameplay. In a similar fashion, there is a lot of different empirical methods, which can be used to extract information from users. The methods used are mainly from the Interaction Design Methodologies and computer science. (As the researcher has that background).Different methods that are both. Thirdly a method group, Game research methods can be used this groups method overlaps or is the same which can/would be placed in interaction design methods.

# 4.1.1 Interaction Design Methods

There is a huge amount of existing interaction design methods. Many of these could be used for the research. One way this research could be made is to focus on the user. And use the methods to

For example, as Copper, Reimann and Cronin (1995) describe how the Persona method could be used, the work can be oriented in who? and why? Is a person buying a role-playing game, and possible define differentiation in users buying different sub genres too.

Methods that focus on empirical studies can be used. This can be done in different ways, for example using Cultural probing (Khalil C. 2010), or Long Range Forecasting (IDEO Cards. 2003). IDEO cards also have the method named Role-playing which might work very well for this research, these methods would mainly be used to evaluate current games and new ways to look at the games.

# 4.1.2 Game Design Methods

An obvious approach to come up with a solution to how to design role-playing games is to actually design a role-playing game. And then develop it, test it, and evaluate the game.

It exist several different way how to create game, simplistic methods for example Brainstorming (Clark C. 1958) to be creative and come up with new concepts for the game, in this case new or possible deeper understanding of the RPGs.

There is still many different way using game design methods could be utilized, first is the research commit to only creating one game, or to test out several ideas by creating more than one game.

Methods that can be used when researching the question which would be able to be realistic would be either make one game. Paper prototyping (Medero S. 2007)<sup>19</sup>, possible board game version of full game could be constructed. These methods are mainly used to create new games, or get a general idea how a current game could be improved etc.

# 4.1.3 Game Research Methods

There exist many different methods for game research. The methods this research is focused on. Are methods that will evaluate current games and the gameplay the user is experiencing playing the game. To be able to disclose how the RPG genre works.

Different type of methods that collect information from users can be utilized. There are several different methods that could be used to get feedback from users.

The researcher can observe users when they play the game, for example as described by Petterson and Munters (2007), a researcher could observe the interaction between players and how they interact with the game. This method could work very well for especially the creation part of characters found in many (Western) RPGs, and in the aspect of understanding the social interaction of users playing MMORPGs this could be used.

The research could focus more on the actual gameplay of the games as described by Bennerstedt (2007). Bennerstedt's observation method could be used to discover learning curve problems, it can test the UI of the game. Arguably the narrative parts of the game could be tested using this, at least it could show if a user can understand the task of the game, especially some older RPGs has a blurry way to express what the user should do next, and as Bennersted writes this will certainly create a problem for a new user. (For example, FF1 lacks the rule previously mentioned from The 400 project "Provide Clear Short-Term Goals")

<sup>&</sup>lt;sup>19</sup> <u>http://www.alistapart.com/articles/paperprototyping</u>



Image 4.A: Final Fantasy 13: FF13 a modern RPG, gives a lot of advices to the user, how to progress the game. The line indicates the end of the area, and where the user should travel (to progress the story), the red circles indicates Side Quest (Faded means they are completed), and the white circle indicates chest location, which is faded as it has already been claimed.

A more direct approach towards users can be made. Sharp, Rogers and Preece in Interaction Design: Beyond Human-Computer Interaction (chapter 7, 2007), describes different methods to gather data by using empirical methods. For example having different type of interviews with users of the product being researched. Interviews can be conducted in numerous ways, Sharp, Rogers and Preece, group interviews into three different categories. "Unstructured Interviews", or called Open-ended interviews. The interviewer will have to react how the person being interviewed answers and come up with follow up questions, this is the most flexible type of interview. "Structured Interviews" are the opposite, this method uses a decided order of questions, usually being very inflexible. "Semi-Structured Interviews", is a mix of the two mentioned methods, usually done by having set questions but letting the interviewed person

answering them how he/she likes, and in the later part of the interview giving more Open-ended questions.

Another version of interviewing presented by Sharp, Rogers., and Preece is "Focus Groups". Focus groups is similar to normal interviews but there is more than one person being interviewed commonly 3-10 people. The focus group is often picked out to represent a target population. The general idea is that people will have an easier time saying their opinions in an environment, where they are being supported by the other individuals with similar backgrounds. A more quantify method is using Questionnaires, Sharp, Rogers and Preece. Questionnaires can be used to gather information from a large number of people.

There is ethnographic methods that can be used, when researching games. There is a number of different methods. As previously mentioned the researcher can in a constructive way observe users, this collectively can be called lab studies. Another method to use is called Direct Observation in the Field, by Sharp, Rogers and Preece (2007), this is typically called Field Studies, and involve the researcher observing the users in their natural habitats. Another method to use is the Shadowing (IDEO Cards 2003), which is about following around the users and understand the user's daily routine in life. And how that affects his/her game preferences. This can be further extended with observing how the user lives or how the user have placed his/her game artifact and how it affects the users life in, as done by Aarsand and Aronsson. (2007) where they research how gaming affects the social interaction of family members. A way to use this method is also described by Sharp, Rogers, and Preece, "Observation in the home" (chapter 7.7).

Furthermore, the researcher can play the game with the gamers. This can give a relation to the users and understand why they play the games. This can create a problem as there is a risk that the researcher becomes emotionally attached to what is being researched according to Tedlock (2000). However, this can also be seen as an advantage. Ellis and Bochner (2000) views the emotions as a resource for the researcher to deeper understand the research subject. This can be favorable when researching role-playing online games according to Mortensen (2002), mainly when researching the social interaction MMORPG user will have compared to when they play other genres.

But to be able to play the game with enough insight the research need some former knowledge. This is also true for another method, "playing the game". To play and analyze the game in itself is a method, and can be done in different ones, depending on what the researcher is looking for. A shared matter of these methods is that the researcher should have something called "vulgar competence", which was established by Garfinkel (2002), this ethnomethodology is further explained by Lindwall and Lymer in their paper Vulgar competence, ethno methodological indifference and curricular design (2005).

Vulgar competence means that the researcher has gained extensive personal experience. This is important as Aarseth (2007) says, the researcher needs to be at a certain personal level of skill in a game he/she is analyzing. According to Aarseth a game researcher has a commit to actual truly understand the game. Aarseth also notes how important it is for the researcher to have self-perception and personally know how good one are, and what kind of user one is.

Using game analyzing, the researcher can analyze the components of the game. Mainly in a manner of the different projects mentioned in section <u>2.2</u>. One method that could be used is to establish gameplay design patterns. When working with gameplay design patterns, a method called Cluster method can be used, as done by Björk and Peitz (2007).

Cluster method is a method that takes in matrix (set of vectors) and orders them after different algorithms. By using the cluster method will show how the different genes of the matrix relate to each other. In a game researcher context, the method can be used to show how much two or more games relate to each other based on each value of the vector (row) in the matrix. These vectors can be of anything that can be in a game, for example gameplay design patterns. Furthermore heat maps, can also be constructed to illustrate a visual image on how strongly a gameplay design pattern is influencing a given game. In the article Open source clustering software by de Hoon, Imoto, Nolan and Miyano (2004) explain how their cluster program works. To further use the cluster method a Treeview can be used as described by Saldanha in Java Treeview—extensible visualization of microarray data (2004).

# **5 PLANNING**

# 5.1 Why some methods were not decided to be used

While there is several possible ways to work for the purpose of this research, there were some methods that would not work in this short time span or the lack resources would restrict potential of the specific method.

Creative methods such as Brainstorming and Long Range Forecasting, are good start methods. For example Brainstorming was used in the pre study, but otherwise as this work was done by one individual it's very hard to use most of the group oriented methods.

For the same reason, any kind of building method would be very hard to execute. While it is possible to implement one non graphical game in less time it, is more or less impossible to make any real digital role-playing game in the time frame of the work with only one person. Regardless of the individual's software engineering skills. Furthermore, the game needs testers, and feedback has to be evaluated, in reality the game would have to be finished even faster. But the biggest problem is more that it becomes very limited, in researching RPGs as described in chapter <u>2</u>. The role-playing game has a varied of sub genres, to make any reasonable approach would be to make at least four games, one per subgenre that was decided to be analyzed.

A possible way to do this would be to work with different paper prototypes of designed roleplaying games. This could very well work but probably would create a result biased towards role-playing board games or miss out of a lot of the gameplay context that is derived by the user when playing a digital game.

Using different user observation methods could bring great results. But there is a big problem with this approach for a RPG, especially classic JRPG, which they take many hours to complete for the user. And specifically the starts of RPGs are often very slow. Either it's as modern MMORPGs with start zones, here the research could test if the game is easy to understand for new users etc., but it's pretty tedious and they all more or less look the same. And the typical JRPG has huge amount of storyline in beginning, the Japanese role-playing gameplay across the whole game usually have more narrative parts then a western RPGs, and every other genre except the visual novel genre. But specifically in the start of the game, the games usually explain the game would in some games, would literally take hours before the actual battle gameplay starts, or at least it would usually be minimum battles and a lot narrative part. This does not mean it's not possible, but it's very time consuming. It could be done in a constructed lab study environment, where the researcher has set up the game, for the user. In this context setting up the user for battle gameplay. The problem in this scenario, is that the tester will not have experienced the games start, and reached that point in the game in a natural

order, while the RPGs have less battles in the beginning, almost every game in the genre has a very clear learning curve, the battles in the role-playing genre commonly become more complex when the user progress in the game world, from a number of different reasons.

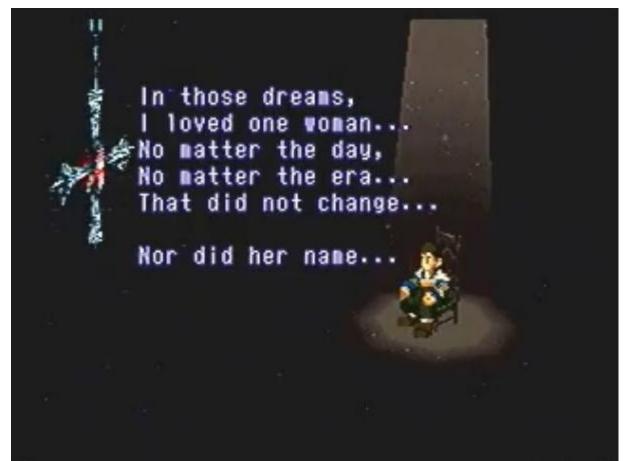


Image 5.A:Xenogears: At the start of the CD2 in Xenogears, Square (1998) the user were simply presented a storyline told by the main character Fie, this lasts for a couple of hours. It has a few battles in between the story telling. Clearly, it is hard to do a user observation study of RPGs.

Another problem is to find the right kind of users to observe. It is not very easy to pinpoint on what actual level a user is as an RPG player. The MMORPG genre, is the easiest genre, where a user that plays the game extensively is an expert user, but it is still hard to define where an intermediate user are. In the other sub genres that are the focus on of this research, it's even harder. This is because for example a JRPG will end at a certain point. While the game can have extra content, arguably the user that completes the games 100% is an expert, but the user is not really an expert of the genre as a whole but that specific game. It is especially hard to define intermediate users, it is also hard to define when and where the user transcends at any stage, beginner to intermediate and intermediate to expert.

Note: This further makes it harder to test and evaluate a developed game too, without extensive resources.

A constrained lab study method could be used to remove unnecessary work time. The game would have to be set up before for the user plays it. By this the user could start right at. What

this research wants to observe the battle gameplay However, it would still take a lot of time, and it would be an alteration of the user experience, and this would great effect the result.

The Questionnaires, is for a similar reason hard to utilize to its fullest extent. While the Questionnaire method can be used to gather information from a large number of people. It's hard to know what people to give it to. This leads to two different ways a questionnaire method can be used. It can be very open and broad and given to a lot of people, or can be very specific and narrow. In both cases, it has to be easy and correctly written and it has to be very unambiguous to make sure there can be no misunderstanding.

Field study methods possibly would work in theory. However to conduct a field study, a field is needed. As RPGs generally is played alone, places do not typically exist where a lot of users play the game, it would be at a user's home, which would have the same issues as lab studies. There is possibility for field studies with RPG genre, for the subgenre MMORPG users playing alone or in groups can be found at LAN, or at Internet cafés. Possibly ARPGs could be observed for example users playing Diablo 2 or Path to Exile, Grinding Gear Games (beta). These mentioned issues furthermore effects methods involving playing with the users. While in other genres, the researcher could very well play with the users, for example the fighting game genre, and then gain a lot of information from the users. However, for role-playing games which are usually single player games this is impossible. Although its depends on the subgenre, the researcher can play with MMORPG users and mentioned some ARPGs for example Secret of mana 3, and examples of Shooter RPG Cooperative mode exist for example Borderlands. The genres of WRPG, JRPG and TRPG are usually only single player, it exist rare examples e.g. Tactics Ogre, Quest (1995) versus mode, Disgaea 3, Nippon Ichi Software (2008) time battle mode(online against other players), Pokémon or for example Golden Sun, Camelot Software (2001) which has a similar user battle mode as Pokémon has.

## 5.2 Methods decided to be used

The main method decided to be use, is gameplay analysis of existing games, by using the gameplay pattern design. There are several reasons behind this. As vulgar competence was already inherent in the individual performing the work, the researcher have extensive experience playing RPGs. The researcher has played a large number of the released RPGs to console since 1986 to 2012, and many of the recognized computer RPGs released during the same time. For example, the researcher had played these games to Super Nintendo Entertainment System before the research.

The 7th saga, Bahamut Lagoon,Breath of fire 1, Breath of fire 2,Chrono Trigger, Dragon Quest 5, Dragon Quest 6, Drakhen, Earthbound(mother), Fire emblem 1-4, Final Fantasy 4, Final Fantasy 5, Final Fantasy 6, Front Mission, Illusion of Gaia, Lagoon,Live-A-Live, Lufia 1, Lufia 2,Might and Magic 2, Might and Magic 3,Mystic Ark,Ogre Battle, Romancing Saga 1,Romancing Saga 2,Romancing Saga 3,Rudra no hihou, Seiken Densetsu 2 (Secret of mana 2),Seiken Densetsu 3, Secret of Evermore,,Soul Blazer,Super Mario RPG, Tactics Ogre, Tales of Phantasia. Ys III: Wanderers from Ys



Image 5.B: Ogre Battle, The March of the Black Queen: One of the game decided to be analyzed is Ogre Battle, from the researchers' knowledge of unique battle systems this game was picked. The game has a kind of manager battle system (user cannot directly control the characters in battle), and a real time strategy system.

The researcher has completed a huge number of RPG games across different consoles and to computer, furthermore the researcher has "truly" completed most of the games clearing the games hardest challenges. This research has access to an import collection of many RPGs that was not released in Europe (Pal versions) and some games that were never released outside Japan.

By picking mainly games the researcher were already very experienced in, the research could lead to that more games could be analyzed in the time frame of the work. Furthermore, it is possible for a deep analysation of the battle system as the researcher has extensive knowledge of the games battle systems. The game analysation were used in conjunction with gameplay design patterns, as the research had easy access to expert knowledge in this project. Staffan Björk was the supervisor of this research, furthermore Björk introduced how he had previously worked with the gameplay design patterns. Furthermore as his research with Johan Peitz (previously mentioned in method chapter) used the cluster methodology for a similar research,

support for using this approach existed. For this reason, it was decided that the research should start with using a similar process.

Another reason to use game analysation methods was as previously mentioned because it can be utilized by only one individual. Methods, which can be utilized by one person is preferable. However, some empirical methods were used. But these methods were mainly used for the pre study and for the end of the research, the methods mainly used where a combination of focus groups and interviews, while for example questionnaires could be used. The questionnaire has to be very precise and given to the right people, then one might as well interview those people. At the early phases of the research using focus group and brainstorming season was used. RPGs are very complex games, normally with a huge number of game elements unparalleled by any other genre. While other genres for example the RTS genre, e.g. Starcraft 2, Blizzard Entertainment (2010) has a more complex battle system than most RPGs, a RPG has many different parts. The narrative, complex character development, complex battle system, extra content, game world exploration etc. This makes it easy to miss parts of an RPG, or to be clouded by the whole game experience when the battle system is the main focus of the research.

# 5.3 Time schedule

Week	Work planned
1-4	Prestudy, gather literature, plan what games should be analyzed
5	Analys of the first 20 games
6	Establish Different Gameplay design patterns, compare with existing patterns
7	Second Iteration, add 10+ more games
8	Compare results from 1 and 2 iterations, merge patterns, remove patterns
9	Third Iteration, add 10-20 more games
10	Compare results from 1,2 and 3 iterations, merge patterns, remove patterns
11	Review the work so far, determine if other literature could be relevant
12	Fourth Iteration, can the patterns be found in other genre outside the RPG genre
13	Compare the result from 1,2,3 and 4 iteration, Prepare Empirical studies
14	Empirical Studies

15	Conclude the empirical studies with the former results
16-20	Thesis reading

# 6. WORK PROCESS

An iterative process was used in conducting this research. There have been a prestudy and 4 major iterations, and in the following each iteration is described chronologically. While most iterations used the same methods, the fourth iteration adding some empirical methods.

# 6.1 Pre Study

Before the actual work started, several parts of what later would be in the actual work was planned out.

First the thesis proposal and from that establish the purpose and the limitations of the research. Secondly some literature that would be beneficial to read.

A big part of the pre study was deciding what kind of methods would be the most studied ones to accomplish the goal in the time span, as described in section 5.1, being only one individual working with this and having a limited amount of resources had a deciding factor in what methods could be decided to be useful.

Lastly a big part of the pre study was to plan what games to actually analyze. As the person performing the work (and pre study), have for many years been having had "vulgar competence", in the field of digital role-playing games. At first, this might give the impression this would make the preplanning of what games to research go relatively easy as less knowledge of basics of the genre would be necessary. But on the same time, this creates a situation with too much knowledge of games, an individual with true vulgar competence of RPGs can easily pick out 50+ RPGs with an "interesting" battle system.

This created a lot of pre reasoning before the actual work time started, and some methods were used to gather more opinions on good RPG to analyze. This was mainly done in Brainstorming sessions, focus groups and unconstructed interviews. From this 20 games were decided to be in the first iteration (it later became 21), and some other games which could be used in the second and third iteration where brought up but not 100% decided on to use.

## 6.1.1 Literature

The main agenda when gather information from literature was to find information about different views of combat system of games. But also on role-playing games in general, as described in chapter <u>3</u>. The role-playing genre can be slightly confusing to categories. Literature that has different specific role-playing games was also tried to find as that can give a direction on what specific games should be researched later. To be frank, current literature about role-playing games. Most literature, for example Basic of Game Design (Moore, 2011), only barely touch on the

surface of how the different battle system works. As described in chapter <u>3</u>, most of the different game design literature mainly gives different perspective on what different sub genres that exist. On the other hand there exist literature on the narrative part in RPGs for example in Challenges for Game Designer (Brathwaite and Schreiber, 2008) describes how in especially older RPGs it exists, a pseudo narrative interaction where the user cannot actually make decisions in the narrative, but the game try to create the fake appearance of freedom. However, this did not have much relevance for this research. The literature that have helped this research, is literature that has been focusing more on the overall user experience, meaning that certain parts of different game design books did give some ideas, but literature as for example MDA (Hunicke, LeBlanc and Zubek. 2004), who instead focus more on the user's emotion and gameplay experience, gave more ideas on why and how a battle system works when analyzing games. Note: Obviously literature that covers the main research method (Gameplay design patterns) was important to read and to learn how it can be used.

#### 6.1.2 Motivation for why the specific games were decided to be analyzed

That games that was decided to be analyzed has a couple of different reasons why. First games that is axiomatically good. Games that have sold millions of copies or are very strongly cult classics. And to take different games from the different four sub genres. This would include games e.g. Final Fantasy 9 (JRPG), Diablo 2 (ARPG), Disgaea (TRPG) and Dragon Age: Origins (WRPG). Secondly games that could fill that can be placed in a subgenre but would be different than the previous picked, for example Secret of mana 3 (ARPG), similar to Diablo 2 but one the same time very different. Thirdly games that have a more unique gameplay, for example Resonance of Fate, tri-Ace (2010) and Vagrant Story, Square (2000) (Image 6.A). Fourth, all the 20 games are games, the researcher were already familiar, which would lead to less time spent on actual playing the game and more one analysation and learning to use different tools.



Image 6.A: Vagrant story: Features a real time battle system. However, it pauses when the user is to attack, and the user can pick what body part to attack of the enemy. Each body part has different defense and Variable Accuracy rate, and will give the enemy different Ailments if injured.

#### 6.1.2.1 Motivation for the choice of games studied in the First iteration

One of the main sources for review data is Metacritic, which is a site that takes reviews and collects them. After this they calculate an average score from all the reviews<sup>20</sup>. This creates a fairer score for a game and other media such as films etc.

Most of the games picked have a high score at Metacritic, however some games do not have any score because they are too old. And other old games that have been rereleased generally receives a worse score by reviewers then what it received at its original release

Mainly the Metascore is given, a value from mainly magazines reviews, however at some games a userscore is given. At some games at the site there are much more user scores or arguably the userscore reflects better on how the game is perceived the general users of RPGs.

<sup>&</sup>lt;sup>20</sup> <u>http://www.metacritic.com/about-metascores#scoring</u>

#### Breath of Fire 5

Breath of fire is a role-playing franchise from Capcom, which has been re-released several times. And the 5 installment has an interesting battle system where the user can do a lot of pre played strategies, before the actual battle gameplay.

#### Chrono Trigger

Chrono Trigger is a game created by the developer from Square and Enix, joining together and making a game at a time when they very rivals(today they are one company) the game had a very good reviews several times, as it has been re-released several times. Metascore 92% rating<sup>21</sup>

#### Diablo 2

The most famous dungeon crawler type of role-playing game (ARPG) Barton (2008). Diablo 2 is still played by many people today, over 10 years after its release. And the third installment was released during the end of this research. Metascore of 88%

### Disgaea 1-3.

The modern start of the tactical role playing genre, the game which made Nippon Ichi an acclaimed company, and the franchise is still their main game(Fourth installment was recently released) Metascore of 84%<sup>22</sup>

#### Dragon Age: Origins

The well received role playing game from Bioware, have several awards won. Have spawned several sequels, in the form of expansions, DLC, and full new title. Metascore of  $91\%^{23}$ 

#### Dragon Quest 8 (Known as Dragon Warrior in some parts of the world)

The first Japanese role-playing game was Dragon Quest 1. Dragon quest as a franchise is extremely conservative and the eighth installment is very similar to first installment. Metascore of 89%<sup>24</sup>

## Final Fantasy franchise( split into 5 games)

The Final Fantasy franchise is the pinnacle of the JRPG genre, this franchise is by far the most famous JRPG games. Many of the games mechanics have been reused by other game developers, most notable the ATB battle system from FF4. According to Barton (2008), FF7 "introduced innovation that became standard not only in JRPGs but also several CRPGs". The franchise very much defines the Japanese role playing genre.

<sup>21</sup> http://www.metacritic.com/game/ds/chrono-trigger

<sup>22</sup> http://www.metacritic.com/game/playstation-2/disgaea-hour-of-darkness

<sup>23</sup> http://www.metacritic.com/game/pc/dragon-age-origins

<sup>&</sup>lt;sup>24</sup> <u>http://www.metacritic.com/game/playstation-2/dragon-quest-viii-journey-of-the-cursed-king</u>

Final fantasy 4-9 has fundamentally the same battle system, but with different character development (most notable the job system in ff5). Because of this FF9 is the game being analyzed being the newest of the ATB battle system games of Final Fantasy. FF 9 has the Metascore of 94%<sup>25</sup>

Final Fantasy 10 is turn based and emphasized more on tactic then the others, it was the first FF to Playstation 2, features some of the most prominent Meta gameplay in the Final Fantasy franchise. Metascore of 92%<sup>26</sup>

Final Fantasy 12 is the only game where the user can move around with the characters completely free both during battle and before. FF12 is the game who is closest to the battle systems gameplay of WRPG, using an advanced version of the ATB battle system called Active Dimension Battle (ABD) Metascore of 92%<sup>27</sup> and it received 40/40 by Famitsu, most recognized Japanese game magazine.

Final Fantasy 13 famed for its dynamic new battle, using another evolution of ATB battle system called Command Synergy Battle (CSB) Metascore of 83%<sup>28</sup>, however when FF13 was released it was very anti-hyped.

#### Grandia 2

One of the few Dreamcast role-playing games, features a sort of mix between final fantasy 10 system and the other final fantasy games ATB system, however with another character development system. Metascore of 90%<sup>29</sup>.

#### Ogre Battle

A cult classic, has very interesting battle system which was very unique for over a decade (until Soul Nomad), was made by Quest, one of the first Tactical role-playing games.

#### Pokemon:

Sold most in history of role playing genre (Fahey 2010), 215 million this number might be of all Pokemon games (some which are not role-playing games).

One of the most recognised brand name, started out as a role-playing game 1995, and is continuously released with new mechanics and dynamics each game. Pokémon black has the Metascore of 87%<sup>30</sup> same score for white, the researcher has played both installment, and all other main Pokémon generation games.

#### Resonance of Fate

It's very expert oriented role-playing game, featuring a unique battle system.

<sup>25</sup> http://www.metacritic.com/game/playstation/final-fantasy-ix

<sup>&</sup>lt;sup>26</sup> <u>http://www.metacritic.com/game/playstation-2/final-fantasy-x</u>

<sup>27</sup> http://www.metacritic.com/game/playstation-2/final-fantasy-xii

<sup>28</sup> http://www.metacritic.com/game/playstation-3/final-fantasy-xiii

<sup>&</sup>lt;sup>29</sup> <u>http://www.metacritic.com/game/dreamcast/grandia-ii</u>

<sup>&</sup>lt;sup>30</sup> <u>http://www.metacritic.com/game/ds/pokemon-black-version</u>

#### Saga Frontier 2.

The researcher's favorite role playing game to Playstation, features 3 battle systems in one game. A typical team battle system, a duel battle system where the user can create attacks/abilities from combining different weapon/elements style of attacks and a typical Tactical role-playing gameplay.

#### Secret of mana 3

Cult classic game, a real time battle system. Was never released outside Japan but have seen numerous fan translations.

#### Soul Nomad

Nippon Ichi has mixed their tactical role playing game with the system from Ogre battle. Unique battle system. (Katanari, 2007)<sup>31</sup>

#### Suikoden 5

The role-playing franchise from Konami. The game has 108 different characters and the user can pick a team out of these characters, similarities to Pokemon. It also features 2 other battle systems then the standard battle gameplay, tactical gameplay and a duel gameplay. Which however is not that much of a challenging gameplay basically they have replaced rock, paper and scissor with parry, thrust and slash it's more used for a dramatic effect in the storytelling. Userscore of  $94\%^{32}$ .

#### Vagrant Story

Received 40/40 in Famitsu. Generally scored very high by reviewers 92 % metacritic<sup>33</sup>, and has been released. It has a unique battle system, more specifically a negative game resource called risk, each time the user do anything he/she will gain risk (0-100). Every risk point increase damage taken and miss chance, the stronger the attack is the user gains more risk and the user can perform combos (very important on bosses), however each hit will increase the cost more than the last.

#### Valkyria Chronicles

Was well received, and is kind of turn based first person shooter, which actually is a tactical game. Metascore of 88%<sup>34</sup>.

Appendix A covers other games that were considered but not used as the first 20 games, but many of them were later incorporated into iteration 2-3.

<sup>31</sup> http://worthplaying.com/article/2007/12/25/reviews/47669/

<sup>32 &</sup>lt;u>http://www.metacritic.com/game/playstation-2/suikoden-v</u>

<sup>33</sup> http://www.metacritic.com/game/playstation/vagrant-story

<sup>34</sup> http://www.metacritic.com/game/playstation-3/valkyria-chronicles

## 6.2 Iteration 1

Note: this iteration had a planned of 20 games, but it became 21 games. This is because the researcher was currently playing Final Fantasy 13-2 (which was released during the time this work was conducted) outside work time, meaning it was very easy to establish that games gameplay patterns. Further, the collection was initially larger than 20 games since other games were at first at part of the research, these games were FF1-FF8. Which was later removed, as otherwise the analysis would be oriented too much towards one franchise.

The analysis of games to establish gameplay design patterns started with analysing one game, and pointing out gameplay elements in the game that could be considered gameplay patterns. This would be done for each game. The main way this was handled was looking at the games battle gameplay and take each part of the systems core mechanics and analyze it at first. Then working upwards in hierarchical viewpoint, for example if core mechanic A exists, does it lead to mechanic A, which leads to behavior A, etc. At first it was important to see the relation between games to find actual patterns and not unique occurrences. After a couple of work days this became increasingly exponentially harder as when one pattern is established from game A, it would not be have to established for game B. But rather set that the gameplay pattern also exists in game B. This makes it harder to establish an equal number of gameplay patterns from each game, literally it is impossible each game added would be able to come up with its original own gameplay patterns. But one the same time, adding one game which is more unique than other games could create several new patterns to be discovered, which could lead to indication that those or at least some of the patterns existed in other games too.

The games and their gameplay patterns were added into a matrix, the researcher took them in letter order. Starting with Breath of Fire 5, Capcom (2002). Then adding in gameplay patterns which could be identified, for example from Breath of Fire 5, the first gameplay pattern from BoF5 was *New Game+*. In the start of the work, numerous comments were added into the boxes of the matrix comments about the game or how the gameplay pattern affected the game. This was later removed and converted into a value of 0, 1 or 2 (These comments were later used as the backbone on how the new gameplay patterns works and they were saved in other documents).

0 meant that the game did not have the gameplay pattern, 1 meant it had it slightly and 2 meant it was clearly or strongly present in the game. These numbers can be and probably is afflicted by subjective reasoning based on the opinion of the researcher even if the researcher tried to be as objective as possible when setting the values. It has been very hard already from the start to determine in some games if it is 1 or 2. It is not very hard to set a 0 if it does not exist in the game, but then it can be very relative if it is a 1 or 2.

А	В	С	D	E	F	G	н	1	J	к	
	SaGa Frontier 2	Breath of Fire 5	Grandia 2	Romancing saga minstrel song	FF9	FF10	Dragon Quest 8	Skies of Arcadia	Wild arms 3	ChronoTrigger	Pł
Dynamic random Permanent Development	0	0	0	C	0	0	0	0	0		0
Character development											
has no limits.	0	0	0	C	1 1	2	2	2	0		0
Linearity prevents character development	2	2	2			1	0	1	0		1
Party Experience	0		2	0		2	0	0	1		0
Party Skill set	2								2		0
Sphere/chess grind			2						2		
talent system	0		0	0		2	-	0	0		0
Talent Tree	0	-	· · · · · · · · · · · · · · · · · · ·	-	· ·	-	-	•	0		0
Class talents	0	-	-			-	-		0		0
Learn by doing	2	0	0	2	2 0	0	0	0	0		0
Characters learn skill at random	2	0	0	2	, c	0	0	0	0		0
Characters do not develop trough experience points	0	0	0	1	c	0	0	1	0		0
Characters are permanently removed to improve users overall											
party.	0	0	0	C	) (	0	0	0	0		0
User reload game to											
min/max	1	0	-	-				0	0		0
Alignment class system			-	-		-		-	0		0
Parent System	0	0	0	C	) (	0	0	0	0		0
Class/club room											
svstem	0	0	0	0	) (	0	0	0	0		0

Image 6.B: This is an image of how the matrix looks like (A very small part of it). For example FF10 scores a 2 in Sphere/chess grind talent system (later called Grid Talent System). While the other games do not have this and score a 0.

After the initial game analysation, and establishing the first gameplay patterns. The work focused on using the cluster method to analyze the relation between the games. At first, this took quite a while to find a workable program and preferably open source program. The program that was incorporated into the process and used extensively during the process was Cluster 3.0. Cluster 3.0 is an enhanced version of Cluster, which was originally developed by Michael Eisen while at Stanford University<sup>35</sup>. To further being able to create visualization from the data created by the Cluster 3.0. Treeview 1.1.6 was used. Treeview originally created by Alok J. Saldanha, also affiliated with Stanford and is an open source program, which can take the files created by Cluster to visualize them in different ways<sup>36</sup>. The main way this was used is to produce heat maps and tree structures showing the games relation to each other as Eisen, et al. did in their paper Cluster analysis and display of genome-wide expression patterns (1998) where they analysed genes of the humans DNA, in this research gameplay design pattern for games where used replacing genes. To get this program to work a matrix file has to be extracted as a CSV file. Cluster produces a CDT file which Treeview can read to create the actual illustrations (for example Tree1).

This worked out as first preliminary usages of the cluster method, by creating a Heat Map, of the matrix. The first step consisted of detecting human errors and correcting them. This involved values being invalid meaning nothing, or a value far too high (10 or 20). Going through the heat map would often result in some corrections. This meant that the matrix had to be redone a

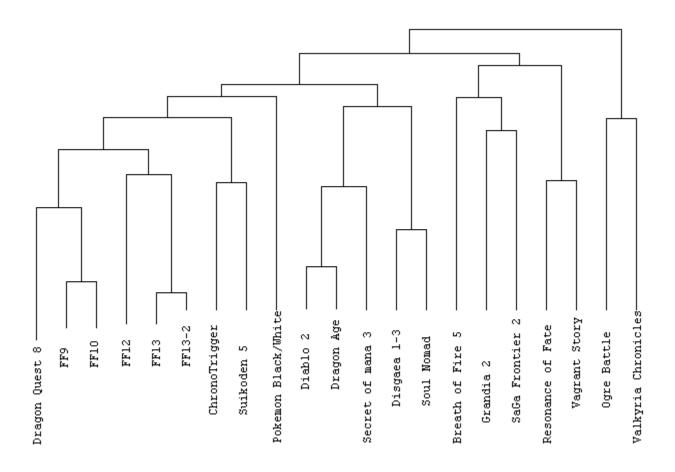
<sup>&</sup>lt;sup>35</sup> Which can be downloaded at <u>http://bonsai.hgc.jp/~mdehoon/software/cluster/software.htm</u>

<sup>&</sup>lt;sup>36</sup> Which can be downloaded at <u>http://jtreeview.sourceforge.net/</u>

couple of times. This lead to a couple of smaller iterations and each large iteration described in this chapter followed this work pattern.

The full Matrix (as an Heat map) can be found <u>in Appendix F</u> (Divided into smaller parts, otherwise it wouldn't be readable)

Iteration 1 included several patterns which were never counted in the result. These were mainly narrative gameplay patterns in the game. Although this should not be confused with gameplay patterns that actually affects the battle system while being in the narrative part of the games.



Tree1: From the first iteration, the tree was created using the cluster method. The games who are connected are the one who has the most relation to each other according to the program when it has calculated the values given by the matrix, constructed by games and their gameplay patterns.

Analyzing Tree1, a different conclusion can be made. The Final Fantasy games are closely related with Dragon Quest 8 (2004) another Square Enix game (original an Enix franchise), which is not surprising. These games do have a lot of game elements in common. And then Chrono trigger, Suikoden 5, Konami (2006) and later Pokémon Black/White, Game Freak (2010) adds up which all have similarities to the FF franchise.

Breath of Fire 5, Grandia 2, Saga Frontier 2, Square (1999), Resonance of Fate and Vagrant Story are in one group probably because of their linearity. While Grandia 2 is not a particular hard game it is very unforgiving, which all of the other games excel in.

What the games in the middle group had in common was not understood at this stage. As it has ordered the real time games of Dragon Age: Origins and Diablo 2 with the two heavy tactical games Disgaea and Soul Nomad, Nippon Ichi Software (2007). Especially as Soul Nomad fundamental battle gameplay is very similar to Ogre Battle, which instead is ordered with Valkyria Chronicles. (The explanation for this was understood from iteration 4, explained by tree 10 in the result chapter)

The reason why Ogre Battle and Valkyria Chronicles are related the most and is out on the side is probably because in their uniqueness they are not very similar to other games. However, they are evidently similar to each other since they both have a real time and a turn based battle system and have two different battle systems in one game.



Image 6.C Valkyria Chronicles: Features a Real time/Round Turn-based game with an Shooter RPG battle system, but is fundamentally an TRPG.

During the last part of iteration 1, it was decided which next 10 games to add to the research should be. By the prestudy a list that covered more than the 20 first games picked existed (<u>Appendix A</u>), and this list was mainly followed with a few changes.

### 6.2.1 Motivation List for games 21-31

#### Elder Scrolls V: Skyrim

The latest installment of the Elder Scrolls franchise, which have received great critical response, Metascore of 94%<sup>37</sup>. Furthermore, the game was relatively new when this research was conducted, making it very easy to find users to conduct empirical study about this game.

#### Fire Emblem Franchise

Is a Nintendo game franchise, arguably the first real tactical role-playing game(Harris 2009). The game Fire emblem. The Sword of Flame was picked being the most recent Fire emblem game the researcher had played, it also has the highest Metacritic score of 88%<sup>38</sup>

#### Front Mission 4

Front mission franchise is another Square Enix franchise, This franchise have taken most of the TRPG game mechanics to a complex level (VanDyke 2004)<sup>39</sup>. A newer installment exists - the fifth - but it has never been released outside of Japan.

#### Phantasy star Franchise

Is Sega's RPG franchise. Released to their own consoles in the early 90s. The franchise has been released after Phantasy Star 4, but these have all been MMORPGs making Phantasy star 4 more relevant.

#### Phantom Brave

Phantom Brave follows a lot of the typical Nippon Ichi's (Disgaea etc) games fundamental gameplay, but in this game they removed the *Chess Based* battle system and instead has a *Roaming Turn Based* system, furthermore it has a some unique meta gameplay(the user brings with him/her objects to stages which characters are conjured from) and for the structure it was a good test to observe if it would be placed in relation to the other Nippon ichi games. Metascore of 81%<sup>40</sup>.

#### Rogue galaxy

RPG to Playstation 2 from Level-5. It is an ARPG, which made it a good test game for the structure, as mentioned the structures ARPG was currently placed close to some TRPG. Metascore of 83%<sup>41</sup>.

#### Shining Force Franchise

<sup>37</sup> http://www.metacritic.com/game/pc/the-elder-scrolls-v-skyrim

<sup>38</sup> http://www.metacritic.com/game/game-boy-advance/fire-emblem

<sup>&</sup>lt;sup>39</sup> <u>http://www.gameshark.com/index.asp?s=35\_64162e-4b19-4ad6-beef-b4f13e5930ad&a=reviews&id=1884</u>

<sup>&</sup>lt;sup>40</sup> <u>http://www.metacritic.com/game/playstation-2/phantom-brave</u>

<sup>&</sup>lt;sup>41</sup> <u>http://www.metacritic.com/game/playstation-2/rogue-galaxy</u>

Is Sega's TRPG franchise, and was mainly picked because it is extremely similar to Fire emblem franchise. The plan was to affect the mentioned structures problem by adding this game to test it. Shining force 1 to iOS has the Metascore of 84%<sup>42</sup>

#### Skies of Arcadia

Is a RPG to Dreamcast from Sega. GameCube userscore of 96%<sup>43</sup> (the Dreamcast version site was/is down)

#### Tactic Ogre: Let Us Cling Together

This game belongs to the same franchise as Ogre Battle, but battle gameplay is completely different. However the meta gameplay is very similar. This was a test subject to observe if it would be placed in relation to Ogre Battle, as Ogre Battle currently was in its own little group. Furthermore, Tactics Ogre (TO) is the base for Final Fantasy Tactics. But FFT uses the FF5 meta system while TO uses the OB system, making TO unique (except the later remakes and follow-ups to TO e.g. Tactics Ogre: The Knight of Lodis)

Metascore of 87%<sup>44</sup> to PSP (the Playstation and Super Nintendo version was analysed)

#### Wild arms franchise

Wild arms 3 has a very complex customization for items. Which creates very hard meaningful choice for the user. Furthermore the game has a lot of extra content, in the field of bosses but also subgames etc. Making it another game that should be close to the other JRPGs. Furthermore the game is turn based battle system, but the *Characters roam around*, which makes it similar to Grandia 2. Could create some possible new structure.

Wild arms 4 and 5 would have been two other games that could be analyzed, or rather one of them as they are very similar, Wild Arms 1 and 2 are basically the exact same battle system. Making 3 have its own system. However 4-5 have another unique battle system, which is a hexagon system. Wild arms 3 was mainly picked because the researcher had very thoroughly knowledge of the game. WIld arms 3 has the userscore of 95%<sup>45</sup>.

## 6.3 Iteration 2

The second iteration did not actually start with simply adding the 10 games and see what happens. Instead, a lot of work was put into comparing this research's current gameplay patterns with previously established patterns by Björk, Staffan. & Holopainen, Jussi (2004). And to merge patterns or to rename patterns. After this was done, work was done to try and find relations between patterns, e.g. if a pattern was a sub pattern of another pattern (this work was continued in later iterations).

<sup>42</sup> http://www.metacritic.com/game/ios/shining-force

<sup>43</sup> http://www.metacritic.com/game/gamecube/skies-of-arcadia-legends

<sup>44</sup> http://www.metacritic.com/game/psp/tactics-ogre-let-us-cling-together

<sup>45</sup> http://www.metacritic.com/game/playstation-2/wild-arms-3

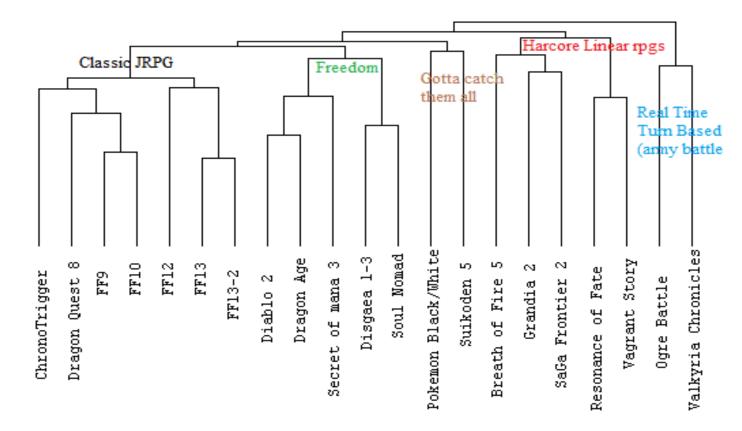
Comparing gameplay patterns is not a black and white science often one pattern that gameplay design project presents is similar to a pattern established but not exactly the same. It can be that it should be renamed to the current existing pattern or that it is a sub pattern, or that it is actually not the same. There was a lot of work reasoning back and forth about these topics. And it was especially time consuming deciding if and then what to name patterns when merging patterns.

Merging Gameplay patterns usually means taking to patterns which are more or less the same but not exactly the same and forcefully count them as the same. One of the reasons for doing this (is as later mentioned in Tree3), that having too many gameplay patterns of the same type of gameplay is weighting the matrix and tree structure. However sometimes two or more patterns can be established from different games and actually being the same, but with different names. Then it is an easy situation, and simply merge or renaming them.

Renaming was actually a big part of this iteration, in later iterations and partly during iteration 2. Names that were given to gameplay patterns were simply far superior, then how it was conducted in iteration 1. Iteration 1 had created a lot of patterns which really had no good naming at all, some of the patterns was two sentences long. This lead to a lot gameplay pattern names being reworked, usually in a conjunction with merging or identifying that the specific pattern was already existing in other people's previous works.

After this, a new approach to establish gameplay design patterns was performed. In iteration 1, each game was added and then patterns were established but usually one or more games had to be added for comparison this would lead to patterns being all over the place, slightly being in order of the game added, but more in what field they affect the game for example iteration 1 was more looking at all games character development patterns on the same time. Creating patterns more in order of how they affect the gameplay. In iteration 2 it was instead changed to add one game then completely go over and over, that game comparing it with every other game. Meaning the 21 first and the 10 new ones, add all new gameplay patterns that could be established and after this going to the next game. This lead to a more structured pattern ordering especially in the work matrix where it is easier to follow the analysation comments and document how the game's gameplay is.

After establish all new gameplay design patterns. The matrix was validated with the heat map as with iteration 1, some human errors were identified and corrected. It was during this iteration 2 where it really started to be a very large matrix, to have an overview and complete control of the matrix truly become exponentially harder. To perform smaller iterations became needed.



Tree2, is the same number of games (21) But with less patterns. Tree2's matrix is a reworked version of Tree1 when some patterns have been merged or removed.

This version is not very different from Tree1. Two games moved, but that was probably a chain reaction of the first game being moved. The game Suikoden 5 is according to Tree1 most related to Chrono Trigger, but with the new patterns it is instead viewed as being most related to Pokémon Black/White. And then Chrono Trigger was instead mostly related to Dragon Quest 8.

During the work process of Iteration 2. It was decided to starting naming the different groups (which would have helped in explanation of Iteration 1). These groups are the higher hierarchal points of the tree. This was made to more easily explain the general gameplay relation across several games, which all have many similarities as shown by the tree structure.

#### **Classic JRPG**

Is the most obvious grouping for any person familiar with the JRPG game franchises, as it has 5 Final Fantasy games, Dragon Quest 8 (DQ 1 being the first JRPG), and Chrono Trigger made by the same developers that worked on different FF titles and DQ titles. A very expected group to be constructed. This group has a lot of sub gameplay patterns, .e.g. *Extra Bosses* and several of the games have the *ATB* battle system or a system being based of *ATB*. Furthermore, the narrative is more or less the same, how it is presented and how *game world exploration* affects the battle system and the overall gameplay.

Still FF12 is pretty much an ARPG and does not really fit into this, while it is very similar to FF13. And FF10,FF12 FF13 and FF13-2 is actually not very classic JRPG in the aspect of not having a freedom centered game world exploration used by more or less all older console RPGs, for example FF9 and Chrono Trigger.

#### Freedom

As mentioned, this grouping is fairly strange. Having three real time games, Diablo 2, Dragon Age: Origins and Secret of mana 3 with two heavy tactical games, Disgaea and Soul Nomad. However the games shares a lot in the way the user have access to *statistics placement* gameplay. The player has more *Dynamic Character Development* than in the other 16 games.

#### Gotta catch them all

Named after the typical gameplay of Pokémon Franchise and other similar games (e.g. Dragon Quest Monsters, Enix (1998)). Where the user will have a lot of options in how his/her party should look like, creating a *Dynamic Party Composition*. The Suikoden franchise (5 included) has 108 different characters the user can catch, while the unlocking character is not similar to Pokémon where the user simply catches *random encounter enemies*. The gameplay is still a lot about discovering how to unlock a character and try to perform that goal, it's very similar to how a user in Pokémon will have to research how to catch more unique Pokémon's, both low spawn rate and legendary Pokémon's.

Another game for example that probably would be closely related is Radiata Stores, tri-Ace (2005) who also has a catch a lot of character system. But where Suikoden uses the narrative or specific requirements, Radiata Stories is more similar to Pokémon in that the user can more easily unlock most of the villagers the in the starting zone of the game, but then uses a time, persisting world system to unlock characters. (Actually making it be a mix of Zelda: Majora's mask, Nintendo (2000), Suikoden and Pokémon).

Note: One thing with this group that is odd is how it is placed slightly closer to (one step) *Freedom* and not *Classic JRPG*, these two games do still have mainly JRPG patterns, and was expected to be placed as a subgroup of the current *Classic JRPG* group.



Image 6.D: Suikoden 5: All the 108 stars of destiny. The user will acquire many of them thought progressing the story, however most of them are Extra Characters.

#### Hardcore Linear RPGs

These games are both harder than most other RPGs (excluding Grandia 2), particular not games a new user of the RPG genre should start with. Furthermore they are all very linear too, in the sense that they have almost zero percent game world exploration (if not zero as in Grandia 2 and Saga Frontier 2). While JRPG are called linear by people (Section <u>3.1</u>), these games are truly linear, furthermore some of them for example in Grandia 2 (this is how it is in SF2 and BOF5 too), has a level of linearity that is very extreme. For example, if the user leaves

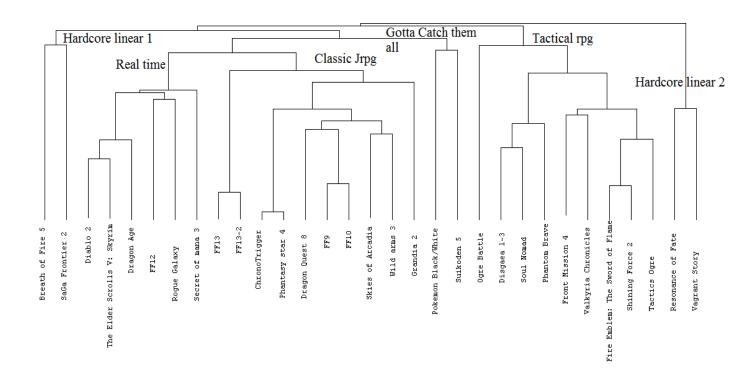
a Town, the user cannot re-enter the Town. The user is only in Town A when the games story moves the user there. All of these games are extremely unforgiving and has that the user is under constant constraint of *Limited Resources*.

#### Real time turn based

This games are both strategy oriented. The name comes from the games having two systems as their battle systems. Furthermore, they are probably placed in close relation from having values concerning several different fundamental gameplay patterns as they have scores a lot of them. And also why they are placed out on the side.

The next was to include the 10 new games. Inconsistency could be observed in the making of the tree structure, earlier version of tree3 did not seem very correct. Especially as two of the new games that were added were not placed together, when they clearly are the most comparable to each other or older games that had a connection in the previously iteration but now lost it, if this was a clear that it should not be in this state. This would create another validation check and then a verification of the result of an iterations matrix. To further reduce human errors, in some iterations this lead to a very thoroughly check on the values. However, it at several times actually usually leads to that it could not be changed. Some of the relation can at first glance seem strange, which would create the belief that it was wrong in the matrix. For example as in the middle of iteration 2, but after thoroughly checking over the matrix several times it was concluded that it was in fact correct. In the end this would often create insight in otherwise missed connection of games.

Note: These game where Shining Force 2 and Fire emblem: The sword of flame which is two extremely similar games (Harris 2009)



Tree3. By adding 10(total 31) more games another structure take shapes. This structure is in many ways very different from the earlier trees. But it has some of the older relation intact, mainly it is how the games higher hierarchal relations have been grouped. For example in Tree3 Disgaea and Soul Nomad are still the most related to each other, as they were in Tree1 and Tree2. However they are not closely related to Diablo 2 and the other games that were in the Freedom group. While Diablo 2 is still closely related to Dragon Age: Origins (but Skyrim is now sorted to being closer), as it was in Tree1-2.

Here in the process, the structure is starting to look more like the typical view of RPG sub genres that was presented in <u>chapter 2</u>. Not entirely but some games relation seems familiar to the seasoned RPG player. As mentioned, it is now less strange, but mainly the *Tactical RPG* group seems related and reasonable. This was created as intended by adding a number of TRPG in this iteration as described in section <u>6.2.1</u>.

Some of the major noteworthy changed parts, and how the new games are placed are: BOF5 and SF2 is still related but now are separated from Vagrant Story and Resonance of Fate, and this have created two groups, placed on either side, distanced from the other games. While Grandia 2 is now placed close to most of the earlier *Classic JRPG* games (Fundamentally Grandia 2 uses the *ATB* system, meaning it is similar to FF franchise etc.).

FF12 is now outside the *Classic JRPG* group, and is instead said by the cluster method to be closer to for example Dragon Age: Origins, which usually is not the common opinion, furthermore FF13 and FF13-2 has moved to the outskirt of *Classic JRPG*.

As mentioned the groups relation to each other can be analyzed. For example how the group *Real time* is closely related to *Classic JRPG*, more than either of them is related to Tactical RPG. What this and similar structure orderings truly mean is hard to distinguish. However what each group represent and the main gameplay of the groups can be done. During this iteration, the process went deeper in how and why the games are grouped as they are. And try and understand a more fundamental part of the gameplay, 3 gameplay design patterns were established as the group's main characteristics in the sense that these patterns occur in all the game of the group and that it clearly strongly affects the battle gameplay.

#### Offshoot of hardcore linear 1

As mentioned this two games are very similar in the way, they are extremely linear with an extremely unforgiving gameplay for the user. But the actual battles of the games are not alike. However the gameplay is similar still in how restricting the games are. 3 patterns: *Linearity Prevents Character Development.* (Called Limited Leveling during the iteration) *Ridicules Challenge* 

Limited Resources

#### Offshoot of hardcore linear 2

VS and ROF, both of these games features a mix system of real time and turn based, and a combo system which is turn based. These games are odd but on the same time slightly similar to each other. During the work process observing this grouping, which was seen in Tree1 too. But in Tree3, it is very clear that these games do have a lot in common in a weird way. This was new information, but after working a while and especially at this stage observing how the games has been put aside together, a little revelation of how similar the gameplay this two games actually has was realized. Especially both games battle system pauses from its real time, while it is real time and the user moves around in free spaces(subjected by the game world and game rules), typically a more WRPG or a ARGP gameplay experience. The game stops, pauses when moves is executed, which is more of a TRPG pre planning gameplay. These two games are a little mix of the 4 sub genres (fundamentally the games have JRPG parts and especially the storyline is a typical JRPG system).

3 patterns: Ridiculous Challenge Perma lose of items/user can miss items

Pseudo Real Time

#### **Real Time**

This group is partly the earlier *Freedom* group, with FF12 and two new added games. That Skyrim, Bethesda Game Studios (2011) is placed in close relation to either Dragon Age or Diablo 2, should not be surprising to anyone who knows about Western developed role-playing games. These games are very similar. Rogue Galaxy, Level 5 (2007) one of the new games added, is an ARPG. The character development is unique but resembles the system of FF12. Also the battle system in Rogue Galaxy has similarities with FF12. However arguably it's closer in fundamental gameplay to Secret of mana 3 (another game in the real time group). That added 2 games were expected to get placed in group, while that FF12 would move out was not expected but as mentioned its battle gameplay is different from the earlier installment of its series. All of these games (excluding Skyrim) usages AI players in different ways, while RPGs usually let the user play several characters, the user will usually control each character 100%. However, in all of these games the user will play 1 character while the others will be controlled by the AI.

3 patterns:

Real time

Main character is freely constructed(some patterns) *AI players.* 



Image 6.E: Rogue Galaxy: A typical real time RPG from Japan. The user controls one character while the rest are AI controlled.

## **Classic JRPG**

This group is the typical JRPG, this version has an increase it. With Skies of arcadia, Sega (2000) which is a at its core a very typical JRPG an expected result. Phantasy Star 4, Sega (1993) was also expected to somehow get related to JRPG especially as it's a reasonable old game, it really has a lot classic JRPG gameplay patterns. Wild arms 3 has some quirks, however it is also fundamentally has a lot of JRPG gameplay patterns. At the time of iteration 2. This grouped looked pretty solid, expect that FF13 and FF13-2 might leave this field. But While FF13 is more action-oriented it still has huge amount of typical JRPG patterns, and its battle system is closer to FF9 etc. However it is arguably most similar to FF12, placing it somewhere in between FF12 and FF4-FF9. Otherwise this group has pretty obvious similarities, for example in the JRPGs the user has a very clear showcase of what the game enemies will do. Know the order of attacks, easy to distinguish strategy, when to heal when to attack etc. The typical JRPG has the pattern *Predictable Consequences*.

### 3 patterns

ATB or turn based (The battle system of each game is one of these two or a *Turn Based ATB* system)

*Battle is a minigame* (Called Games are a minigame during the iteration) *Extra content* (secret bosses,side quest and/or sub gameplays)

#### Gotta Catch them all:

This group is unchanged from the last Tree. 3 patterns *Gotta Catch them all Functional Roles Dynamic Party Composition.* 

#### **Tactical RPG**

This group is arguably the most important part of Tree3, in relation to its changes from Tree1-2. As mentioned by adding several TRPG a clear grouping of those games was created. Furthermore it also, took in Ogre Battle and Valkyria Chronicles that in the previous iteration where on the outside. Those two games are really typical TRPG in many aspects, excluding their unique battle gameplay. Making it obvious why they would be set in this bigger group, however they are now split from each other. This is probably from Front Mission 4 (new game added), Square Enix (2003) has many similarities to VC, at many game mechanic parts, while those two games are not that alike. As Front Mission is a very typical *Chess based battle system*, with round turns etc. While VC as explained earlier is some kind of real time turn based Shooter RPG. However both games are very heavily on ranged weapons, while more or less every TRPG (or RPG for that matter) usages ranged weapon. This two games have only ranged weapons (FM4 do have 1 melee weapon type which very few game character uses), and are under heavily influence of the gameplay pattern *Variable Accuracy*. Both of the games incorporate FPS gameplay patterns.



Image 6.F: Front Mission 4: Front mission features the typical TRPG gameplay, with added complexity on the character's body part and a complex equipment system. Furthermore the characters can be Linked (as the 3 enemies are, indicated by the red lines), which can add in different abilities when one character takes an action.

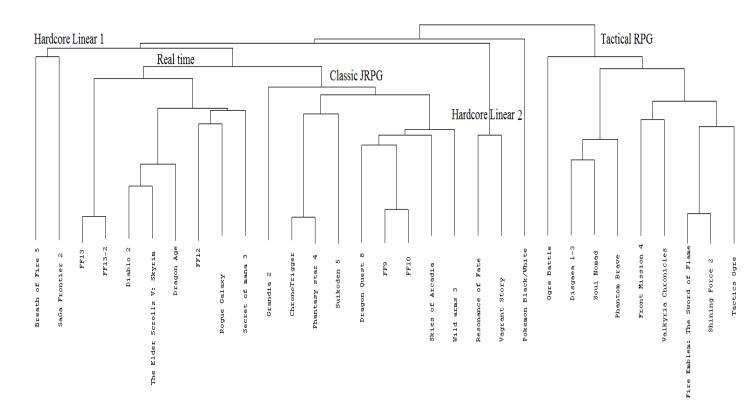
Ogre Battle was placed alone, at the very end of the group. It does have a non-typical TRPG battle system, and a very uncommon character development system. As Tactics Ogre (the sequel) was added in this iteration, it was believed they would be close related, and it might remove Ogre Battle's position of being alone, these two games share all the *Character Development* patterns, and many other gameplay design patterns. But with very different battle system, it showed they do not apparently share enough characters to be in close relation. A reason is probably that Ogre Battle has its own system, but it was a slight belief that it would be placed next to Soul nomad, which arguably is the game it is mostly similar too. However Soul Nomad is very, very alike the other Nippon Ichi games in all other gameplay parts.

This is another part which Tree3 shows about the design space of battle systems for RPGs. As there is a clear Nippon ichi group to the left, Soul Nomad and Disgaea, and then the newly added game Phantom Brave, Nippon Ichi Software (2004). This group has many similarities, particular the gameplay focus on *Grinding* and *Character Development* through extra battles, outside the narrative parts.

Fire emblem and Shining Force 2, Sega (1993) are connected with Tactics Ogre connected as the closest relation. These games are typical old school TRPG, TO and FE has *permadeath* while SF2 has a soft *Permadeath*. And patterns such as *Friendly Fire* is important, *Friendly fire* is a common pattern in TRPG but with *Permadeath* it becomes a big concern for the user, these game represent the origin of TRPG games. Later TRPG shows more forgiveness towards the user. (Fire emblem franchise has kept its unforgiving gameplay).

3 Patterns:

Character Classes (and Functional Roles) Environmental Effects Pull them(because of user is out numbered)



Tree4. Is constructed by having the 31 games, with all the patterns. However as mentioned this means Tree4 does not consist of every pattern from Tree1, as patterns was removed/merged in the start of iteration 2.

The first and foremost important changes that can be read from tree4 in relation to tree3, is that not much has actually changed. The groups are starting to look solid, especially the *Tactical RPG* group has had zero change, also the groupings *Hardcore Linear 1* and *Hardcore Linear 2* is neither affected by adding more gameplay patterns. However, there is a change, *Hardcore Linear 2* is now closer in steps from the other groups. Before it was on the outskirt and now it is closer to *Hardcore Linear 1*, *Real Time* and *Classic JRPG*. While the group *Tactical RPG* has

not changed, it is analyzed by the cluster as being less close to any other RPGs. One perspective can view it as one huge group that is distantly related to the rest of the games. That *Hardcore linear 2*, is not as distanced anymore from *Real Time* and *Classic JRPG*. Seems correct as those games are kind of a mix of those groups. Still those games are unique and maybe should be farther away. And that they still kept being one group, probably means one of three reasons. Either it is too many patterns, to few patterns or the games are simply that different from the rest of the games.

One notable change is that Suikoden 5 has left Pokémon black/white in close relation and has been moved to the top of *Classic JRPG*. This removed the small group *Gotta Catch them all*. As mentioned before, it was surprising in the earlier trees that Suikoden and Pokémon type of games wouldn't be in a closer relation to the more typical JRPG. By adding more patterns or by adding more games, Suikoden 5 has become located at the top end, it probably from the increase gameplay pattern making it be closely related to the games in the *Classic JRPG* group.

That Pokémon is left outside was not very easy to understand. Pokémon do still feature a slightly different gameplay even though it is based on fundamental JRPG patterns. What would make most sense would be if Pokémon Black/white and Suikoden 5 had a close relation as a subgroup of *Classic JRPG*.

Arguably the biggest change, was that FF13 and FF13-2 moved outside *Classic JRPG*. This was what the researched has hoped and expected would happen. The games moved to the top of the *Real Time* group, meaning at this stage of the process it was still very uncertain where it in the end of the work would be placed. However at this junction it was at least an interesting occurrence, for a person knowing the background of debates of what an RPG is (Chapter <u>3</u>). Even if the research does not aim to disclose that topic. But tree4 does point towards a much more complicated understanding of the fundamental gameplay of RPGs the battle system then what one would gain from reading different persons opinion on RPGs.

As during the end of Iteration 1, and in the end of this iteration what next game to add in was analyzed. During this iteration it was decided to add games, with a more combo oriented systems. Or games, which would, might change some of the structures. It started to become harder to pick games at this time, it would be very easy for the researcher to simply take numerous classic JRPGs, for example adding more Final Fantasy games, or games from any other major RPG Franchise, for example while Breath of fire 5 is one of the first 21 games, BoF1-4 has a completely different battle system, one of those game could have been added. The games picked decided to be added tried to move away a from the typical RPG battle systems. For example while Lufia 2, Neverland (1995) was planned to be added, Lufia 3, Neverland (2001) was instead added. Lufia 3 has unique matrix formation battle system, while Lufia 2 has a very typical Super Nintendo entertainment system JRPG battle system.

## 6.3.1 Motivation list for games 31-41

## Bahamut Lagoon

Was decided to be added, because it has a similar army battle system to Ogre Battle and Soul Nomad. Especially as Ogre battle was on the side of *Tactical RPG group*, adding this game might create another sub group in *Tactical RPG*, and possible take Soul Nomad from Phantom Brave and Disgaea, although that probably would not happen as those three games share a lot of gameplay patterns in every aspect of a game.

## Final Fantasy Tactics Franchise

This game is famed as being one if not the best TRPG ever (Parkin 2007)<sup>46</sup>. And having Tactics Ogre and Disgaea, FFT can be said is the bridge between those games. Seemed as a very reasonable game to add. However Final Fantasy Tactics Advance was instead added. This game adds more depth into the character development, and pre plan stage for the user, but on the same time limits the characters choice of classes (but has more classes). One of the main reason why FFTA usually score much worse than FFT is because of the narrative in the game, which for this research do not matters. FFTA has the userscore of 92%<sup>47</sup>. Furthermore FFTA has a law system which is special.

### Legaia 2: Duel Saga

Legaia 2, is game with an direction input battle system. The idea to add this game, was to mainly create a new group and analyze where this group would be placed.

## <u>Lufia 3</u>

Lufia 3 has unique usages of how the user orders the party formation. The user plays with 9 characters in the and sets up a matrix [3x3], then depending on what characters stand in different rows and columns they will give each other different benefits both defensive and offensive.

### Mario & Luigi: Bowser's Inside Story

The Mario games are from Nintendo, which usually are platform games. However a RPG spin off franchise started with Super Mario RPG: Legend of the Seven Stars. Legend of the Seven Stars was first considered but as Mario & Luigi: Bowser's Inside Story is the newest installment, that game was instead decided to be in the research. It also has more differently gameplay than Legend of the Seven Stars which is mainly a typical JRPG. Metascore of 90%<sup>48</sup>

## Shin Megami Tensei: Persona 4

Persona 4 is both an RPG and a Dating Sim. Persona franchise is a little different than other RPGs, furthermore the game has a lot character relationship gameplay pattern that affects the

<sup>&</sup>lt;sup>46</sup> <u>http://www.pocketgamer.co.uk/r/PSP/Final+Fantasy+Tactics%3A+The+War+of+the+Lions/review.asp?c=4356</u>

<sup>47</sup> http://www.metacritic.com/game/game-boy-advance/final-fantasy-tactics-advance

<sup>48</sup> http://www.metacritic.com/game/ds/mario-luigi-bowsers-inside-story

battle system. Which some other games has to for example Valkyria Chronicles and Front Mission 4, because of this of this it was very hard to predict where this game would be placed. Made it it an interesting choice to add, to merely observe and analyze what happens. Metascore of 90%<sup>49</sup>.

## Romancing saga: Minstrel Song

As the *Hardcore linear* groups was once one group, adding in a game that is extremely (ridiculous) hardcore as Minstrel Song is. This was added as it would very likely be placed in Hardcore linear 1, and possibly bind together these groups or takes Breath of fire 5 place as the most related game to Saga Frontier 2, being a remake of a prequel to Saga Frontier 2.

### Star Ocean: The Last Hope

First Star Ocean: The Second Story was planned to be added (being a cult classic). But the researcher had recently played through The last hope, which is also the newest installment.

Furthermore this game is a real time battle, but the battles are a minigame. Which is not very rare, but still not very common. It's a game that might be seen as an ARPG or possible a JRPG, at also has some social patterns as with Persona 4(but far less than Persona).

## Tales of Phantasia

Tales of Phantasia, is similar to Star Ocean: Last Hope, it also in real time. but has battle is a mini as Star Ocean: Last Hope. However furthermore it has Random Encounter, making even more unique and to top it off, the game is played out in 2d from the side. Using fighting game input system to activate abilities. When it was new it clearly had many unique traits, today it has a lot sequels in the Tales Franchise that are similar, anyone of the Tales games should be analyzed as they feature some kind of Fighting game meets RPG.

### <u>Xenogears</u>

As with Legaia 2, Xenogears has a direction input, but it also has button inputs, they are not actually very similar. The game closest to Xenogears battle system is probably Chrono Cross (sequel to Chrono Trigger). But this game was expected to be placed close to Legaia 2. And probably in Classic JRPG group as it has a typical JRPG gameplay experience. Userscore of  $96\%^{50}$ 

## 6.4 Iteration 3

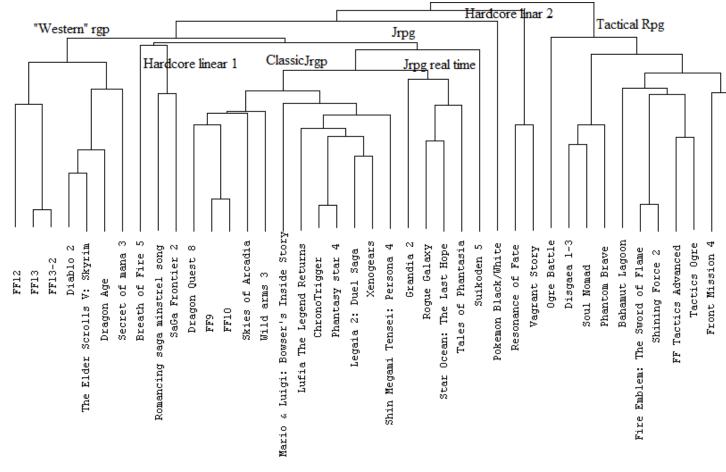
As with iteration 2, this iteration mainly started with merging and renaming existing gameplay design patterns. After establishing each gameplay design pattern that could be found by adding the new 10 games, it was a lot of patterns. As mentioned before, the process was now to aim at naming the patterns better from the start. This meant that it took quite a while to add the new gameplay design patterns. It also had the same previous problems with missed values.

<sup>&</sup>lt;sup>49</sup> <u>http://www.metacritic.com/game/playstation-2/shin-megami-tensei-persona-4</u>

<sup>&</sup>lt;sup>50</sup> <u>http://www.metacritic.com/game/playstation/xenogears</u>

Furthermore it really had the problem of patterns that were not the exact same thing as another pattern but very similar. Merging or removing had to be done several times.

An important thing that happened in part of the process is that, while some games added in around 20 more gameplay patterns. Some other games only added in 5-6. The process started to be saturated of RPGs. Each new RPG added means it would be less pattern the next game would add. However, this low number was after removing/merging etc, if each slightly quirky sub pattern would be kept. Most of the games would have added around 30 gameplay design patterns.



Tree 5. 10(41 total) more games added, this is with the patterns from iteration 2. And to analyze the effect of adding 10 more games.

There is a couple changes which are noteworthy in Tree5 compared to Tree4.

*Hardcore Linear 1* has been extended with Romancing Saga: Minstrel Song, Square Enix (2005) as expected. But it has not connected the group to the Hardcore Linear 2 (which is completely unaffected). However, it has now moved to be connected to the newly created group JRPG which is understandable as the Saga Franchise especially do have a lot of typical JRPG characteristics (it is developed by Square Enix after all).

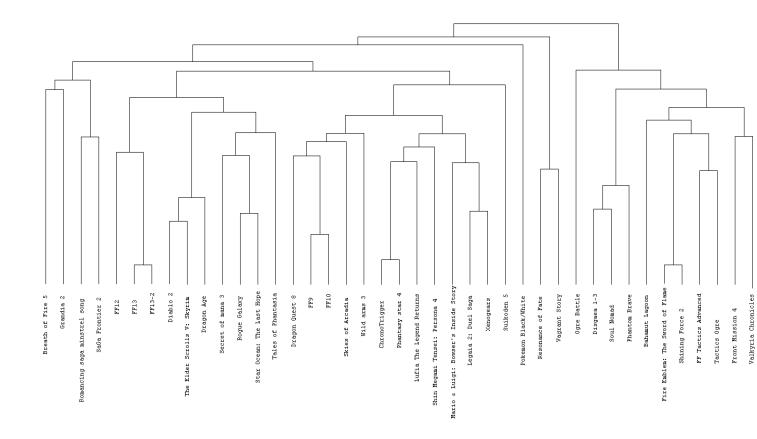
The real time group has lost Rogue galaxy that now is close to the newly added Star Ocean: Last hope and Tales of Phantasia, Wolf Teams (1995). Creating a new sub group of JRPG the JRPG real time. This group do have a more real time battle system and distance of characters is important. That Grandia 2, is on the edge is reasonable when it is not free controlled characters like the other games has.

*Western RPG* (real time renamed to show FF12 and FF13 placements) is no longer close to JRPG which also is one of the reasons for calling it Western RPG and that many of the real time games were moved to their own sub group. In Tree5 FF12 is now closer related to FF13(and FF13-2), which seems much more correct than having it close relation to rogue galaxy and Secret of mana 3, while FF12 arguably has the most fundamental relation to Dragon Age:Origins, its overall gameplay experience is most related to FF13.

The group *Tactical RPG* is an extremely stable group, the game Bahamut Lagoon, Square (1996) was added and it was just placed in the one of the sub groups. FFTA was also added and didn't change anything with the group, and was connected to Tactics Ogre, which is very reasonable.

None of the 10 games affected the placing of any TRPG game or where the group in itself is placed and distance to other group is the same. Although this also means that Ogre Battle is still on the outside and that Bahamut Lagoon did not create the army sub group that could exist in the Tactical RPG group.

The games Xenogears and Legaia 2, Prokion(2001) has created a small sub group in *JRPG*, which was expected as they were picked from their input battle system.



Tree6. Every Game, with all the final patterns. The matrix has 41 games, with 321 different gameplay design patterns. From this one of the two final versions is created. Tree6 has no group names labeled as Tree7, is the same tree but with a very extensive group and pattern definitions. Tree6 will be further explained by Tree7, and Tree7 is explained in iteration 4.

The *Real Time* group is constructed again, now with the former JRPG real time group placed as a sub group creating a big group of real time games.

The large group *JRPG* has now 3 different sub groups. Which is because e.g. Xenogears added several new patterns but when those patterns were not in the matrix that game was simply added on to the older *JRPG*, now with its gameplay design patterns added it has gained its own sub group with the similar game Legaia 2, and Mario and Luigi, AlphaDream (2009) has also been placed in this sub group.

*Hardcore Linear 1* has been extended to two smaller sub groups as Grandia 2 has moved backed into this group as it was in the early process. This seems more correct than when it was in the real time JRPG, and arguably more correct than being at JRPG.

The *Hardcore Linear 2* is still as distanced from the rest of the games as before. Which is arguably correct as especially Resonance of Fate does offer a unique gameplay. But Pokémon

Black/White is still placed at its alone place in the top of the tree. As mentioned there was hope it would move down to JRPG, but has not happened.

Lastly as pointed to several times the major group *Tactical RPG* is unyielding. It has not changed at all by adding the gameplay design patterns established in iteration 3. Since Tree3 this group has been immovable, any game added has only created subgroups within *Tactical RPG*, no games that has been placed in the group has ever moved. This was clear earlier in the process, what a TRPG is, the research seems to have pinpointed.

## 6.5 Iteration 4

In the planning it was planned in iteration 4 to mainly aim at analyzing other games. And analyze how the established gameplay design patterns affect games outside RPG genre. This could have been done in different ways for example adding in 10 other games to the matrix and analyze how many patterns they have and how big an impact each pattern has, furthermore using the cluster method to analyze how related they are etc. However constructing the tree part seemed a little pointless, the games should be placed outside most of the groups. Although it would be interesting to find games that would be placed deep in a group.

The main reason why analyze other games outside was that, it seemed much more reasonable and meaningful to perform a deep analysation. This included two different work aims, one to better explain the different gameplay design patterns, the other to analyze the design space of a developer by analyzing the tree structures.

The combination of this was to as previously in iteration 2, find the 3 most significant gameplay pattern for a relation, but this time for each pair, and each junction of groups. Furthermore work was conducted on defining relation between gameplay patterns, e.g. what pattern is a sub pattern to another or if pattern A works without pattern B etc.

During the early phases of iteration 4, it was clear that having ordered the patterns after the games, made it for some games that are closely related easy. But for the general work of trying to analyze junctions of groups it would been much easier to order the patterns after what they affect, meaning list of patterns would be sorted type of gameplay instead, as was conducted in iteration 1. In the end a lot was spent to reorder the whole matrix. And also reorder matrix after the games.

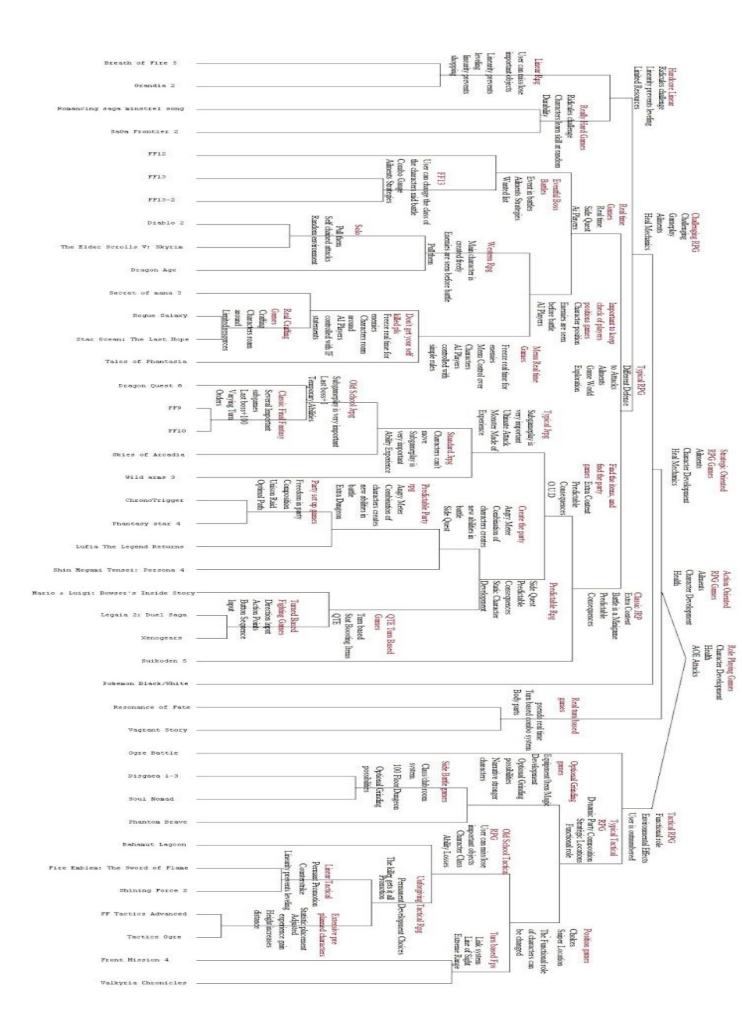
Finding the most significant patterns for some games can be very easy, but for the most times it's a very complicated procedure. The problem during this iteration is that often two games had around 5-7 gameplay patterns that are very important for both games and very similarities for them. From this only 3 can be picked, there is a lot of analysation behind creating tree7. Another issue is the junctions, at high hierarchical level they actually become very arbitrary as to find a pattern that 20+ games has means it will be a gameplay pattern that is very basic, for example *Challenging Gameplay*, which is an important gameplay design pattern for most games, especially for RPGs, and obviously it will exist to some extent in each game. However at smaller

junctions often between two of the lowest groups, meaning four games. It was usually a very complicated procedure to find most accurate patterns.

A few gameplay design patterns are occurring in several groups. This is purely intended if those gameplay patterns are most important they are, the most important. It more points to complicated similarities as two groups can share a pattern while being very far apart in overall similarities.

To further show how the patterns relate to each other the gameplay design patterns are constructed in a cascading flow, at the top it will be more arbitrary overall pattern that includes many differentiations while one step below will have a pattern being a sub pattern of the junction over it. And then being a more detailed pattern. Each group will carry at least one gameplay design pattern to its junction. For example *Permanent Promotion* is a detailed pattern and a sub pattern of *Permanent Development Choices*, which is in the next junction.

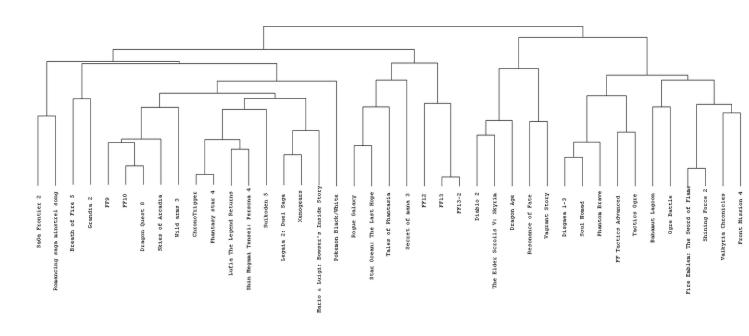
Note: At a few locations one or more patterns is simply carried over.



Tree 7: Tree 6, but with noted 3 sub patterns per group. Each pattern can be found in <u>appendix</u> <u>B</u> and in <u>Appendix C</u> is group is shortly explained.

Note <u>Appendix C</u> also shows the alternation between Tree7 and Tree10.

After each group had three gameplay patterns. The total number of the patterns left become 89 patterns. To further analyze the relation between the games, and to further go deeper in how the design space is when design role-playing battle system. And first of all to observe if the groups would keep their formation. A new tree was created using only the 89 patterns.



Tree 8: A structure with much less patterns with only patterns taken from Tree 7.

Much of the structure is the same, in Tree8 compared to Tree7. When it comes to the close relation of specific games, meaning one game and other game. However, the distance of the major groups have changed a lot, and at this time in process using this Tree8. Some of those questions that had been unanswered since Tree1 in iteration could be answered.

*Hardcore Linear* is split in this Tree. However, the games are still located next to each other, it doesn't really mean much. It is more or less the exact same thing.

*The Group Classic JRPG* has almost zero changes. That group had its major changes mainly from the real time JRPG games. The structure it has now, with its small changes is probably the most correct view of these games. Because now Pokémon is finally in it although on the outskirt

Suikoden 5 has moved down closer, which is reasonable as it very much resembles the Create The Party group games.

The clear big change is that, first the Real Time JRPG games have their own group, which is now outside *JRPG* (not like in tree6), meaning it's just *real time* but they have also taken FF12 and FF13(-2). and moved them away from the *Real Time* group. This is very questionable if these games shouldn't be in the group to the right.

This now instead has been ordered close to the whole tactical group. This makes it have a similar outlay as Tree1. Furthermore the group *Real Turn Based Games* (*Hardcore Linear 2*) is now closely related to the *Western RPG* group. They are in *Pseudo real time*, and do have its similarities with Western RPG s.

However why they are closely related as well as why the whole *Western RPG* group is related to *Tactical RPG* group was understand now at the process. It's because of all the environmental gameplay patterns. While the overall gameplay of real time RPG s, much more focused on action-oriented gameplay is not at all similar to the heavy strategy and planning gameplay of TRPGs. They are actually very similar in how they uses gameplay patterns e.g. *Chokes, Strategic location.* And especially how the patterns *Pull them, Kiting,* and *User is outnumbered* is very similar. For example Diablo 2, the user is vastly outnumbered and will constantly move around the enemies into his/her *Traps* or at least Kite the enemies. In Disgaea the user is also vastly outnumbered and will actually do more or less the same thing, pull the enemy into prepared *Traps*.

In Vagrant Story, *Chokes* are also important, but it's especially the height and walls used in Resonance of Fate that makes the game probably be close to western real time games. Simply said all the games to the right(including RG) of Rogue Galaxy has distance as an important factor for the player, the *Characters(s) Position* affects what abilities can be used and how the overall strategy should be. While all the games to the left, this does not matter at all. Every character stand still and abilities, and strategies will never be affected will not very situation based.

Note: This excludes Grandia 2, were *Delay mechanic* is depending on distance and in Saga Frontier 2, *AOE Attacks* is depending on *Character(s) Position*. However the user cannot control, how any characters will be placed, in those games it's more of a random feature that ability A works better than ability B in situation X. Meaning it's not anything the user can take strategic decisions on (Lack of Meaningful Choice).

In the *Tactical Group*, it's important to note that no game has left the grouping. While they have moved around from the former trees structure, as believed earlier in the work process this group is solid. The group Extensive pre-planned characters, have moved to close relation with Optional Grinding Games, in one perspective is more correct than the former tree. As mentioned Disgaea is very similar to FFT. It's both how the user trains his/her characters and how the battle is a *Chess Battle System* with importance's in height, which the group Linear Tactical does not have. Furthermore Ogre Battle is now closely related to Bahamut Lagoon which was tried to be achieved in the earlier trees. Altogether this section of the tree is arguably the most correct view how TRPGs relate to each other.

To further analyze how the structure is affected by this gameplay patterns observed as the most important ones. Each pattern which is a sub pattern of any other was removed. For example *Wanted List*, is a sub pattern to *Side Quest*, which is a sub pattern to *Extra Content*. This removed a large number of patterns. This process reduced the patterns down to 53 patterns and created another Tree structure. This tree (tree9) is presented in the result, it's the final Tree with the least amount of workable number of gameplay design patterns.

## 6.5.1 Empiric Studies

Furthermore to improve this two last trees of iteration 4 (Tree7 and Tree8). Empirical studies was conducted. What was tested was how easy users of the role-playing genre understand the established gameplay design patterns. To test the result, Tree7 was given to people in Focus groups seasons, a few unconstructed interviews was performed to. Furthermore after the testers had given their explanation to each pattern and group name, they would read Appendix B (one sentence per gameplay design pattern in Tree7).

There was some minor things pointed out that could be changed. There is a few names in Tree7 that was expected to be either hard to understand or more that the name is not very good. Most of those patterns also did receive complains. From this an improved version of Tree7 was created Tree10, presented in the result chapter.

The empiric study was done with 4 focus groups, 2 occasions with 3 people and 2 occasions with 4 people. In each different focus groups and a couple of interviews. The interviews were mainly unconstructed, the only real direct control and questions from the interview was to make sure each gameplay design pattern and each group was brought up.

In both cases the tree was analyzed from either the left to the right, in a bottom to up approach starting with the bottom left corner to the bottom right corner. It was intentional made that each group or interview was 50% from one side and 50% from the other to see if it would have any impact on how the user would understand the patterns, generally it did not.

As the testers were given a lot of freedom, this lead to some patterns being talked and discussed a lot more. For example many testers saw the *Tactical Group* as very solid. This lead to the bottom being discussed or they talked to the interviewer about it, however at middle and higher parts of these groups they saw most of the patterns very arbitrary and most people then had very little to say. Probably they felt the very common patterns for example *Chokes*, is such a known thing that they did not think it is much to that the researcher did not know already or the other people in the focus group did not know.

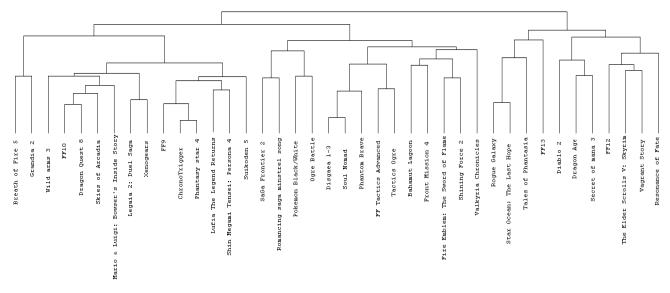
# 7 RESULT

This research presents two different types of results, although they are very closely related. The first are the Tree structures which shows, how 41 games are related to each other, based on their gameplay design patterns. Two different types of tree structures are presented. The first type of Tree Structure shows the 41 RPGs with all the patterns used. This Tree also has the three most prominent gameplay design patterns for each intersection of games. The other type of Tree Structure only uses the most prominent gameplay design patterns.

Secondly, this research has established several gameplay patterns. These gameplay design patterns are described as result in itself. A subresult of this is four identified groups of design patterns which are intended to help designers by outlining what types of options exist when designing battlesystems for RPGs.

## 7.1 Trees, dispersion of genres

First presented is the result of using only the most prominent gameplay patterns but with no sub patterns.



Tree9: Further reduced by taking away each sub pattern ending up with 53 patterns that create this construct. FF13-2 was removed, because at this level of detail it was exactly the same as FF13.

Tree9 is final result using the least amount of patterns. It can be argued being the best structure, however it do have some strange relations. For example Ogre Battle is placed in

close relation to Pokémon Black/white and then their group is close to the Really Hard games group (The saga group), that does not seem right. Front Mission 4 being close related to Bahamut Lagoon is incorrect. Front Mission 4 uses most of the more advanced gameplay patterns found in modern TRPGs and is unquestionable much more related to Valkyria Chronicles as it was in every other Tree Versions. However most of the other parts of this tree is a very good illustration of the RPG genre. Because almost every typical JRPG game is in the same group, while some of the Tactical RPGs have moved around they are all still in the same group (except Ogre Battle) and all the action oriented RPGs are in one group. Ogre battle was always on the outskirt, being the least game afflicted to the Tactical RPG group. This is last evidence on how, Tactical RPGs are similar to each other and a designer should with ease be able to pick gameplay patterns from the different good TRPG and create a soild bases for the battlesystem in a new TRPG. Overall the games presented here in the Tactical RPG group presents the typical gameplay of the subgenre.

Why Pokemon and Ogre Battle exist close to TRPG is probably again from the environmental gameplay design patterns. Pokémon does feature dependency of *Environmental Effects* both for *Random Encounter*, and for how the battle is played out. For example if it rains where the battle take place, water (and lighting) moves are stronger. Saga Frontier 2 also have this where the user have access to different abilities depending on what location the battle take place. E.g. unlimited access to Stone magic in a cave. Furthermore many of the TRPG are extremely linear, making them have similarities to games from the Linear Groups, but then in a meta gameplay perspective.

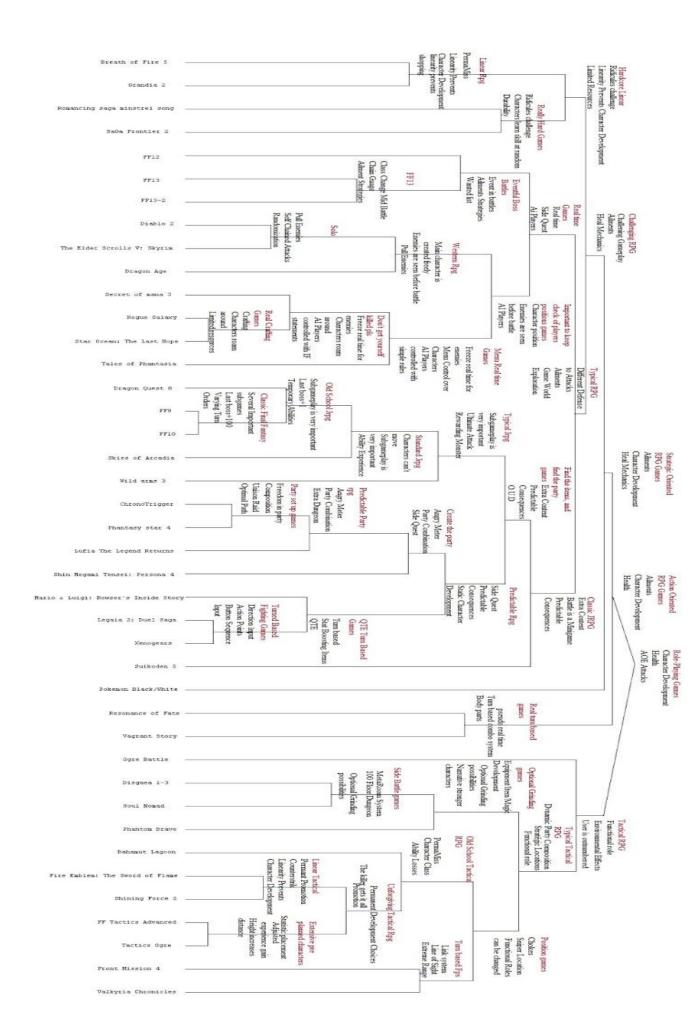
The games oriented towards more action, the real time group is now extended with the *Western rpg* group, the *JRPG real time* group and the *Real Turn based games* (*Hardcore Linear 2*). Tree9 has the wanted Real time group the earlier trees did not have. Although the relation closeness of the actual games is not at all similar to former tress. Still it this ordering has a lot of valid points to, Vagrant Story and Skyrim are the only games of the total 41 where the user only has one controllable character, their character development system is similar, furthermore the whole battle gameplay becomes alike(e.g. *Self-Chained Combos* etc.).

Rogue Galaxy and Star Ocean:Last Hope, are very similar especially how the user control the *AI Players*. Tales of Phantasia fits very well to, FF13 does features a system of the *AI Players*, and the focus of only one character which is actually similar to how Tales of Phantasia and the other games works.

The only real relation that seems lacking is FF12 overall placement, it would probably be better if it was placed at Dragon Age:Origins.

These small factors together shows that one cannot distinguish RPG games from each other with too few gameplay design patterns. Tree9 show a possible correct relation between the 41 games, however Tree8 as pointed has more correct relation for some games. The most prominent evidence of this is that FF13 and FF13-2 had the exact same values in tree9, but they do not have the same battlesystem and not to have same Character Development system etc. They are very similar, but not equal: which is the result of using too few gameplay design patterns when constructing tree9.

(Tree10 follows the work on gameplay design patterns, and does not point towards any new relation between games.)



Tree10: Tree10 is the same tree as Tree6 and Tree7, but with a further improvement of the Gameplay design patterns, after the empirical studies and overall work conducted afterwards. This Tree arguably shows a correct relation between each game analyzed in this research. Furthermore, it pinpoints each game's most significant gameplay design pattern. This can be used by developer to give their game a touch of the specific group or groups they would like to have. The group's characteristic can be combined to create new gameplay experience for the user. Tree10 shows how the design space looks for battle system of role-playing games.

## 7.2 Patterns

The second result presented by this research is several gameplay design patterns. This has first been ordered in four different groups of gameplay design patterns. Further, subgroups of gameplay design pattern have been established, the group shares many subgroups. However, note that a subgroup don't necessarily affect the gameplay the same as a subgroup with the same name from another major group, and of course each gameplay design pattern in itself affects the game differently.

Ubiquitous patterns, which have no subgroups, these patterns is the very fundamental pattern that should more or less always be in a digital role-playing otherwise it is probably not a RPG. That list is because of this a summary of different formerly introduced gameplay design patterns, and neither of the patterns will have any explanation.

The second group is Structural Patterns, the gameplay design patterns presented in Tree7 and Tree10. These pattern as explained in <u>chapter 6</u>, are the patterns needed to create the structure. And they are the most prominent pattern of junctions of games in the Tree structure. Structural patterns are distributed into these groups:

- Fundamental Battle Patterns
- Party Patterns
- Character Development
- Challenging Gameplay
- Strategy Battle Patterns
- Extra Content

The third group is the Flavour patterns and is more uniquely patterns or important patterns that create specific gameplay experience for the user regardless of which RPG subgenre a game belongs to. An example is *Abilities cannot be learned by gaining experience*, which will affect the users game experience a lot from other RPGs. However, this pattern is not common in a specific subgenre of RPGs and could arguably be used in any game with *Character Development*.

Flavour patterns are distributed into these groups:

- Fundamental Battle Patterns
- Party Patterns
- Character Development
- Challenging Gameplay
- Environment Patterns
- Strategy Battle Patterns

The fourth group is the Meta gameplay patterns, patterns which are not in the actual battle of the game but heavily affects the battle gameplay. An example of this is *Narrative personality affects battle gameplay*. Depending on the user's decisions in the narrative parts, this will affect the battle gameplay. For example, in Tactics Ogre, if the user takes the lawful path in the game narrative he/she will lose the option to pick a *Character Class* for the main character. Instead the main character will become an extra strong class unique to him. Meta gameplay patterns are distributed into these groups:

- Fundamental Meta gameplay patterns
- Party patterns
- Character Development
- Exploration Patterns
- Extra Content

Lastly there is a large group of the patterns not in any of these 4 groups. These patterns are not as prominent as the patterns presented in Appendix B-E. This does not mean this pattern have no meaning, it was decided based on the time frame that there was simply no time to analyse each pattern at the same detail. The other patterns can have an impact on the gameplay experience. However, they usually have a smaller overall affect for the user's gameplay experience. The other patterns are in <u>Appendix F</u>, which is not as detailed as the other Appendixes as those patterns are reasoned to usually be of less importance for the overall gameplay experience for the user.

## 7.2.1 Ubiquitous patterns

Ubiquitous patterns are patterns, which is almost in every RPG. Presented here are earlier established gameplay design patterns, which more or less should be in every RPG, this research adds no new gameplay design pattern to this group. The research has instead identified what previously established gameplay design pattern should be here for role-playing games. There are a few exceptions, for example *Player-Created Characters*, is a not on many typical JRPGS but are in almost any WRPG. There is truly not much that can be said by most of these patterns for any person who have played a few RPG should recognize each of them.

Privileged Abilities, Privileged Movement, Ubiquitous Gameplay, Player-Created Characters, Equipment Slots, Analysis Paralysis, Equipment Armor, Game Items, Enemies, Player Characters, Avatars, Parties, Boss Monsters, Improved Abilities, New Abilities, Gameplay Statistics, Grinding, Quests, Combat, Companions, Cutscenes, Damage, Dialogues, Game Worlds, God Views, Helpers, Illusion of Open Space, Inaccessible Areas, Inventories, Loot, Main Quests, Non-Player Characters, Obstacles, Player-Created Characters, Player/Character Skill Composites, Stimulated Planning, Tactical Planning, Weapons

## 7.2.2 Structural patterns

Which can be found in <u>Appendix B-C</u>

To decide which patterns that ultimately become the structural patterns, preexisting gameplay design pattern had to be used (23) but the majority is newly established pattern by this research (66).

What these patterns represent has been mentioned several times, in the work process. These are the patterns most prominent for each relation of games. To further explain how they affect the user's experience. They have been further sorted into groups. Here in the result a few patterns per subgroup will be explained, the rest can be found in <u>Appendix B</u>, which is order after letter order as it was used for the empirical studies and in <u>Appendix C</u> which is order after the Tree structure of tree7.

What these patterns represent has been mentioned several times, in the <u>work process</u>. These pattern those patterns that where analysed to be the most prominent pattern between games that where in a close relation created by the tree structure. Further, these pattern where used to create the later tree structure tree8, where only these pattern where used, and Tree9 which uses these patterns but all subpatterns has been removed.

## 7.2.2.1 Fundamental Battle Patterns

These patterns are patterns that are the very core of the game's battle system. For example *Turn-Based Games* and *Real Time Games*.

Turn based, means that the game is performed in turns by the users and the computer. For example Final Fantasy Tactics. While Real Time is the opposite, in Real Time the game runs constantly and the users and the computer plays simultaneously, for example Diablo 2. A more interesting Fundamental Battle pattern is for example *Pseudo Real Time*, which can be achieved in different ways, usually the game plays in Real Time, but when the user performs different decisions (using UI menus) the game freezes. For example Vagrant Story.

Commonly the user will control a party of characters, as mentioned in section <u>2.3</u>. This is a heritage from the fantasy literature, where the characters will be a broad band of adventurers. While this might sound simple these groups is vastly important for the games, especially as it also includes how the narrative will unfold which is not analyzed in this research. At the level of structural Patterns which affect the gameplay, for example *Character Classes* 

and *Functional Roles*. These two patterns are extremely important for almost any RPG. Functional Role is what purpose the specific character has, which is especially interesting for MMORPG users when they are building their adventure parties. But this of course takes place for in any other RPG subgenre, when the user plans out his/her party for the next obstacle of the game.

Another important gameplay is if the game *has Freedom in Party Composition*, some games do not let the user at all changes the character, for example Grandia 2. While in Suikoden 5 lets the user have 108 characters (although all can't join normal battles). In Suikoden the user can spend hours planning what composition to use for different occurrence. However, what often happen in games like Suikoden is that each character has instead a limited *Character Development*, in Grandia 2 the user has more freedom instead in how the four playable characters will develop.

A subpart of the party Patterns are the *AI Player* patterns, these are not in every game as it depends on how the game is played. In *Turn-Based Games* they would often make little sense, but in *Real Time* RPGs. The user often plays one characters while the other characters is controlled by the AI. This leads to several different ways the user can give commands to how the AI should act. The game who has the most advanced version of this is probably FF12 (at least of these 41 games), with its Gambit system, which has the pattern *AI Players controlled with IF statements*. Meaning the user can set up each and every move for the AI controlled characters, e.g. IF below 20% health points = Use Cure.

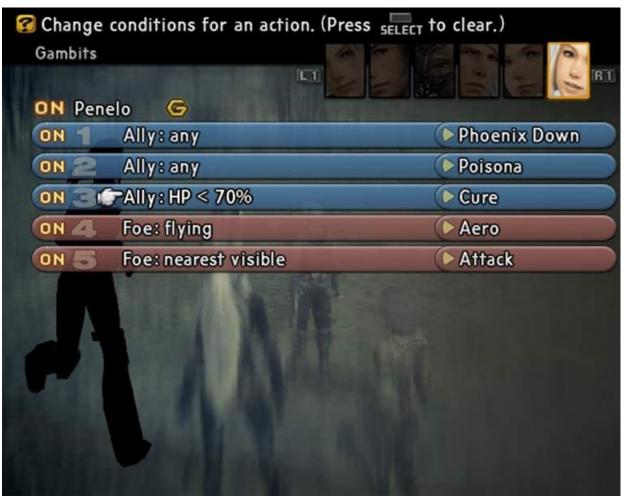


Image 7.A. Final Fantasy 12: The Gambit system. The user can code each character's behavior; It is actually possible to program at such detail that each battle can be auto played. The user can simply leave the game for an hour and the boss will be defeated when the user returns.

## 7.2.2.3 Character Development

The user will spend a lot of time, investing in how he/she wants to develop her/his character(s). At the structural patterns level, this group is more of a negative pattern collection as the structural pattern points at different, unique factors.

For example *Linearity Prevents Character Development*. Which means the user cannot improve his/her character(s) outside the narrative part of the game. Not very common but it does exist a few examples, e.g. Saga Frontier 2, Grandia 2, Breath of Fire 5, Fire Emblem Franchise. This often leads to a very, unforgiving gameplay towards the user. The Fire Emblem games, typically has a huge problem for the user if he/she does not manage to level up a character during the early stages. This will leave this character too weak to beat the later enemies and as the user cannot gain experience points outside the narrative driven battles this creates a very constructed gameplay where the user(if aware of this), will steadily train each character, equally

distributing experience gain per stage. Although the grand example of this is Saga Frontier 2, the game also has *Character that dies in narrative* (Meta gameplay Pattern), resulting in that the user cannot train characters through narrative battles as they all expect one dies by the story, instead the user gains five new characters for only a few last stages.

Another pattern is the *Static Character Development*. Which means the user cannot at all decide what the character will learn, or how their statistics will be placed etc. For example Diablo 3, has this where the user will gain always the same amount of distributed statistics points and the user will simply gain new skills and have no meaningful choice on what to priorities.

## 7.2.2.4 Challenging Gameplay

Patterns that makes the game extra challenging for the user, challenging gameplay patterns are actually very few in the structural patterns, as they are often more uniquely designed expect the very fundamental challenges a game can have, which makes those patterns be placed in the ubiquitous group. The Challenge gameplay patterns in structural are the ones which are very clearly increasing the challenge and which has several examples of in role-playing games.

A typical Final Fantasy challenging gameplay is *Last boss+100*, The Game features one or more bosses that are much harder than the last boss of the narrative. This is a way that the games narrative can be accessed by most users, the casual user can be able to play the game's whole story. Then the game has several times harder bosses to challenge the hardcore user, the expert of role-playing games. Typically JRPG has several of *Last Boss+1* who are slightly harder. These bosses can provide the user with smaller challenges, and they can work as learning curves to prepare the user for the *Last boss+100*, both by letting the user access to more powerful *Equipment* and by improving the users' skill in the game itself

## 7.2.2.5 Strategy Battle Patterns

There is a lot of Strategy Battle patterns in the structural Patterns. Mainly from the Tactical RPG group. Strategy patterns are about how the user can use game mechanics, to come over obstacles. This makes Strategy patterns very broad. For example *Optimal Path is* a strategy pattern and *Chokes* is too. It can be argued that using *Choke Points* is an *Optimal Path*. However *Optimal Path* refers to that the user has deduced that Party Composition of A, B and D is the best party in any situation. *Optimal Path* is a negative gameplay design pattern, that is common in party set up games, where the user will have several different characters who are under the effect of *Static Character Development*, and the game is then about how the user sets the party. Often there will be an *Optimal Path* severely better than any other set up. For example in Chrono Trigger there is a few clear party compositions that are far superior to the others. This is a very complex pattern to use, as in Suikoden 5, this pattern is even stronger. However Suikoden 5 has a huge gameplay entertainment in the unlocking of secret characters. For the user to be satisfied when unlocking a new character, that character should be unique or be stronger than former characters. Another game that has this problem in an even more

problematic way is Marvel Avengers Alliance. Where only 2-3 characters are viable to play of 30 characters. But in this game, the user has to pay to gain the new characters. And the only good characters cost the most points. Which makes the pattern *Optimal Path*, even more negative as it means the user has to either use actual money or Grind for an extensive time to unlock the only good characters.

*Chokes* on the other hand, is a typical Strategy to utilize in RTS genre, but also in TRPG and ARGP. For example in Starcraft 2, defending at *Choke Points* against the opponent is preferred. Because it limits the opponent's unit's movement, meaning the defender can perform a higher damage output. Similar in Diablo 2, it is preferred by the user to gather all enemies at narrow paths or doors. By doing this, the user can use *Area of Effect(AOE) Attacks* and defeat all enemies at once.

*Chokes* strategy is based on the game's environment, meaning the user takes a meaningful decision. While *Optimal Path* is based on the users knowing outside game information on what will be most beneficial for the user.

### 7.2.2.6 Extra Content

The patterns in this group are patterns that link gameplay outside the battles (the forced battles) to the gameplay during the battle. For example, a common Extra content Gameplay design pattern is *Side Quest*. Which means the user will gain extra smaller missions, often having smaller storylines of their own which don't affect the main story of the game. *Side Quest* can possibly be instantiated by *Companions*.

A typical JRPG pattern is the *Subgameplay is very important.* The game features games in itself which possible could be standalone games. Usually these subgames are important to play as the user can unlock powerful objects/abilities by playing them. Many JRPG features complete in-game in the game, for example Blitzball in FF10 or Chocobo Racing/Breeding in FF7. What is important to note, about these pattern is that these game the user has to play the subgames to gain the necessary *Equipment* to be able fully complete the game. E.g. Blitzball unlocks the best weapon for Wakka, who deals the most damage in FF10 (by a very large margin). While in FF7 only through gaining the Golden Chocobo can the user gain Knights of the round, the strongest ability by a humongous margin.



Image 7.B:Final Fantasy 10: Blitzball is a subgameplay in FF10, which is a mix between Soccer/Football + Martial arts in water.

## 7.2.3 Flavour Patterns

Which can be found in Appendix D

Flavour patterns, are patterns which are patterns that give their unique spin to the gameplay. Many of them are patterns that were almost included in the structural patterns, if a group had four patterns that were almost all equally important to set in the tree7. Then the fourth pattern which was not put in Tree7, would often be placed in this group. Flavour patterns can be viewed as lower hierarchical patterns of importance below structural patterns. However this means that they are also less overall patterns that was picked as they appeared in many games. Flavour patterns are more a twist in the gameplay, while being common or very unique gameplay experience.

## 7.2.3.1 Fundamental Battle Patterns

These are patterns that are common in several games but the games were not closely related in the tree. For example *Chess Based Battle System*. Is a very, very common TRPG pattern. Which means that the units are moving around on a square grid. This is most common outlay of

a TRPGs battle, altogether this can be designed in different ways. Some games for example Shining Force 2 has a flat square grid, while Tactics Ogre, the squares have heights to, creating a more block based system. The game will from this have range explained in number of squares to the user, e.g Bow attack has 3 Squares distance, and *AOE Attacks* will be in different square figures.

## 7.2.3.2 Party Patterns

In Flavour party patterns, the more quirky gameplay patterns can be found. For example *Overpowered Early Character*, which is a pattern several games has for example FF2,FF4, Saga Frontier 2, Skies of Arcadia and Grandia 3. The user have a character that has far better abilities than the others and better statistics. This is often used as a learning curve for the user. This pattern is often combined with the narrative to be an experienced person of battle that the main character respects, for example in Grandia 3, Game Arts (2005) where it is the main character's mother. After a few hours in the game, this usually leads to either two things. The character becomes seemingly more and more worthless as the game balance the character by letting the character gain less and less per level. Or the character is removed by the story, as for example happens in Grandia 3 where Miranda (the mother) falls in love with the fourth playable character and they both leave in the story. A third option for this pattern that is less common is that the *Overpowered Early Character* leaves by the story and later return when the other characters should roughly be the same strength.

## 7.2.3.3 Character Development

At Flavour patterns, the character development patterns are far more important than in the other groups. As this group is about the major system the game usages for the user to let him/her improve his/her character. There is several different ways *Character Development* can be designed for the user.

One of the common one is the *Talent Tree*. Which means the user will cascade down in a tree, gaining new better abilities the longer the travel is, for example Diablo 2 and Borderlands. The *Grid Talent* system, is an advanced version of *Talent Tree*, where the user will as in the *Talent Tree* move step by step and gaining new skills but also new statistics, the difference is that the *Grid Talent* the user has several way to and it's usually much larger, for example FF10,FF12 and Path of Exile . (FF13 has a mix of *Grid Talent* and *Class Talent*)

## 7.2.3.4 Challenging Gameplay

These patterns are used to construct challenge gameplay to users, so this group becomes very broad as there exist several different gameplay patterns for how this can be conducted. For

example playing Diablo 3 on hardcore, turns on the gameplay design pattern *Permadeath*, which will lead the user to play with abilities he/she would rarely use on normal. And *Equipment* which is not very good at normal can have it uses on Hardcore. This is the same in any game with *Permadeath*, while these games did not structural themself close to each other. It's a gameplay behavior that is very transparent. For example Fire Emblem Franchise has *Permadeath* on each unit, but the user can reload old save files (not as in Diablo 3 where death is right away permanent), still this will lead the user to constant reload the game when a character dies. And overall the user will be extremely defensive and the user cannot send out units on suicide missions, which is otherwise common in TRPGs, for example in Disgaea who does not have *Permadeath* but otherwise features a similar gameplay to Fire Emblem.

#### 7.2.3.5 Environment Patterns

Environment patterns are usually closely related to strategy patterns and will instantiate strategy battle patterns. But an Environment pattern does not necessarily affect Strategy, For example, *Day or Night*, means the gameplay will change between taking place during day or night diegetically, and that this affects actions and events. This can create strategy, but not always. In Pokémon Black/White different enemies will be faced depending on the time of the day in-game. This will lead the user to try and face the specific Pokémon he/she wants to catch. This leads to Character *Development* and to *Dynamic Party Composition* (which will lead to strategy patterns). While in Ogre Battle, the Day and Night is vastly important. Depending on if a character is Evil or Good they will be stronger/weaker depending on the time of the in-game time. Furthermore, Vampires and similar units will be worthless on the day. Depending if it is *Night or Day* units will also move faster/slower. On Day Werewolfs are faster/stronger on Plains, while at night they are faster/stronger in Mountains. In Ogre Battle Day and Night instantiate a lot of different strategy patterns.



Image 7.C: Pokémon: Noctowl . A Nocturnal Pokémon. The user can only find Noctowl in the night of the game. Furthermore the user is using a Dusk Ball, which has increased catch rate on Nights.

## 7.2.3.6 Strategy Battle Patterns

At the Flavour level of patterns, this is about patterns which create specific strategies the user will employ.

For example *Positive Ailments*. Normally *Ailments* are a negative status for the user. However, there are games where *Ailments* can give beneficial status and negative or that having one *Ailment* can protect from other *Ailments* etc. In FF12, having Berserk mean the characters actually do more damage, but the user cannot control the character anymore. Used correctly this is not a problem (it is actually the highest damage output in the game), in Secret of mana 2, the user can be turned into midgets, which will remove the characters abilities, make them deal very low damage and take more damage. However, the user can use the Midge Mallet, to give her/his characters a negative *Ailment* before the enemies. Then the enemies will instead remove the *ailment*. This can be useful if the enemy chains the ailment with high damage abilities.

## 7.2.4 Meta gameplay patterns

Which can be found in Appendix E

Meta gameplay patterns affect the battles but are set by the user outside the battle. It can also be patterns which the user cannot affect, and then it's more important for the user to be aware of the pattern.

## 7.2.4.1 Fundamental Meta gameplay patterns

Are pattern that are very common in RPGs. These patterns is often than not that of a unique pattern which will be a clear differentiation from games to game, rather typical RPG patterns that is not in the battle but do affect the battle.

For example *Experimenting, is very common in RPGs.* If the game has any kind of *Crafting* pattern the user will probably test a lot of different ideas how to create better *Equipment* through using *Crafting.* There are many patterns that can instantiate *Experimenting,* for example *Breeding,* which is pattern that also belongs in this category. Where the user will try and come up with a better monster, this pattern exist in games like Dragon Quest Monsters, and arguably is a very similar to how some games have their *crafting* system but for playable characters instead of *Equipment*.

## 7.2.4.2 Party patterns

These groups are patterns that affect the how the party gameplay is, but from an outside point of the battles or the common party patterns where the user will prepare battles by *Equipment* or what type of *Functional Role* to use etc.

For example previously mentioned *Character that dies in narrative*. Will affect the user's party, and the user's battle after the character is removed from the game. This is created by the narrative and not in the actual battles (where character usually dies all the time with no effect). Meaning it's a Meta gameplay pattern, it will affect the user's battle gameplay but the user can't affect it.

A good example of Meta gameplay party pattern is *Social Link,* and sub pattern to it. *Social Link* can be as for example in Disgaea with a parent system, the parent and his/her children has a bigger chance to perform combo attacks together. However regardless to perform a combo the character have to stand close and surround an enemy, this will lead the user to possibly move the social linked characters in groups instead of more randomly taking characters that fits the wanted *Functional Role*. Another example is Fire Emblem where game has the pattern Marriage/Friendship, where for example a female cleric will heal her husband more efficient. Valkyria Chronicles usages a system where each character has a social bond to a few characters or they are affected by social norm. For example there are many males who have a passive ability that make them deal more damage in close proximity to female allies because the character wants to impress the female characters.

### 7.2.4.3 Character Development

There are many meta gameplay patterns for *Character Development*, usually it's about how to gain the experience points to perform the different *Character Development* system that are in flavour *Character Development*.

For example Secret Grinding Place. It's a Secret Area, which has enemies who either drops specific loot, but usually the enemy at the Secret Grinding Place will give a large experiences points reward. For example in the Dragon Quest franchise all metal Slimes give a huge amount of experience, and in DQ8 the user can find two Secret Grinding Place, instantiated by Flying Vehicle. At these locations the metal slime will have a very high spawn rate. However, it still takes the user several hours of grinding metal slime to reach any high level needed. Secret Grinding Place is a pattern that can help the user to gain Character Development, but it is often used as a mean to force the user to grind for many, many hours.

There is a good point with *Secret Grinding Place* and that is that the enemies of this location usually feature unique abilities to challenge the user. Meaning the user has to develop specific strategies to utilize a *Secret Grinding Place*.



Image 7.D: Dragon Quest 8: A King metal slime. This enemy is the enemy that grants the user the most experience gain in the game by a huge margin (A Rewarding Monster). While it can be encountered at a few places of the late stages of the game, it has a much higher rate to be encountered at a Secret Grinding Place.

## 7.2.4.4 Exploration Patterns

Pattern that has to do with the exploration of the game world. Exploring the game world is common big part of the RPG overall gameplay, from this a lot of different patterns that affects how the battle gameplay will become or how it can be planned for exists.

For example, typically in RPG, especially older ones, *Gossip* is an important gameplay design pattern. The user has to talk around with more or less everyone in each town, to understand how to either progress in the game or how to unlock *Extra Content*. For example Wild arms

Franchise uses this extensively, to be able to understand how to progress in Wild arms 1 the user has to run around talk with NPC constantly. And later to unlock any *Extra Content* the game is all about gaining *Gossip* how to do it.

Dragon Quest Monsters, uses this combined with the former mentioned pattern *Breeding*. By talking with people and reading books in the game (something used a lot by Wild Arms 3 too) the user will learn how to breed the strongest monsters in the game, it is also often explained to the users in riddles or clues by the NPCs or by the libraries in the game.

To clarify it can exist a Last Boss+100, but it is hidden and the user has to talk with in-game characters or read books in Wild Arms 3 to find this boss and other *Extra Content*.

## 7.2.4.5 Extra Content

Meta gameplay extra content patterns are patterns that can give the user gameplay experience about battles but not in the standard way.

For example Tactics Ogre features a versus mode between the users characters, where the user can either faces off against the computer or against another human player. Using some kind of *Training/challenge* mode pattern, can be good in TRPG as they might be under the effect of *Linearity prevents character Development*. By having this pattern the user can battles and improve characters outside of the main story. Although it should not be as in Tactics Ogre where the user would keep experience gained from versus mode. In Tactics Ogre the user can simply set the game to perform a computer vs computer game, keeping the experience gained and repeat this process, versus mode also does not have *Permadeath* which make normal battling and *Grinding* for experience much harder. This lead to the Training Mode making the game too easy.

# **8 DISCUSION**

## 8.1 Method discussion

As mentioned, many methods were first of all not decided to be used. It was not exactly sure how the work would be conducted before it started, while the research field in itself was something that me and Staffan Björk had discussed since a while (I mentioned the basic idea for the research 1.5 year earlier) before the actual time of the work. That it would be some sort of game analysis methods was clear but otherwise it was not exactly sure how to perform it. The main reasoning for using the specific methods as explained in chapter 5 is that I performed the work alone. This obviously right away removes the usages of many methods I otherwise at first consider from my Interaction Design education.

The whole game analysis method, cannot be ignored that it is under subjective affections. As explained in chapter 6, first of all there was many human errors, which kept happening when the matrix values was to be set. Honestly, this simply happened a lot of times when updating the matrix, which after a while also became very large. It was simply hard to not miss different values or sometime type the wrong value, for example 20 instead of 2.

Still I have looked over the values numerous times and those human errors should not exist anymore. This is also a reason why the first 5 trees, can be less correct since they are more likely to human errors than the later ones. Especially the first Tree, Tree1 had some mistakes that was later corrected with Tree2. To clarify, even if it do exist some human errors in the Tree6-7, it is only a very low value, I would believe around 1-3%. It should not really affect how the relation between the games is. For Tree8 and Tree9 the risk of human errors are even less, as these Trees have a low number of gameplay design patterns (Tree1 has more than the double number then what Tree8 has) and these trees have very thoroughly examined. Therefor would argue that there is an extremely low risk for these errors in Tree9.

This is also one of the main reason it is a very tedious to work with the tree cluster method. It becomes a very, very repetitive process I spend a few full work days for each clean-up of each iteration. And of course to actually fill the matrix to start with.

The biggest issue is the setting of 1 or 2 for a game. This is not something I can completely say that I am 100% sure on, but as mentioned I would say I have done it as objective as possible. First of all, it is always in relative relation to other games. I try to look at each other game and reason, Game A very strongly has gameplay design pattern X, then Game B which has the pattern but lesser than game A should have a 1 for X and game A should have a 2 for X. This become very complex when a lot of game has the pattern and at different scales. This is one of the reasons having it be only 0,1 or 2 as if it was 0-99 it would probably be more exact but it would take huge amount of times. It would not be possible to cover this amount of games at that detailed relation. Furthermore, it would still be relatively to each other, by using 2 as a game is affected a lot be a pattern and 1 when it its existing it is easier to get a relatively fair score. Using 0.1 and 2, makes it more of a Boolean statement, False, True or Very True.

One thing that really I spent a lot of work time, which might not be as clear, is this part if a game can should have 1 or 2. I could spend hours, only about a few gameplay design patterns. Another issue, is how the much of similar gameplay design pattern it can exist, at a brief time it existed over 10 crafting gameplay design patterns, which were removed before the iteration was finished. Still the realization on how many gameplay design pattern with only slightly differentiated from each other was clear. However while it could be that some Crafting pattern were redundant some other where truly far too different from each other, having only that they all were sub patterns to Crafting as a similarity. Here I simply could not remove or merge the patterns, this really became a troublesome issue, it had to be solved by removing most of them regardless. Because while many game can feature a similar gameplay but not entirely the same, they would then have to have at least 1 as a value. This created strange sub groups where it was clear that certain gameplay parts had become weighted. This is not an issue with Tree8 and Tree9 who only have the structural patterns, although some are subpatterns (Tree8). Another related issue to this, which might not be an issue depending on the perspective of the viewer, is how some patterns really should be worth more too. This might sound contradictory to what was previously explained, but the problem is that some patterns truly are much more important than other patterns for example if the game has a *Chess Battle System*, from simply that pattern, it is probably is a TRPG. In some cases patterns I would like to simply copy the pattern and have more of the same to imply how important the pattern is, slightly how Tree8 and Tree9 are constructed. But I would say most of these patterns are patterns that I have order as the result, the three groups' structural patterns, flavour patterns and meta gameplay patterns.

I do believe that it's a very deep analysation, still it do come from my subjective reasoning of how each game works. However while it is a subjective issues, the subjective comes from having played numerous games, without my prior vulgar competence in the field of role-playing games this research would not be able to unfold many of the gameplay design patterns this research has as a result. Neither would the worker be able to find human errors, the researcher need to have a huge amount of knowledge to be able regardless to argue if its 1 or 2 in most games, or to even know if it's not 0 etc.

Furthermore, it is important to note that, these methodologies did work pretty well, but claiming that the work took around 20 weeks of full work time is actually a lie, I have played RPGs for more than 1 year of my life time (excluding World of Warcraft, which I have played for more than 1 year by itself). I believe that this methodology works, but I would expect if something tried to perform the same work process with no prior knowledge about RPGs, and especially with no real prior knowledge about games. They would not at all achieve my result, probably they would have to take a lot less games to analyze or each game would not as all be as thoroughly analyzed as in this research. Simply said this research has a pre study of having humongous amount of hours played in RPGs before the actual work started.

However this does affect what game was decided to be analyzed. First of all, it is clear that I have picked more games which were developed in Japan, much more then games developed in western countries. To my knowledge of the game industry there simply are a lot more RPGs made in Japan, for the last 20 years. Further, from my experience if one wants to find unique gameplay features one is more likely to find them in RPG games from Japan, and this was a

aim in the work since this would provide a wider overview of the field. I knew a lot of more unique or quirky battle systems could be found in those games. While I am not saying western developers all do the same thing, many of the games do have a similar battle system. This is for example also true with Japanese games, and why I do not have both FF8 and FF9, as they fundamentally have the same battle system. Instead I have for example FF12 which is very different from FF9. Although I should have added more Western developed games. To clarify, while there clearly are some games who are some of my personal favorite that was picked, for example I really like the battle system in FF13. Other games were added as I believe they have a lot of negative gameplay design patterns, those games are more of hate objects then any kind of personal favoritism of a specific genre.

In retrospect I believe I should also have added more Gotta Catch them all games, I for a long time hoped that Pokémon would fall down in line. I should have added in for example Dragon Quest Monster. And test if it would stable the structure more as I did with other groups. I realized this a little too late, in the iteration 3 1-2 games could have been added with a gameplay in that direction. If I were to continue with another 10 games at least 1 game would be to observe if it would sort Pokémon placements. Furthermore I would try and find games with similar battle system to Vagrant Story and Resonance of Fate.

The empirical studies did not have a lot of testers for a couple of reasons. The main reason is as described chapter 4 and 5. It is not easy to find the right kind of user. Furthermore this was placed in a bad time frame, because the Chalmers Cortege carts were being built by several people I had expected would be able to be interviewed about RPGs. I still managed to interviews people that was building but less people in general then what I had expected. And it could not have been done earlier as the idea was to test the result. If this research was for longer period it would be possible to perform more empirical studies.

### 8.2 Result discussion

Tree 9 and 10 Tree Structures, can be used for a designer to much easier understand the design space that exist when developing a role-playing game. These trees can also further ease the language of context when communicating about role-playing games. As stated in chapter  $\underline{3}$ , there is a lot different sub genres. The blurry lines of what is an RPG is depending on the context, this research offers a view of what RPG is related to each other from the perspective of the battle gameplay.

The result could easily be exchanged to cover other games. Furthermore in that aspect the result while, having value could easily be extended.

The researcher has played these 41 games some of them very extensively. However, in around 20 of the games the researcher has played noumerous hours, this research could have been easily have been with 41 games where in each the research has a very extensive experience. However, then the games probably would have been too similar to each other.

There was a slight issue for some of the iteration 2-3 games, which some of them the researcher has not played at that extreme amount of hours. For example, the researcher has not played Persona more than 10 hours around (although has played other Persona games).

However, on the same time the user has played FFT for 100+ hours at least. It could be more reasonable to then have FFT and FFTA etc. instead, but probably not as they are very similar it wouldn't really amount to much new information. Still the games could easily be exchanged for other games, which have created another view of the design space of role-playing games battle systems.

This could mean that adding more games could be the best possible follow up. However, an important thing that happened in part of the process is that, while some games added in around 20 more gameplay patterns. Some other games only added 5-6. The process started to be saturated of patterns. Each new RPG added means it would be less pattern the next game would add. However, this low number was after removing/merging etc, if each slightly quirky sub pattern would be kept. Most of the games would have added around 30 gameplay design patterns.

I would say that adding in more RPGs probably would not establish much more gameplay design patterns. I do not believe that the patterns presented in the result is the final number of gameplay design patterns that exist in RPGs, and game developers can always create more too. But there is not that many more to be found, already in the first iteration all the fundamental patterns were established more or less. By adding very unique games, more patterns can be identified. However a, noteworthy issue to consider is if a pattern is 100% unique it is not actually a pattern. For example Vagrant Story has this, game resource which I personally find very interesting I called this pattern the Risk (Meter), but I have not found any game with a similar resource, it is not much a of pattern then since there is only one know occurrence of it in game design. Although it would have been a sub pattern to *High Risk High Gai*n. However adding more games would create a much more detailed Tree, which could show the relation of games etc. Clearly, the result is not the final complete truth of the RPG genre.

The tree structure has its faults. First of all as described in the work process, there were a few games that moved around a lot, making the whole structure in itself questionable. However, most of the structure was very stable, especially the *Tactical RPG* section. And that happened very early in the work process and then it didn't change, excluding versions with very few patterns, but it still almost was unaffected. Showing that the Tree Structure works very well as a simplistic view of the design space and option a game designer has when it comes to developing a role-playing game.

Why did some structural parts of the RPG genre become stable? It can be from several reasons, maybe it is that I have a great idea on how the TRPG works or maybe I believe I do and put the same values on each ones. It probably is more from the uniqueness factor. TRPG are not very unique at their fundamental gameplay they are very similar therefore they would easily group together. As mentioned Pokémon was left alone and could probably have been grouped again if I had taken more games similar to the gameplay of Pokémon. Still most of the games are very stable in their position when using each pattern (tree7), it is mainly those games with a high unique factor that moved around. Those games can have many patterns from other genres another reason is that they can have too many patterns from different groups. For example, Resonance of Fate, being both a *Turn-Based Game* and *Real Time Game* and having

a combo system etc. Makes it be connected to every subgenre but on the same time not being to related to anything.

Clearly the result of the gameplay patterns could be fairly easy to improve. Most of the patterns are not fully connected to each other or older previously established patterns. This make them fairly incomplete. The work with the gameplay patterns has been done more informally, by creating more patterns and to see how they relate more to the genre of role-playing games and very little work has been conducted on how they work in other genres. Still, some patterns are very detailed explained and are right on the spot. And while games outside the role-playing genre has not been researched there is several patterns that clearly are universal that any person with good knowledge of games can recognize from several genres.

Furthermore the gameplay design patterns that has been identified and sorted in the different groups, is not finished either. There is possibility that more or other the gameplay design patterns should be put in the groups instead on how it currently looks. Although I personally do not believe that, if anything it could be less patterns in each group that are need to emphasize which patterns are more important or a better flavour for a game etc. This is coming back to the issue of my subjective reasoning behind what makes an RPG. I would still say that, by using the empirical study it is not completely my own personally reasoning, and as mentioned my previous game experience is also under the effect of a lifetime of discussions about RPGs with different people. I would say I have a good sense on what gameplay design pattern which are important to the average user. Still there probably is some of the decided patterns were I feel very strongly that it is a very effectual pattern especially for flavour patterns.

Another important result is the definition of how a designer can view the patterns for a roleplaying game. These results can be used to much clearer understand the difference of impact a decision can have. These groups are important to be aware of and how they affect the user's gameplay experience. For a developer design a role-playing game this different groups and difference in the sub groups can be very important to understand.

The result shows the difference of a much more complex problem of what specific gameplay effect will affect the gameplay. For example a Strategic gameplay pattern or a Challenge gameplay pattern. To understand the difference of these very in detailed parts of the gameplay requires huge knowledge of role-playing games. Hopefully this research can be used by people that have not been able to play and analyze such amount of games. It is very complicated sometimes, a lot of time was spent on reasoning back and forth what would be placed in what group. For example *Last Boss*+1 is placed in the Extra Content group, it is a harder boss then the last boss(narrative game part) to challenge the user. However it does not actually feature much more challenge than the *Last Boss*, it is more of an extra boss battle, an *Extra Content* gameplay design pattern. *Last Boss*+100, is instead in the group Challenging Gameplay patterns, *Last Boss*+100 is a battle several times harder than the *Last Boss*, and is usually the hardest challenge of a game. Clearly it is not a simple matter how a gameplay design pattern effects the game. *Last Boss*+1, still they won't evoke the same gameplay experience for the user.



Image 8.A: Wild Arms 3. Ragu O Ragla the Last Boss+100 of the Wild Arms franchise (it appears in each game). In Wild arms 3 he is also at the end of the Abyss a 100 Floor Dungeon. To simply reach this boss is the most challenging part of the game, then he is at least 10 times stronger than the last boss of the narrative game part.

It was actually not very easy understanding how some of the groups would be set up, especially for patterns that belongs to the Meta gameplay Patterns. I personally believe that those patterns are very hard to grasp for most people how they truly affect the game. One of the hardest parts was when having to decide what 3 specific patterns are most prominent for the tree structure, and truthfully it was probably spend too much time on that aspect, on the same it produced a very solid graphical explanation of RPG genres.

After this a hard part was to understand what patterns should be put into the third category of flavour. It actually was easier to group in patterns that belonged to Meta gameplay, because placing patterns there is arguably easy they are easy to recognize after having played a lot of RPGs. This of course is also affecting how easy/hard understanding flavour patterns is, but there is too many unique patterns. There was a lot of work put into, coming up with, which are the most prominent flavour patterns for the battle system of role-playing games. The end result of that work, actually mainly points many of the basic flavour patterns that most gamers will recognize, for example the *ATB* gameplay design pattern. The reasoning behind that instead of

for example, really point at the most unique patterns, is because now that list is more flavours a person developing an role-playing game should know about.

I believe the result should give clarification to how the RPG genre works from a battle gameplay perspective, it gives an idea how the design space looks like. And the different groupings as mentioned are important but I believe they could be used for other genres too. Other genres won't have the same groups of patterns but some would reasonably the same for example Challenge gameplay design patterns. Which not necessarily improve this research result but as a whole could possibly be used for future game research, or for game development.

### 8.3 Generalization

This result, as mentioned can be a little lacking on how much it works on WRPG genre of games. Furthermore as MMORPG nor Shooter RPG where in the study, there is no any certainty that the result afflicts them. However, MMORPG for example do share most of the gameplay experience with WRPG and other sub genres. Furthermore I personally reason that most MMORPG and Shooter RPGs have the exact same groups of different gameplay design patterns, while they are not in the study officially I have played many of them. Furthermore this is also true for most of the gameplay design patterns, while a pattern might only be in 2-3 games of the 41 games I know that it further exist in 5 other games not in the research. This is especially true for JRPGs and TRPGs.

The JRPGs, TRPGs and the ARPGs seems to be very stable, and the gameplay design patterns established for those 3 subgenre of RPG should be able to be utilized in any game that are of those genres.

A more interesting question is, "How does the gameplay design patterns work in other genres?" First of all, it is not surprising that TRPG is what I believe is the most promising result for the design space, however furthermore on the point of TPR is that many of the patterns are pure strategy games patterns. For example *Choke Points*, and I have taken a lot inspiration from different strategy genre games when establishing patterns from TRPGs especially the RTS genre (note: I actually play more strategy games then RPGs at my free time).

This means for some genres I would say it is already proven that is not purely the RPGs. For the same reason action-oriented gameplay design patterns has been identified from analyzing ARPGs.

While it is unsure how proper it is to use the gameplay design patterns that are mainly for RPGs in other genres, for example the puzzle genre. One should note that many genres have taken the role-playing genre patterns already, and reasonably more will be used in future developed games. As explained in section <u>3.2.7</u> there are examples of RPG, game elements in many games who are not RPGs. As one of the major reason I found it worth my time to analyze the RPG genre is because of all the games that used different RPG gameplay patterns over the years. I would say it is the genre that is most occurring in other genres, if the action genre is

excluded as it is extremely broad genre. Especially Character Development (or e.g. army/unit Development) is something that has become a very common gameplay experience in games today. There is a lot of potential with RPG gameplay design patterns for game development.

## 8.4 Future Work

The possible future work of this research has already been explained, mainly in the last previous subchapters. It is very clear that, there are several ways this research could be followed up on.

One simple task is to add more games and keep expanding the Tree structure. Add more games and identified more gameplay design patterns. Analyze how other genre works with the gameplay design patterns, or/and them into the design space structure.

Improve the gameplay patterns, while some of the more prominent patterns are explained in the appendix, they are not very detailed explained. Furthermore other patterns could also have more details, which it was no time for during this research

# 9 CONCLUSION

This research started with this question: How can a designer affect the gameplay by the usages of mechanics and dynamics that affect a role-playing games battle system?

By analyzing existing games patterns and their general battle gameplay, comparing and creating tree structures to further analyse the games and by conducting empirical studies, this question was answered.

This research has first and foremost established 4 different type of gameplay patterns when designing the battle system for a role-playing game. 1, Ubiquitous patterns that almost every role-playing game has. 2, Structure patterns, patterns that can be used to position a game in the established tree structure. 3, Flavour patterns, patterns which can be used to create specific gameplay experience for the user. 4, Meta gameplay Patterns, patterns that affect the battle gameplay but exist in the games other gameplay.

Game designers can use this to have an easier understanding on how a game feature will affect the battle gameplay.

The tree structure can be utilized to position oneself in comparisons to other games. A designer can use the gameplay patterns to either get closer or move away from a position, while this research does not clarify a specific user group of each structure, some of the structures have a clear user group. Regardless of the user group, each structure has a similar gameplay, which can be used regarding the design space. As the designer can aim to achieve a specific gameplay.

Note that these structures are based on the gameplay patterns, and if a game has a pattern or not has been a subjective decision, it might consist of human errors. Furthermore a few structures are slightly unstable, from a few games that moved between positions a lot.

Several gameplay patterns have been established. The patterns vary a lot in how important they are or how much affect a pattern will have in a game. The main agenda of the research has not been aimed to identify the most crucial gameplay patterns. The resulting patterns are quantity patterns and not necessarily quality patterns. There has been some work, in identifying the more important patterns, and how the patterns relate to each other.

The methodology of using the cluster method has been successful, in several aspects. Most significantly it reduces the impact of subjective reasoning on which games truly are related, and how it can be observed for the design space of battle systems of role-playing games. It helps the actual work as it can show mistakes done with the gameplay pattern analyzing method, further reducing human errors.

Using this method in this short amount of time (20 weeks), requires the worker to have a quantify and a quality knowledge of the games being researched beforehand, to be able to use it well enough. It's a very time consuming method, another way to use it could be to have a lower number of games.

The result of this research can very easily be improved by future work. This can be done in 2 different ways, more games can be added with the cluster method without adding any gameplay patterns to set more games into the structure and create a more clear design space. This could be further improved by adding in more gameplay patterns from the new games. Another follow up on the work, which probably would yield better result than adding more games. Is to improve the established gameplay patterns.

The result, while not tested thoroughly should be able to be used for other sub genres of roleplaying games which was not covered in the research. While those games have other core game mechanics, they still fundamentally are very similar especially the fourth group, Meta gameplay patterns can be used.

There might be gameplay patterns that can be used on arbitrary game genres. This has not been researched but there are patterns which exist in other games outside role-playing games that has been confirmed, but their effect has not been analyzed outside the role-playing genre.

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## Appendix A

10 possible games for second iteration Elder Scrolls V: Skyrim **Phantom Brave** Tactic Ogre Front Mission 1-5 Fire emblem Franchise Skies of Arcadia Wild arms 1-5 Lufia 1-2 Phantasy Star 1-4 Shining Force Franchise Chrono Cross Games for possible later iterations: Parasite Eve. Lunar Grandia 1-3 Tales A-X Tales of Destiny Persona Mario games, Mario story Mario paper Panzer Dragoon Bahamut Lagoon. Xenogears Xenosaga Episode I: Der Wille zur Macht Arc the Lad , Arc the Lad II

Star Ocean: The Second Story

Kingdom Hearts

Heavy Rain

Crisis Core: Final Fantasy VII

Dragon Ball Z: Super Fighting Story

FFT-a2

Note: Many other games was also considered but not listed here, these are the games that were talked about mainly by people in the focus groups and interviews.

## **Appendix B**

Patterns indicated with -wiki can be found at the gameplay design pattern wiki: <u>http://gdp2.tii.se/index.php/Main\_Page</u>

100 Floor Dungeon

Game has a very hard dungeon that is an "endless" amount of stages, common is a 100 Floor Dungeon where it will usually be a Last boss+ 100 at the last stage.

Ability Experience

Characters don't just get level experience but also receives a secondary experience, often related to abilities(it can be class experience etc, this leads to new abilities).

Ability Losses - wiki

Abilities can be lost, in Tactical Rpg this often comes from changing class/environment.

Action points Characters have a set amount of actions they can perform per turn.

Ailments Game features status ailment such as Poison, Freeze, Stun etc.

**Ailments Strategies** 

In the battle gameplay it's important for the user to employ using ailments against the enemy.

Al Players - wiki (specific RPG case)User is controlling one character in the party and the other characters is controlled by the Al.

AI Players controlled with IF statements User controls the AI players with IF statements.

Al Players controlled with simple rules User controls the Al players with general rules.

Angry Meter

The enemy(boss usually), will be stronger when he/she/it have lost health or time have passed, the boss can also often change into another form.

Area of Effect Attacks (AOE Attacks)

Attacks that hit several characters or an attack that hit a larger area(which usually means hitting several characters).

Button Sequence Input User inputs different buttons for abilities. (Straight from fighting games) Battle is a minigame Battle in the game is fought "outside" the game world exploration.

Body parts Characters have health points for more than one part, often split into legs, arms, head etc human body parts.

Characters learn skill at random

Characters don't learn new abilities from leveling or items etc, but from spare random occasions. Partly Related to Learn by Doing.

**Character Class** 

Game has classes, such as Knight, Ninja, Wizard Etc. There is often an correlation between Functional Role and Character Class. There is often a lot more classes and several classes fill one Functional Role.

Character position

The position of character is very important, this relates to AOE Attacks-Pull them etc.

Character Development -Wiki

The user can develop character(s), by level, new equipment etc.

Characters can't move

A related pattern to Turn-Based Games, often the characters(on both sides) can't move and simply stand still.

Characters roam around This means the characters keep running around, can be both in Real time games and Turn based games. This pattern often create strange dynamics in Turn based games.

Challenging Gameplay -Wiki Game features some challenge to the user.

Chokes -wiki

Part of the environmental is closed off and characters have to move into small passages, often defending this parts(chokes) is crucial strategy.

Class/club room system.

User can set up outside of battle gameplay set characters into different relations. Partly related to Pottering and Meta Gameplay(Magic The gathering etc)

Combo Gauge

A combo meter when maxed create new abilities.

Combination of characters creates new abilities in battle.

Certain combination of characters unlocks new abilities.

This pattern needs Dynamic Party Composition or Freedom in party Composition to work properly while it could be used in Locked Battle Party, it would only be inactive then when characters are lost control of(death usually).

Counterstrike

Characters will attack back when attacked.(Important for Permadeath games)

Crafting - wiki User can create or improve items.

Different Defense to Attacks Do the game have different defenses to elements, magic or physical damage etc.

Direction input User inputs different directions to activate different abilities. (Straight from fighting games)

Dynamic Party Composition The user has a humongous disposal of combination of characters for the party.

Durability Items will break after a set amount of use.

Equipment/Item/Magic Development Items can be leveled or improved, by different means(not by crafting).

Event in Battles

Game featuring enemies that can change form, summon more enemies, lose their Achilles heel etc.

Environmental Effects -wiki Overlay pattern that the game has environmental effects.

Extra Content Game has gameplay value outside the games main agenda, it can be side quest, subgameplays mini games etc.

Extra Dungeons Game has dungeons the user can explore outside the mandatory part of the game, often connected to Side Quest pattern.

Extreme Range Characters or weapons have enormous more range then other characters weapons etc.

Freedom in party Composition The user can change around his/her characters in the party.

Freeze real time for enemies

Game that lets the user freeze the game for enemies, but not for the users characters with abilities. This pattern is related to Optimal Path.

Functional roles - wiki Characters fills a role, such as Tank, Healer etc.

The functional role of characters can be changed

In some games the characters is locked to a specific role, this pattern is for games when characters can develop freely

Game World Exploration User can Explore the Game world.

Heal mechanics Game have some sort of mechanics that let the user regain health or the user can heal ailments.

Health - wiki Characters have health points, when they reach zero they usually die.

Height increases distance Characters using ranged attacks from high environment can shoot longer, this is very dynamic pattern in Chess based games.

Last boss+1 Game has bosses that are harder than the last boss(narrative game part) to challenge the user.

Last boss+100 Game has bosses that are much harder than the last boss.

Limited resources - wiki User has limited amount of resources.

Line of Sight - wiki Characters have to shot in a straight line to hit the enemy(or can't shoot if obstacles are in the way), can often create Friendly Fire in Tactical RPG.

Linearity prevents leveling The game is very restrictive and the user can level his/her characters outside narrative parts.

Linearity prevents shopping

The user cannot reach towns/shops as the game is very linear, this can create a strange dynamic as the user have resources for items but cannot use the resources.

Link system

Characters are linked together, this pattern can create create several different other patterns, such as varying turn order, characters attacking out of their turn, new abilities etc.

Main character is created freely Games where the user from the start, can freely decide what their character should be.

Menu control over characters User will jump into sub menus that control the AI characters.

Monster made of experience - Should be renamed User will hunt for monsters that give a lot more experience than normal enemies.

Narrative stronger characters

In Tactical RPGs, where the user can have Infinitive Number of characters, the characters unlocked by narrative are usually still much better.

**Optimal Path** 

Game has a gameplay way that clearly is the best way to win the battles.

**Optional Grinding possibilities** 

The user can level or farm loot, outside the games narrative parts.

Orthogonal Unit Differentiation by Smith. H(2003). In games where the user cannot freely develop characters, there is often a differentiation between the characters the user can pick from.

Permanent Promotion

Characters that have ascended into a class can't go back to the former one.

Predictable Consequences - wiki It's easy to predict the outcome of an action in the game.

Promotion

Characters can ascend to another(or improvement of their current class) class, closely related to Characters classes.

Pseudo Real time

Battles are played out in real time, but the user or the enemies can freeze the game, or the games pauses when the user is in menus.

Pull them User(s) pulls a few of the enemies into his/her(theirs) party to beat the enemy easier.

Quick Time Events - wiki The games GUI, presents buttons or directions, and the user has a short amount of time to press the correct input.

Random environment Unpredictable environment, the game creates "new" gameplay each time for the user.

Real Time -wiki Battles are played out in real time.

Ridicules challenge The game is really, really hard.

Self-Chained Attacks One character can in itself create combos.

Several Important Subgames Game features several subgameplays that unlocks important objects.

Side Quest - wiki

Game features quests not mandatory to evolve the story, often as a reward give the user better equipment.

Sniper Location -wiki

Specific locations in the environment is better for ranged weapons, or that other characters can protect the ranged character(usually from environmental closing of the battle)

Stat Boosting items

Game features items that improve the character's statistics permanently.

Static Character Development.

Character Levels up, and the user cannot affect what statistics or abilities the character should acquire.

Statistic placement User can freely put statistics points in different field for a character(s).

Strategic Location -wiki

There is important locations in the battles environment that is more important to control or to have characters on etc.

Subgameplay is very important Game features subgameplay that unlocks important objects.

The killer gets it all

Closely related to Adjusted Experience Gain and Static Experience Limit, the character that kills an enemy will usually receive a level up.

Turn-Based Games - wiki

The game is turn based, in RPG this often means the user takes one action with all his/her characters then the computer enemies take one turn with all its characters.

Turn based combo system Game featuring combo systems even if they are in turn based, can be connected to QTE.

Ultimate Attack

Characters have an ultimate attack, which will deal a lot more damage, this pattern often requires special condition to unlock the ultimate attack or it cost huge amount of resources.

Unison Raid

Characters can combine their attacks to create new attacks or characters can create their magics to create new spells etc.

User can change the class of the characters mid battle FF13 and FF13-2 uses a specific battle system where the characters can constantly change their functional role. FF10-2 had a similar system.

User can miss/lose important objects This pattern is similar to Permadeath but for items.

User is outnumbered

Computer has much larger army then the user, this pattern only make sense in Games where the user's character is roughly equal in strength to the computers.

Varying Turn Orders - wiki Characters do not receive their turn in a set pattern.

Wanted list

Game features a lot of extra boss battles, the user can hunt this marks and get rewards.

## **Appendix C**

Groups order from the left to the right. And from the bottom to the top. Names () indicates old names, changed after the empirical studie and further reasonings.

#### Linear RPG

These games are very linear, therefore the name. Each pattern indicates how the user freedom is very restricted. The pattern Permamiss, is usually also caused by the linearity of the game. As if the user misses an object he/she cannot return and search for it.

PermaMiss (User can miss/lose important objects) Linearity Prevents Character Development (Linearity prevents leveling) Linearity prevents shopping

#### **Really Hard Games**

This are two Saga Franchise games. These games are very hard, even following a guide the normal user will not beat these games. One of the hardest part is that the characters, learn new abilites at random. Which adds a luck element, each item will break down in the game. And the user cannot repair them or get new items because of the linearity.

Ridicules challenge Characters learn skill at random Durability

#### Hardcore Linear

The combination of very linear gameplay and Limited Resources creates games not very suited for the new user of RPGs.

Ridicules challenge Linearity Prevents Character Development (Linearity prevents leveling) Limited Resources

#### **FF13**

As both FF13 and FF13-2 was in this research and they unsurprisingly were closest relation to each other the group was called FF13. Meaning that the patterns are patterns exclusively to FF13 such as Chain Gauge, Class Change Mid Battle exist in FF10-2 also, otherwise it is a pretty unique gameplay design pattern.

Class Change Mid Battle (User can change the class of the characters mid battle) Chain Gauge (Combo Gauge) Ailment Strategies

#### **Eventful Boss Battles**

The Combination of FF12 and Ff13, is about enemies that do a lot of stuff in battles. While for example World of Warcraft also has Event in Battles, but in WoW it is mainly occurrence at boss battles. in FF12 and FF13 is a common part of the game that enemies can change form etc. Furthermore both games features a Extra Content Pattern Wanted List, where the user will haunt extra bosses. Another important part of both games is that using Ailments is very important something most other games do not focus on.

Event in Battles Ailments Strategies Wanted List

#### Solo

These games are played out by only 1 playable character, while all otehr games(exluding Vagrant Story) is a party game of at least 3 characters. This creates a gameplay where the user will be able to do a lot of abilities with only 1 character.

Pull Enemies(Pull them) Self-Chained Attacks Randomization (Random Environment)

Western RPG

This is the junction of the ranges WRPGs. For example all games have player created characters, and the sub pattern Main Character is created Freely.

Main Character is created Freely Enemies are seen before battle Pull Enemies(Pull them)

#### **Real Crafting Games**

This name is not the best. However each game focus heavily on crafting, Rogue Galaxy has a 3 crafting systems in the game. But they are really placed together as their real time battle system is very similar.

Crafting Characters Roam Around Limited Resources

### Don't get yourself killed pls

As these games act in real time, the user will only control 1 character completely. This will usually lead to the AI controlled characters getting themself killed. A pattern shared with these games and higher hierarchal games are that the user can prevent the enemies from do anything by using certain abilities. Usually the enemies will be paused by the Cut scene of the ability.

Freeze real time for enemies Characters Roam Around AI Players controlled with IF statements

### Menu Real time Games

A common way to control these AI characters are by Menu control. In reality this can mean the game actually pauses when the user gives commands in the menus. However modernly games usually has a small window in the game, acting as mini menu for the user to control characters.

Freeze real time for enemies Menu Control over Characters Al Players controlled with simple rules

#### Important to keep check of players positions games

All these game have in common is that the distance between the user's character and the enemy characters is very important

Character Position Enemies are seen before battle AI Players

#### **Real Time Games**

Games that play out in real time, because of this they commonly have AI Players.

Real Time Side Quest Al Players

#### **Classic Final Fantasy**

The FF franchise always has some sort of subgame, usually several ones. Which unlocks important items for the user. Furthermore the game has challenging extra bosses, as the main story challenge usually is very easy.

Several Important subgames Last Boss+100 Varying Turn Orders

#### Old School JRPG

Commonly in JRPG the characters will have some sort of Ultimate Attack or an Ultimate Form they can active for a small amount of time under the right conditions.

Subgameplay is very important Last Boss+1 Temporary Abilities

#### Standard JRPG

In JRPG the characters usually gain experience both to level up, which will increase their statistics. But also gains ability experience, that levels up their magic or they can level up their class etc. Furthermore commonly each character won't be able to move during battles.

Characters can't move Subgameplay is very important Ability Experience

## **Typical JRPG**

Usually there will be monsters that are much more rewarding for the user to defeat in the Typical JRPG. These monsters will often give extra high experience reward, which can be split in to give either level up experience or Ability Experience. Or this monster will drop important crafting items.

Subgameplay is very important Ultimate Attack Rewarding Monster (Monster made of experience)

#### Party Set up Games

This group of games, focus on Static Characters. Because of this how the user sets the party up will be crucial. This usually leads to the game having on dominant strategy, an Optimal Path which clearly is far better to use. The Character can usually do extra powerful attacks together, Unison Raids.

Freedom in Party Composition Unison raid Optimal Path

### Predictable Party RPG

While each character combination might not be able to specifically use abilities together, different combination of characters can give forth to new abilities in these games. Furthermore they are very predictable each boss will almost always have an Angry Meter, which can be viewed as the reverse of the boss health meter.

Angry Meter Party Combination( Combination of characters create new abilities in battle) Extra Dungeon

## Create the Party

Angry Meter Party Combination( Combination of characters create new abilities in battle) Side Quest

## **Turn Based Fighting Games**

These games take a lot of inspiration from fighting games. The user activate abilities by inputting common fighting game inputs

Direction Input Action Points Button Sequence Input

#### **QTE Turn Based Games**

These games are turn based but really on the Quick Time Event(QTE() gameplay design pattern to make the user be more involved in the battles.

Turn based Stat Boosting Items QTE

#### Predictable RPG

These games are pretty traditional RPG systems, where it is very clear what will happen next in the battle. The user alwasy know when he/she should be offensive or defensive etc. Side Quest Predictable Consequences Static Character Development

#### Find the items and find the party games

This game focus on different unique characters, where the user will combine them to create his/her party. With Extra Content gameplay design patterns to focus the user on finding more powerful unique Equipment or abilities to the characters.

Extra Content Predictable Consequences O.U.D

#### **Classic JRPG**

In the Classic JRPG style, the battles are fought in their own world outside(or rather inside) the game world exploration.

Extra Content Battle is a Minigame Predictable Consequences

#### **Typical RPG**

This is the junction of the Real time RPGs and the JRPGs. At this point the Patterns are starting to become very arbitrary. All of these games have in common is a game world to explore, this might sound obvious but the typical TRPGs do not have this.

Different Defense to Attacks Ailments Game World Exploration

#### **Challenging RPG**

At this junction the Hardcore Linear has been added to Typical RPGs. At this point the patterns become very simplistic. For example each game features some sort of challenge to the user.

Challenging Gameplay Ailments Heal Mechanics

### Strategic Oriented RPG Games

Ailments Character Development Heal Mechanics

#### **Real Turn Based Games**

The off shot group. The name was taken from Tree2. Where it was realized it much more suit these games. Which are constantly swapping between being real time and turn based. Furthermore another part making these games similar is that they point usages a Body Party system.

Pseudo Real time Turn Based Combo System Body Parts

#### Action-Oriented RPG Games

The point of this name is to set in relation with the Tactical Group which is very not Action-oriented.

Ailments Character Development Health

#### Side Battle Games

These two games are very focused on extra battles, where the user can develop his/her characters and Equipment to a far higher level than needed to beat the game. Furthermore they both usages a MetaRoom system, where the user can position characters which will affect the battle gameplay.

MetaRoom System(Class/Club Room System) 100 Floor Dungeon Optional Grinding Possibilities

#### **Optional Grinding Games**

This group could be called Nippon Ichi games, they are very similar. In how the user can gain infinite number of characters but usually it is only the narrative characters that matters anyway. Furthermore they are heavily focused on Grinding.

Equipment/Item/Magic Development Optional Grinding Possibilities Narrative Stronger Characters

#### **Linear Tactical**

These games are very linear, they are in a way very similar to the Hardcore Linear. Although with a completely different battle system. One thing special with these games (and some other TRPGs) are the effect of Counterstrike + Permadeath.

**Permanent Promotion** 

Counterstrike Linearity Prevents Character Development (Linearity Prevents Leveling)

#### **Extensive Pre Planned Characters**

In these games the user can freely change what class a character should be between battles. But depending on what class the character is when leveling up, he/she will gain permanent statistics for that class. This leads to that the user can pre plan how a character should be. Train a Ninja from Level 1-50 then make the ninja into a Warrior to have a Warrior with High Dexterity etc.

Statistic Placement Adjusted Experience Gain Height Increases Distance

### **Unforgiving Tactical RPG**

In these games the game offers a very unforgiving gameplay. Many of them have Permadeath and PermaMiss. And gaining the wrong status on a character can ruin the character for the whole game. Furthermore not gaining experience with a character is often a crucial mistake as it is hard to gain experience by any means.

Permanent Development Choices The killer gets it all Promotion

## Old School Tactical RPG

The user can easily miss important objects. Furthermore the characters are often very limited to what class they are are currently or on their current position at a battlefield.

PermaMiss (User can miss/lose important objects) Character Class Ability Losses

#### **Turn Based FPS**

These games have a lot of FPS genre gameplay both are Turn Based. Furthermore they share a lot in how the user can set p Links between the characters, and how they have weapons with an Extreme range in relation to the battlefield, something not many other RPGs has

Link System Line of Sight Extreme Range

#### **Position Games**

In TRPGs the position of characters is very crucial. Furthermore it is very important on what character is in the front of the army or at specific locations.

Chokes Sniper Location Functional Roles can be changed (The Functional Role of characters can be changed)

#### Typical Tactical RPG

In the Typical Tactical RPG, it is further important what party the user decided to use at the specific battle. Commonly the user will have several different party composition for different type of battles. Dynamic Party Composition Strategic Locations Functional Role

#### **Tactical RPG**

In Tactical RPGs, the role of a character is important, how the environment is in important. Lastly the user is usually severaly outnumbered, while in other RPGs the user commonly faces of with 1 stronger adversary and therefore outnumbering the enemy. In TRPGs the user is instead faced with around equally strong enemies as the user's characters but they are usually 3-5 more of the enemy forces.

Functional Role Environmental Effects User is Outnumbered

#### **Role-Playing Games**

This is the top of what a RPG is. The user will be able to perform some sort of Character Development. The game will use tactics such as Health. And the game will have different attacks with different abilities.

Character Development Health AOE Attacks

# Appendix D

Flavour gameplay design patterns.

## Fundamental Battle Patterns.

Resource meter lose is carried over to the next battle Extremely common pattern, the characters do not recover any resources(Health/ability points etc) after battles. More interesting are games that do not have this pattern, for example FF13. This is used in FF13 to set up harder normal battles.

This pattern makes the user use a lot of healing items between battles. Examples: Final Fantasy 13, Final Fantasy 13-2

Status ailment is carried over to the next battle

Many games features that status ailment such as poison is left after battles, this will lead characters to have ailments at game world exploration and in most cases start with the ailments the next battle. This pattern can be set up in 4 different ways, either the aliment is removed after a certain amount of time. For example by the user walking in the game world or it stays infinitive and have to be cured with items/abilities. Furthermore the ailments can be designed to cause affect during world exploration or not. For example the user's character losing health each step from being poisoned. This can lead to an unexpected challenge for the user, as being afflicted an ailment from the enemies don't affect the in-game battle as much as it does to game world exploration, and then affects the next battle more. Examples: Pokémon(Red-Black), Wild arms 3

Active time battle, ATB.

Real time battling but the characters can only take action when their gauge have reached maximum. It's common to let the user only know the time when their character will move, but this pattern be used to show each character in the battle(playable characters and enemy characters), this second option is rare. When used it can further initiate meaningful choice from the user, and initiate patterns like Delay Mechanics(A delay attack will usually force the enemy character's gauge back a bit)

Examples: Final Fantasy 4-9, Chrono Trigger

Sub pattern ATB Turn Based

Game is partly real time, game freezes when a user character can give a character an action, some game have this as the base of the battle system, and in some games who is ATB the user can turn a "easy mode" where the game will pause when its the user's action. Further the pattern can also be designed that when the users enters menus the game will freeze(usually an easy mode function), for example Final Fantasy 9 let the user turn on ATB Turn Based.

Examples(game that has this constantly): Grandia 2, Xenogears.

#### Chess Based Battle System

A common pattern for Tactical Rpgs, units in the game move around in a square based environment. And all units have a movement specified as number of square per turn, all abilities have specified square range and AOE Abilities have a number of squares it will affect.

Examples: Tactics Ogre, Front Mission, Disgaea.

Closed environment real time

Game is in real time, but the battle take places in a confined environment. Sub pattern to battle is a minigame.

Examples: Star Ocean: The Last Hope, FF13-2.

**Duel Gameplay** 

Game features a 1v1 duel system between player controlled character and enemy controlled characters, even while there is more characters than 1 in the party.

Examples: Pokemon, Saga Frontier 2(user can decide if he/she wants this or party battle).

#### Secondary Battle Gameplay

Game have another battle gameplay which is not a subgameplay (minigame) but another battle gameplay. meaning its is needed to be played to advance in the narrative of the game.

Examples: Pokemon Ruby-Black, Suikoden 1-5, Saga Frontier 2.

Sub Pattern Gameplays are connected

If game have more then 1 battle gameplay and they are connected. For example if the user progress a character's character development in Battle Gameplay A this will make the character stronger in Battle Gameplay B.

Examples: Pokemon, Saga Frontier 2.

Arbitrary new Battle gameplay.

Game has a battle gameplay (secondary) which is really not connected to the first gameplay, or that games normal battle gameplay change significantly such as the rules are changed. But it still the a battle gameplay.

Examples: Final Fantasy 10,12-13 summons(changing the game rules for a short time)

Rock-paper-scissors Battle game played is based on a fundamental strength vs weakness system. Examples: Fire emblem franchise (Sword->Axe->Spear->Sword), Pokemon

Event in battle storyline Typical bosses are notorious of this pattern, often late game bosses can change form, or summon in extra enemies. Examples: Final Fantasy 13, Valkyria Chronicles World of warcraft(almost every end game boss)

Variable Accuracy wiki Examples: Resonance of Fate, Front Mission, Diablo 2.

Battle rules

User has to follow set rules in the battle, this can be for example no characters can use white magic spells, usually the enemies have to follow this rules too. This pattern can be used to increase the difficulty of the game by limiting the user choices or viable set ups, especially if the enemies don't have to follow the rules

Examples: Final Fantasy Tactics Advance 1-2, Disgaea.

Center of the universe

In some games the main character will be all powerful having several abilities no other character have, this pattern will usually have the pattern "Game over if main character dies". Examples: Phantom Brave, Breath of Fire 1-5, Tactics Ogre.

Everyone can shoot - To be removed not a pattern as I can't come up with more games that has this currently? Oo like front mission I guess.

Game features that every type of character can always use ranged attacks regardless of equipment, abilities etc. This pattern will have importance for patterns like Faced Direction. Examples: Tactics Ogre,

No melee combat

Characters or abilities who can't attack/be used at to close ranges, typically an archer unit can't shoot at 1 range but at 2-5 range.

Examples: Fire Emblem, Shining Force, Disgaea.

## **Party Patterns**

Convert enemies

User can take over enemies, usually user can capture enemies who are of monster types but not humanoid enemies.

Examples: Pokemon, Dragon Quest Monsters, FF13-2, Legend Of Mana.

Jobs

Specific system in the Final Fantasy franchise. The game need character classes, then the user can set up a combination of 2 classes(jobs), this was introduced in FF3, and has been further improved in FFTA the user can also have 3 passive abilities from 3 different classes while being a hybrid of 2 classes(user can use 5 classes simultaneously), FF10-2 has the dress system which is similar to jobs, and FF13 partly has some similarities.(FF10-2 is a bridge between job system and the paradigm shift battle system of FF13)

Examples: FF3, FF5, FFT, FFTA, FFTA2, Partly: FF10-2, FF12(second version) FF13, FF13-2

Locked Battle Party

The characters can never be changed.

Examples: FF5, Grandia 1-3, Dragon Quest 8. Partly Secret of mana 3(party is permanently decided by the user before game starts)

Army of Parties

Game features minigame battles of parties at a tactical game stage. The actual battle of the parties can use different battle systems. Usually the battle of the parties ends after each side have performed a set number of actions(usually 1-2 round turn for each character).

Examples: Ogre Battle(no manual control real time), Soul Nomad(no manual control turn based), Bahamut Lagoon. Partly Saga Frontier 2.

User cannot manually control characters

Manager system. Game features type of meta gameplay, it can be that the user can give commands but not directly control characters.

Examples: Ogre Battle, Soul Nomad. Partly Bahamut Lagoon.

Character/class is overpowered.

Many Tactical RPGs features a class that clearly is far better then other classes, RPGs with extra characters pattern can often have this. Examples: Disgaea, Marvel Avengers Alliance, Suikoden 1-5, FFTA

**Overpowered Early Character** 

A way to make it easier for the user at start is to give them a character being much more powerful then the enemies and other playable characters this will make it easy for user to learn the game basics, this pattern can lead to "Character that dies in narrative" (to get rid of the overpowered character). Examples: FF2,FF4, Saga Frontier 2, Partly Skies of Arcadia, Grandia 3

### User can change characters in battle

User have more characters then what is in battle currently, and can at any time change characters. This pattern partly negates the pattern of freedom in party composition, as then its only the users start up party. This pattern affects the difficulty severely, either the game can be designed to be very complex and letting the user then change in the more suited character after understanding the enemy's weakness/strengths, but on the same time this can lead to a very easy game as the user always can respond perfectly to any challenge.

This pattern is further complicated when the game also have the pattern "User can prepare for battle in the Game World Exploration", this allows the user to swap in characters with specific protection/boost against an enemy, which further lead to complex meaningful choices and a "hard" or an "easy" game. Note: The user will most likely always be able to prepare at least equipment before battle, which can lead to for example character A full Ice immunity character B full Fire immunity etc. Examples: FF10,FF12, Breath of Fire 4.

## **Character Development**

Upgrades wiki Examples: Suikoden 1-5, FF8,

User can learn enemy/monster abilities

User can learn abilities from enemies, usually user can only learn from enemies who are of monster types but not humanoid enemies.

Examples: Final Fantasy Franchise have a specific Job(class) called Blue Mage that only learn new abilities from this. FF5, FF8-FF10. FFT-FFTA2. Breath of Fire 3-4, Heroes of Might and Magic Franchise (Eagle Eye)

Character development has no limits.

User can grind characters, a lot more than what is necessary to clear the games narrative part(and sometimes the extra content part), can initiate that every Character can learn everything. Examples: FF2, FF10, FF12, Disgaea, Soul Nomad, Phantom Brave

**Talent Tree** 

User develop his/her character, in a tree. Where one skill will lead to another one, with usually means the best skills will be at the bottom. Usually the user will receive 1 point to put in the talent tree per level. Examples: Diablo 2, World of Warcraft,

Grid talent system

User develop his/her character in a grid net or something aesthetically looking different e.g Chess net in FF12 but effectually is exactly the same system as in FF10(Sphere grid net). This pattern is arguably a advanced form of Talent Tree, but the user has a lot more options, more paths to travel when character development progress.

An important difference is that sphere grid talent system usages of statistics(or attributes?) points in the grid while Talent Tree usually(I have never seen a Talent tree with stats in it) only have new or improved abilities.

This leads to that a sphere grid have more "steps" and each step is significantly less important than in a Talent Tree.

Furthermore this is important in Comparisons of FF10 and POE, where POE has a limited number of levels, and the user levels slow and only gain one step per level(like in Talent Tree) while in FF10 the user can gain multiple steps from one battle(using the Ability Experience pattern instead) Examples: FF10.FF12 Path of Exile (Beta game) Partly FF13, FF13-2.

#### **Class Talents**

User progress character development by placing points(usually gained by leveling up) into a class , a mix between dynamic and static development.

Note this is not the same as playing a warrior class and gaining experience to the warrior class, this means the game has for example warrior, wizard and thief. And the user plays a warrior gains 100 ability experience points and place them at leveling up as a thief(if the game uses ability experience)

Examples: Dragon quest 8, Skies of Arcadia, Grandia 1-3 Partly FF13. FF13-2 Note: FF13(-2) uses a mix of Sphere grid and Class Talents where FF13 is closer to Grid net while FF13-2 is more Class Talents oriented.

Learn by doing Character improve in X by doing X. Examples: Elder Scrolls Franchise , Saga Franchise. FF2

Static Experience Limit

A character levels always on a set amount of experience, typical a character's needs to gain 100 experience points to reach the next level. This pattern almost always instantiate Adjusted Experience Gain.

Examples: FF8, Fire Emblem Franchise, Shining Force Franchise, FFT Franchise, Ogre Franchise

Adjusted Experience Gain (Is in Structural Patterns 2, Text here to explain the connection) Characters gain more experience from dealing damage to a higher leveled characters, this usually is regardless of the damage done, this pattern instantiate the pattern "Killer Gets it all". Examples: Fire Emblem Franchise, Shining Force Franchise, FFT Franchise, Ogre Franchise Note: FF8 Don't have this pattern instead the game have adjusted difficulty(if user is level 99, enemy is level 99), and because of this the user can reach level 100(max level) in a few hours in FF8,an enemy that gives more than experience then the static limit is, will always give the users a level up.

Equipment unlocks new abilities.

Typical accessories in games can for example grant immunity(or resistance) to elemental attacks like fire/ice or prevent ailments like poison/stun.

Examples: FF Franchise, Diablo Franchise, Pokemon(interesting side effects)

Exponential worse to focus on the same field when character development

When the game has freedom in character development, it can be useful to use a system where the characters get less and less from the same character development choice. A common usages of this is that the experience to progress is increased each time a user reach a new ability in a class talent system. But it can also be that for example that each time the user picks strength for character A, character A receives less and less effect for each new strength(usually would mean less damage per strength) Examples: Wild Arms 3(very good example of this), Quest 64. Dragon Quest 8. Grandia 2, Skies of Arcadia.

Note: Class Talents systems games usually uses this to prevent the user from easily horde every experience point in the same class.

#### User can overpower one character

The reverse of "Exponential worse to focus on the same field when character development", is when a user can place everything on one character and that character can then solo the game. Examples: Wild Arms 3(while they solved overpowered guns the user can instead overpower the abilities of one character), FFT-FFTA2, Disgaea, Front Mission 3-4 Partly, Rogue Galaxy.

#### Passive abilities

Characters have passive abilities, this can be anything from immune to fire magic, to countering ranged attacks etc.

Examples: Valkyria Chronicles. FF Franchise, Suikoden Franchise, Breath Of Fire Franchise.

#### Abilities cannot be learned by gaining experience.

Characters cannot learn new abilities from battling enemies alone, often this will mean the user has to buy new abilities in stores, this pattern can then instantiate the pattern Store development. It could be that abilities has to be find in the game (outside of battling) instantiating Game World Exploration. Examples: Vagrant Story(Magic abilities), FF1, FF12, Suikoden Franchise. Rogue Galaxy Characters can learn everything

There is no difference between character A and character B as they can both master every field of the game.

Creating no difference between Character A and character B late game.

Examples: FF2,FF3,FF5,FF7,FF8,FF10,FF10-2 FF12, FF13, Front Mission, Resonance of Fate. Note: Usually the FF franchise have each character with an unique Ultimate Attack/Form creating small difference(which is extremely important in few of them)

Ability to improve loot/experience gained

This pattern indicates the user can increase chance of loot drop or experienced received, often this is done with equipment.

Examples: FF10,FF12,F13. Diablo Franchise, Heroes of Might and Magic 1-5,

Weight

User has a lot of freedom in customizability for character or equipment and the only limit is the weight. Examples: Tactics Ogre, Front Mission, Wild Arms 3.

## **Challenging Gameplay**

Permadeath wiki. Examples: Diablo(Hardcore mode), Fire Emblem Franchise, Tactics Ogre, Partly Breath of Fire 5.

Time Limits wiki

Examples: FF Franchise. Front Mission, Valkyria Chronicles. Romancing Saga Minstrel Song.

Dynamic Difficulty Adjustment - wiki Examples: FF8, Saga Franchise, Marvel Avengers Alliance.

Unpredictable Behavior wiki Examples: Wild Arms 3, Saga Franchise.

Fog of War wiki Examples: Ogre Battle, Diablo Franchise, Starcraft, Valkyria Chronicles.

User has to replay the game to complete the game:

This is a very challenging(tedious) pattern, where the user has to play a new game+ to unlock true good ending of the game.

Examples: Romancing Saga Minstrel Song(at least 3 times), Breath Of Fire 5, Partly Front Mission 3, any number of visual novels.

Limited Saves.

The user can only do a number of saves, or the user can only do one save(often linked with permadeath). This pattern will usually instantiate Ridicules Challenge.

Examples: The Nightmare of Druaga, Vagrant Story. Partly Breath of Fire 5, Saga Frontier 2, Unlimited Saga

Computer do not aim to win A typical challenge adaptation, the computer intentionally plays bad, this can become an hidden easy mode for the user.

Note: This pattern is specifically about where the computer should have an even footing with the user for example in the Pokemon Franchise

Examples: Pokemon Franchise

#### Computer cheats

Computer is not bound by the same principles like the user, for example the enemies can use abilities even when they are out of resources. The computer is not bound by the rules, or the computer have information they shouldn't have.

Examples: Street Fighter 4 (knows input), Warcraft 3(have steady income), Civilization(know where resources will spawn and Is not bound by game rules) Pokemon(is not bound by game rules( evolution on earlier levels) have infinitive items)

#### Game over if main character dies

Important pattern in tactical Rpg, where the user can have a several characters but the user still loses when the main character die. Similar to protect the base pattern.

This pattern is often linked with Center of the universe.

Examples: FF13(not in FF13-2 where it was removed), Fire Emblem, Tactics Ogre, Shining Force, Ogre Battle, Valkyria Chronicles.

Note: This pattern is very important in games, and is often very non intuitive in for example FF13, if any other character dies in the battle the user can revive them, the user can even just wait and the AI player can revive the fallen other AI player(if the character is in medic class form), but if the currently played Character dies the game is over. Reasonably the other characters should be able to revive the player. This was changed in the sequel FF13-2 where instead the user will take control of the other character(previously AI controlled character).

#### **Restart Option**

User can restart a battle, common in modern RPGs. This pattern effectually removes that the user has to replay a whole dungeon when the user have died on a boss(or normal enemies), on the same time this might make the game to easy. Some games usages the Cost Restart Option, where the user can pay resources to restart a battle.

Examples: Resonance of Fate(Cost version), FF13, Skies of Arcadia.

Last Resort

User has some sort of abilities that will be very strong but will cost a lot to use, typically it will be some sort of suicide attack with a character. Meaning the user will most likely only use this type of things when defeat is imminent.

Examples: Warcraft 3(specifically gather townspeople ability of humans), Pokemon(features several turn costing attacks, e.g Hyper beam etc) Street Fighter X Tekken (Pandora Mode).

Active trigger

User can give inputs during the attack animations to increase the damage of the user's character. Arguably is a sub pattern to QTE.

Examples: FF8, Mario RPG franchises.

#### Cursed Equipment

Equipment that cannot be unequipped, this type of equipment will often give a lot of offensive statistics while decreasing defense or making the bearer have constant ailments. Examples: Shining Force 2.

#### Battle Cannot be Won the First Time

For different reason a story battle, can't be won the first time the user tries. This doesn't mean it's a battle the user is supposed to lose but there is factors that will affect the battle, which the user cannot predict. Eventful storytelling battle is usually the cause for this. Especially the combination of Eventful storytelling battle with Permadeath.

Examples: Valkyria Chronicles, Fire Emblem, Tactics Ogre.

Headquarter must be protected

In games the user sometimes have to protect a location or an object, some game have escort mission or specific mission where defending something is necessary but then there is game that each and every battle have a specific location that has to be defended. This is usually also the users spawn point for units. Examples: Advance Wars. Ogre Battle, Fire Emblem Franchise.

#### High Risk Crafting

Many games features crafting where the user has to take sacrifice their items, in developing new items. This is not the same as the usual crafting, where the user requires materials to craft something, as in those cases the material is arbitrary items gathered. This pattern is for games where the user have to sacrifice real weapons(they most likely want to use) to create new items. Can be Instantiated by Limited Resources.

Note this is not a High Risk, High Gain situation, rather it's usually a marginal better item created with a chance to lose important items.

Examples: Vagrant Story, Rogue Galaxy. Diablo 2 (Gambling)

#### Sloth Machine Attacks

A Sloth Machine will wheel different icons where the user can stop to get different set, which will be different effects or damage output. This can often be an extreme variation in the damage output some games even have negative effects for the user.

Examples: Final Fantasy Franchise. Unlimited Saga.

Motion Input

User does a motion with the analog stick to active some ability, common in fighting games. Examples: Tales Franchise, Street Fighter 4, Marvel VS. Capcom 3, Blazblue.

4th Wall Geometric Abilities.

User can use the "invisible walls" of the sides of the screen for Abilities. . Examples: Tales of Phantasia, Guilty Gear XX.

Random Angry Boss

Bosses uses their abilities at unpredictable manner, this will often make the battles harder than in standard RPG way(which uses the Angry boss pattern). This pattern can make the boss battles seems more realistic.

Examples: Wild Arms 3. Front Mission 3-4, Vagrant Story.

## **Environment patterns**

Random Encounter

A very common pattern, the battles will start at random intervals when the user travels around, is very connected to Battle is a minigame.

Examples: FF1-FF10, FF13-2, Suikoden Franchise, Breath Of Fire 1-4, Dragon Quest Franchise, Phantasy Star 1-4

#### Environment height

This pattern will often instantiate sniper location, but also specific heights in Tactical RPG's, where characters will have a set jump power, and a how much they can jump down from heights. Examples: Disgaea Franchise, Front Mission Franchise, Final Fantasy Tactics Franchise.

#### Weather

Games where the areas weather have an effect, in rain water monsters become stronger etc. But it can also be that it creates the chance to face water monsters, meaning it won't be any water monsters unless it rains in some games.

Examples: Pokemon Ruby-Black, FF12, FF13-2, Advance Wars Franchise, Valkyria Chronicles.

Environment ground.

Units have different abilities or statistics depending on what type of ground they are standing on. Examples: Shining Force 1-2, Fire Emblem Franchise, Ogre Franchise.

#### Cover

A very common pattern in FPS, but used to a large extent in Tactical RPGs too. Characters can take cover from ranged attacks by using the environment. Examples: Front Mission Franchise, Valkyria Chronicles, Resonance of Fate.

Day or Night Game is different depending on if it's night or day in the game. Examples: Secret of Mana 3, Ogre Battle, Valkyria Chronicles.

**Environmental abilities** 

Characters have specific abilities locked at specific environments, for example an octopus monster having extra strong AOE Attacks in the water. Examples: Ogre Battle, Final Fantasy Tactics. Saga Frontier 2.

Able to change the environment

The user can alter the environment, for example changing the weather. Examples: Pokemon Ruby-Black, Disgaea,

## **Strategy Patterns**

Traps wiki.

(this indicates both game traps, and trap abilities by the user). For the user to utilize trap abilities, the game more or less needs to have the patterns Pull them and/or Kiting. With this the user can make the enemies move into the set traps.

Examples: Dragon Age, Diablo 2-3, World of Warcraft.

Zone of Control wiki Examples: Ogre Franchise. Valkyria Chronicles.

Friendly Fire wiki Very common in tactical RPGs. Examples: Disgaea Franchise, FFT Franchise, Front Mission Franchise.

Achilles' Heels wiki Examples: FF Franchise, Grandia Franchise, Secret Of Mana Franchise. Sub Pattern Arbitrary Achilles Heels. This is for games where it's not so obvious what the user should do. Examples: Chrono Trigger, FF12, FF13.

Invulnerabilities wiki

Examples: Pokemon Franchise, FF Franchise, Dragon Quest Franchise.

Sub Pattern: Almost Invulnerable

Some game features enemies that are invulnerable to most things but then usually having 1 Achilles heel this causes the user to be able to only have a very limited options, creating a optimal path. But more precisely it creates a behavior where the user constantly will only repeat the same ability over and over again.

Examples: FF13, Dragon Quest 8,

**Positive Ailments:** 

Few games have aliments having both positive and negative effects, for example berserk ailment can work like this, the character receive increased damage output but user can't control the character anymore

Examples: Final Fantasy Franchise. .

Displacement mechanics.

Abilities can move around characters on the field, in real time game this can often be ability that creates small knockbacks, while in Tactical RPGs, the user can instead move enemy units specific amount of squares backward(sometimes forward to).

Examples: Disgaea Franchise (where these mechanics is crucial), DotA.

**Delay mechanics** 

Abilities that makes a character or enemy lose time to its turn,partly connected to ATB pattern. Examples: FF10, Grandia Franchise. Xenogears.

Abilities that ignore defenses

Abilities or equipment that completely ignore a characters defence/evasions statistics, or (passive) abilities that grant defence/evasion etc. This abilities are often weaker than other abilities for the same resources cost but will deal the same damage to any enemy. Examples: FF Franchise, Marvel Avengers Alliance.

User have information about the battle before picking the party

This pattern occurs in any game where the user have died once and then repeat a battle. Which means its a lot easier for the user the second time, but there is a specific usages of the this pattern. In Tactical RPGs where the user picks a party with the pattern Dynamic Party Composition, knowing what characters the computer will have will affect the users decisions a lot. Examples: Front Mission 3-4, Shining Force 1-2, FFTA-2, Pokemon.

User can prepare for battle in the Game World Exploration:

This pattern means, that the user can for example set Traps, or cast buffs beforehand. Allowing this system in a game can be a huge difference for the gameplay challenge of the battles or how much the user can meta gameplay the game.

Examples: FF12-FF13. Diablo Franchise, World of Warcraft. Secret of Mana 2-3

Ability Resource:

Many different sub system of this, depending on how the game features ability cost, for example having 2 different meters, using the ultimate meter pattern etc. Will create meaningful choice.

Sub patterns, Ability meter/points, Ammunition, Ultimate meter, Combo meter, Combo chain cost Separate ability meter, ATB Cost

Examples: Every game of the 41 game in the research have at Top pattern or a sub pattern.

Shared ability resource All characters shares the same resource for their abilities. Examples: Skies of Arcadia, Persona 4.

Knowledge of the order of actions(of characters/enemies)

This pattern indicates that the user has a God View(absolute knowledge), of the turn order of the his/her characters and the enemies, meaning the game first needs to have Varying Turn Orders. This Pattern can be used to create a very challenging gameplay, and can instantiate patterns such as Delay mechanics.

Examples: FF10, Phantom Brave, Grandia 2-3.

High Risk, High Gain, risk reward, tradeoffs. investments Game features meaningful choice that will either go very well for the user or very bad. Examples: Pokemon, Vagrant Story(constantly whole game)

Faced Direction.

In turn based tactical RPGs, when the user have finished his/her move with a character the way he/she moved the character will result in the character watching in a specific way(often in 4 different directions), this will lead to meaningful choice, as many games features that characters cannot evade when attacked from behind, or lose of defence, often both. In games with Faced Direction characters will usually turn them self to the attacker, creating a tactical system for the user how to achieve more than 1 attack in the back of an enemy. This can also instantiate the use of "Cover" as placing a character with the back to a wall, will prevent this etc.

Examples: Tactics Ogre, FFT Franchise, Front Mission Franchise.

Characters attack out of their turn

Characters can do attacks out of their turn(game needs turn based), this is often done prepared by the user with Link System or Social Link.

Examples: Front Mission 4, Valkyria Chronicles, Disgaea(Arguably)

Reverse AOE

Characters can increase the damage their abilities do by removing the spread damage. Examples: Front Mission Franchise.

Expandable magic items

Items that works as a character abilities, but they will be expended after one use. Examples: Skies of Arcadia, Vagrant Story.

Battle is over when the enemy leader dies

In this pattern the computer loses when their leader dies(typically a boss character), this can create different strategies employed by the user to ignore the other enemy units(This pattern is mainly for Tactical RPGs).

Examples: Ogre Battle Disgaea(Item World) Partly Front Mission Franchise

No defense to magic All magic attacks always deal full damage to all characters. Examples: Shining Force 1-2, Fire Emblem Franchise.

Health sacrifice User can sacrifice health as a resource for abilities or increased damage(usually). Examples: Diablo 2, FF9,

Super vulnerability

Types of attack is really really, strong against a character Examples Pokemon( where a pokemon can have double fire weakness etc). Persona 4, where vulnerabilities can be chained to other enemies then the first target with the actual vulnerabilities.

## Extra Content

Replayability wiki Diablo 2, Minstrel Song:Romancing Saga

Game+.

The user beats the game, and can then save a new file. In this pattern the user will when loading the file be in the late stage of the game but new extra content will be available, often last boss+1. Disgaea Franchise, FF13. Breath of Fire 3-4

new game+

The user beats the game, and can then save a new file. In this pattern the user will when loading the file be at the start of the game. Then it can be 3 different systems, 1 the user start the game over but with new extra content being available, 2 the user starts with characters/items/abilities being saved over from the former game, 3 both of 1 and 2.

Breath of fire 5, Vagrant Story, Minstrel Song:Romancing Saga

# Appendix E

## Meta gameplay patterns

Gameplay Spoils the Narrative Story:

Some games features gameplay elements often connected to the battle, which the user can deduct what will happen in the storyline of the game. Usually the user can use meta gameplay patterns to create/find better items/abilities and this can go too far and reveal coming parts of the game. Or it can simply be bad implanted.

In FF9, the user can play the subgameplay and gaining a Flying Vehicle from that, before the user has a Flying Vehicle from the Storyline, the user can actually miss story parts with this. In Suikoden 5, the usages of Extra Characters pattern has a Stone Tablet in the game(same in other games), the user from this can actually have 109 characters (108 being the max) and by this deduct what character in the game will betray the user in the storyline.

Resonance of Fates, Game world building pattern, shows that the user will have battles in the game world where it is currently no Random Encounters.

Examples: FF9, Resonance of Fate. Suikoden 5.

Experimenting wiki

The user will often experiment in what kind of combination will create what in a RPGs Crafting gameplay or similar patterns. The user will often usually experiment with different Character set ups, or a Character's abilities.

Examples: Skies of Arcadia. Diablo 2. Suikoden 2.

Memorizing wiki

As the user is Experimenting a lot, it's important to remember what creates what. Furthermore it is also important in most games for the user to remember the enemies specific abilities or weakness/strengths.

Examples: Almost every RPG.

## Crafting/Breeding causes constant restart.

Memorizing is especially important in games, where Crafting is a little Extreme. For example In Vagrant Story, the Crafting often causes horrible result. In Bahamut Lagoon, the user feeds the Dragons different items, there is no tips on what will happen. The Dragon Units can be completely ruined by the item, causing the user to restart the game. Examples: Bahamut Lagoon. Vagrant Story.

## Extreme Customizable "characters"

Often connected to monster controlled characters. The user create huge variation of one character depending on different Character Development systems. Or with games where the user can alter a character by more means than simply equipment. For example as in Front Mission where the user can decide the Body Parts, Weapons, Accessories, Skills, Link System, etc.

Examples. Bahamut Lagoon. Wild Arms 3. Front Mission 3. Legend of Mana.

Extreme customizable Crafting Games featuring very extensive type of Crafting. Examples: Vagrant Story. Rogue Galaxy. Disgaea Franchise.

Pottering Crafting

The Crafting is based on building Crafting very slowly by different means. Either the user has to collect enormous resources to be able to craft. Or the user has to collect this resources only at given interval, common in games with Persistent Game world. Examples: World of Warcraft.

Pottering wiki

Safe Havens wiki

Sub pattern Home.

User has a home, which work as a Safe Haven, Stash and often have Store Development. Home can feature many different patterns. The difference of Home and Safe Haven, is that Home can usually be Development by different means. And usually has a lot of different functions. For example in Disgaea, acting as the base of operation for each battle place and for each other meta gameplay pattern. Often Home is where the user has to travel to perform specific important task, that will afterwards affect battles. For example as In Bof2, changing the element shaman of a character.

Examples: Bof2-5. Suikoden 1-5. Fire Emblem. Skies of Arcadia

Home Development

User can develop the home. This can be done in different means, advancing in the story, finding extra characters, beating subgames etc. Or by simply letting hours pass in-game. This is often important as a bigger home, will unlock new abilities or items to the user. Examples. Bof2-5. Suikoden 1-5. Skies of Arcadia

## Assistance from home.

Home characters will help out in battles, or if home is a mobile it can attack enemies(doing more damage if its developed)

Examples. Skies of Arcadia. BoF 5. Arguably: Dragon Quest Monster 8(depending if Monster subgameplay can be seen as Home)

## Pseudo Development Time

Many games also features a Pseudo paus in the games story normally. The user will have to wait for something to be finished built or researcher etc. Commonly sending the user of to fake Side Quest (they are not true Side Quest as the user has to actual do them to progress the story).

Examples: Suikoden 2. Wild Arms.

## User can adapt to challenges

The reverse of Battle Cannot be Won the First Time. WHen a game has this pattern, it means the user can observe and analyze what the challenge the games battle is offering and change accordingly. This does not mean that a user cannot win a battle without this pattern, it's about that the user can make significant changes which will increase the user's chance to succeed.

For example if the user realize Boss A is focusing heavily on a fire elemental attacks. The changes the equipment of the characters making them Fire Immune. Examples: FF10,FF10-2 FF12, FF13. Disgaea. Ogre Battle

Expandable ability items

Many games features item, which are expandable and have an ability that corresponds to a playable characters ability or it can be an unique ability(but usually not).

Examples: FF Franchise

Sub Pattern Powerful Expandable ability Items.

More interesting are games which have expandable ability items, which are very powerful. The usages of these items can change an battles outcome. This can lead to the user grinding for these items, usually prevented by some games where the powerful Expandable ability items are limited to only exist a few of. Which in this case leads to the user searching for them and usually saving them for the harder bosses of the game, typical for Last Boss+1.

Examples: MegaElixer FF Franchise, Holy water, in WoW for Nefarian encounter.

### Monster made of hell

Some games have enemies that are more or less impossible to beat, or that the specific enemy can spawn at an to early time for the user. This leads to an behaviour where the user will simply have to run away from them, and always try to avoid the enemies, But it can also lead to the user simply instantly dying from these enemies. This pattern can be a Negative Pattern, at least in the case where a random rare spawn enemy is far to strong.

Phantasy star 1, is a good example where it is not a Negative Pattern but a strange used Challenge Pattern. At the third planet(Dezolis) of the game. Where White Dragons will be encounter, roughly at 20% chance. And will be 100% impossible to beat, they also drop nothing. However they force a Time Pressure where the user will have to try and escape before they defeat the user. Examples: FF12, Phantasy Star.

## **Party Patterns**

Character that dies (or "leaves) in the narrative

Playable characters are permanently lost caused by progressing in the story. Can cause a problem for the user. If the user had invested a lot of time developing the specific character. Can lead to making battles after the lose very hard for a while. However if a user had spend time on the character the narrative impact is arguably stronger as described by Rogers.S (2010)

Examples. FF2, FF4, FF6, FF7, FF8, Grandia 1-3, Suikoden 2.5

Classes/ability locked to races

Certain classes can only be picked for certain races.

Examples. Ogre Battle. Tactics Ogre, Final Fantasy Tactics Advanced.

Classes/abilities locked by gender Certain classes can only be picked for certain gender Examples. Ogre Battle. Tactics Ogre. Social Link:

Characters can have social bonds, or the user can create social bonds for the characters. Sub patterns.

Narrative personalities.

Parent System

Class/club room system.

Camp.

Pairing

Mariage

There is a lot of different Subpatterns to Social Link. All of them have their own way the user links the user together. Or in some cases the characters are linked from the narrative story and the user cannot affect that.

Note: All these patterns involves effect on the battle system, there are a lot of games where characters are related but it does actually do anything.

Examples. Persona 4. Suikoden Franchise. Valkyria Chronicles. Fire Emblem Franchise.

## Breeding

User can breed monsters, this can lead new monsters being born with abilities that monster type shouldn't be able to learn, or in heritage statistics of its parents. However usually the main goal of Breeding is similar to Crafting. That Monster A + Monster "¤"¤"#F = Monster Ultimate. Examples: Pokemon Franchise, Dragon Quest Monsters Franchise. Legend of Mana. FF13-2

## User can create infinite number of characters

In tactical RPGs, the user can often create how many characters he/she wants. This will instantiate the pattern Reserve. Often this leads to the user having several characters of the exact same Functional Role. Either to battle hard stages in the game for example a 100 Floor Dungeon and then the user can exchange injured characters on the stages, or to enter a battle with only the same type of character to overwhelm the enemies.

Examples. Disgaea Franchise. FFT Franchise. Soul Nomad, Ogre Battle, Phantom Brave.

## Reserve

User has more characters then out in the battle, this pattern is often combined with several battles or several dungeons(floors) in a row, meaning the user will have to swap out characters between the battles.

Note: Most RPGs the user has character not in their party, this pattern however is about games where the Reserve characters have a point.

Examples: Examples. Disgaea Franchise. FFT Franchise. Soul Nomad, Ogre Battle, Phantom Brave.

## Reserve help

If user has more characters then in the party, this pattern can be used, meaning the other characters might grant passive abilities, or use abilities at random etc. Examples: Bof4, FF10,FF12. Disgaea Franchise.

## Formation

User can set up a formation of his/her characters, characters in the back usually have increased defence, or cannot be targeted by enemies. This pattern is extremely important in Ogre Battle and Soul Nomad as the characters have different abilities depending on their position. Examples: Ogre Battle, Soul Nomad, Suikoden Franchise.

Units Wiki In most TRPGs the user will have more of Units pattern then a simple adventure group.

## **Character Development**

(arena and training)

Store development

The in-game store develops, this can be done in different ways, normally it develops after the user transcend further into the narrative parts of the game. Another way this pattern can be set up is that a store develops after the user have bought a certain number of items at the store. A third way can be that when the user battles, time past in the game world, meaning store becomes bigger as the ages past. Examples: Disgaea. FF13-2

Vehicles wiki

Flying Vehicle

In many rpgs(especially games to snes/psx) the user will unlock a flying Vehicle so he/she can travel to every place of the world, this pattern can instantiate Secret grinding place, and most Extra Content patterns.

Examples: FF4-9. Dragon Quest 8. Wild arms 1.

Quick Travel wiki

In more modern days, letting the user have the ability to travel to any area in the game world has become standard especially since many rpgs today have no "real" game world exploration(meaning they cannot have any Vehicles). Although a game can have both this pattern Vehicle Examples: FF10,FF12,FF13. Dragon Quest 8. Wild arms 3.

Secret Areas wiki

Secret grinding place

Especially good place to farm for the user, can instantiate Eventful battles(typically the enemy that grant the extra high experience and will have some feature making it harder to beat) Examples. FF Franchise, DQ Franchise.

Ability to improve loot/experience gained

User can improve what enemies will give him/her. Often this is done by Equipment. A good example of this is Diablo 3, where the user can equip gear granting, different values for this. More items %, more Experience% and more gold find%. While in typically the JRPG the user can equip one accessory that double (usually it is a lot easier then in Diablo 3) the experience gained from battles.

Examples: Diablo Franchise. FF Franchise,

Optimal experience gain

There will often be an enemy, or a place in the game where the user can optimally farm for experience. Can be instantiated by Secret Grinding place, and is often a combination of Secret grinding place and Ability to improve experience gained and farming the Rewarding Monster. Examples: FF Franchise, DQ Franchise.

Alignment Status affects gameplay battle

Good character having other abilities then an evil character. Ogre battle prime example, this pattern affects the gameplay a lot in OB. In OB a good character is stronger on the day, while a evil is stronger on the night. Further Tarot Cards(Ultimate Attack abilities) do different damage depending on the character's alignment, and for example Sun Tarot hits all characters(Friendly Fire) but deals no damage to good characters.

Examples. Ogre Battle, Tactics Ogre.

Narrative personality affects battle gameplay.

Depending on the users decisions in the narrative parts, this will affect the battle gameplay. For example in Tactics Ogre, if the user takes the lawful path in the game narrative he/she will lose the option to pick a class for the main character. Instead the main character will become an extra strong class unique to him. Examples. Tactics Ogre. Valkyria Chronicles. Persona 4.

accessible invulnerability's

User can make a character be immune to something, often an elemental. This strategic preplanning will often be a need on bosses in RPGs. For example WoW, Grinding for Fire resistance before battling Fire ability based bosses.

Example. FF6, FF9, FF10, FF12, FF13, WoW. Wild Arms 3.

## **Exploration Patterns**

Gossip wiki

It's often important for the user to gather information in the game from NPCs, especially in older RPGS (before the Internet).

Persistent Game world. wiki

Item grant access to new places Typical Platform/action game pattern. Although it exist in some RPGs to. Examples: Castlevania Franchise, Metroid Franchise.

Traveling Action Points

User can only use a set amount of abilities per travel between Safe Havens. This usually affect how much Gathering the user can perform, of if the user can continue traveling in the game. Arguably a strong Negative Pattern.

Examples: Unlimited SaGa, Minstrel Song: Romancing SaGa.

Game world can be lost

Part of the game world is removed from the user. Can be instantiated by progress in the story. Which creates a common behavior by seasoned RPG users to carefully find each item etc in a

game before moving on in big story chapters. In older games this could be caused by the technical limitation of game size. For example (arguably) the last Disc of FF8 is only the Final Dungeon of the game. If the user enters the Final Dungeon he/she will be prompted to exchange Cd and then the user cannot play anything else then the final dungeon with that CD. However it can be caused by different Extra Content Patterns, and can be prevented in some games. For example in Minstrel Song: Romancing SaGa a continent in the game is destroyed, however the user can prevent this by doing each quest exactly perfect, in a hidden order, without battling anything.

Examples: FF2,FF6,FF8,FF13,Minstrel Song: Romancing SaGa.

## Hidden linearity

Game has to be played a certain way, to be able to beat the game. The game featured different option for the user but is actually only playable in a certain way. Examples. Ogre Battle, Minstrel Song: Romancing SaGa.

## Extra Content.

## Arena

A place where the user can battles hordes of monsters, this pattern will often instantiate Eventful Battles, and will usually feature a boss at different stages of the arenas. Examples. Resonance of Fate. Wild Arms. Fire Emblem

## Training/challenge mode

User can enter a training mode for his/her units, this can done so that the user gains experience in training mode is counted for real. This can be used to make linear games much easier for the user. For example Front Mission 3 does not have this, while FM4 has. FM3 is extremely unforgiving if the user fails to Character Develop enough or in the right way. FM4 instead the user can gain experience and resources by doing Challenge Mode battles. Examples: Tactics Ogre. Front Mission 4.

## Theme park

The game has a theme park or a Casino etc. Where the user can play subgamplays or minigames. Usually the theme park will host important objects to be unlocked. Examples: FF7(Golden Saucer) FF13-2. DQ8.

Minigames wiki

Puzzle Solving wiki

## Versus mode

User can set up a versus mode between his/her own characters. This is usable for tactical rps, and can be a fun past time mode for the users. The mode can be used as user vs computer, user vs user or computer vs computer(if user wants to observe what would happen). Examples. Fire Emblem, Tactics Ogre.

Extra characters User can unlock more characters than what the narrative part of the game will offer. Examples: Suikoden, Sub pattern Gotta Catch them all The user gains new characters by catching them, name and the gameplay comes from Pokemon.

Examples: Pokemon.

Subgameplay that affects gameplay that is not in the game

A few games have extra games outside the games, where the user can gain items or new abilities etc. For example Skies of Arcadia, featured a subgamplay done by using the Dreamcast memory card (which has a screen) and by playing that items could be transferred to the game. Pokemon features a very important part of the game, where the user can upload his/her pokemons to the net, and play with them at other games (with absolutely no relation to the normal gameplay). However, doing so can unlock a Pokemon's third passive ability which can affect the battle a lot.

## For the show patterns

Clothes

The user can change the physical appearance of the characters. Which do not change anything in the battle, or the narrative. However the character arguably looks "cooler" or "cuter". Examples. Resonance of Fate.

## **Unnecessary Action Moves**

Characters will perform very over the top action moves, which realistically is completely pointless, many abilities, specifically summon spells very extreme cut scene will take place. Examples. FF Franchise, Resonce of Fate. Disgaea.

# Appendix F

A heat map.

Each image is part of the same matrix since it cannot not fit one page and still be readible.

White indicates a value of 2, the game clearly is influenced by this gameplay design pattern Gray indicates a value of 1, the game partly is influenced by this gameplay design pattern Black indicates a value of 0, the game does not have the gameplay design pattern

