Role-playing Games and Usability – The Effects of Design on the Experience of Play

Arttu Reinikainen
University of Tampere
The School of Modern Languages and Translation Studies
Translation Studies (English)
Pro Gradu Thesis
April 2008

Tämän pro gradu -tutkielman aiheena ovat käytettävyys ja roolipelit. Tavoitteena on selvittää, millä tavoin huono käytettävyys vaikuttaa pöytäroolipelien pelikokemukseen. Tutkimuksessa roolipelit ja niiden säännöt rinnastetaan tietokoneohjelmien käyttöliittymiin ja pelien sääntökirjat käyttöohjeisiin. Tavoitteena on myös tutkia tämän rinnastuksen onnistuneisuutta selvittämällä voidaanko roolipelien käytettävyyttä analysoida samanlaisin työkaluin kuin muiden käyttöliittymien käytettävyyttä.

Tutkimusta pohjustetaan esittelemällä pelien ominaisuuksia ja määrittelemällä roolipelien luonnetta, ominaisuuksia ja pelaamisen mielenkiinnon lähteitä. Lisäksi pohditaan roolipelien erikoislaatuisuutta muihin peleihin verrattuna sekä tarkastellaan sääntöjen merkitystä roolipelin pelaamiselle. Lopuksi teoriaosassa esitellään käytettävyyden käsitteistöä ja perusteita sekä pohditaan näiden sopivuutta roolipeleistä keskustelemiseen.

Aineistona tutkimuksessa käytetään Dungeons & Dragons v. 3.5 -fantasiaroolipeliä. Peli koostuu kolmesta perussääntökirjasta, jotka muodostavat pelin pelaamisen perustan. Aineiston valinta perustuu pelin tunnettuuteen, sen markkinajohtaja-asemaan sekä henkilökohtaisiin kokemuksiin sen huonosta käytettävyydestä.

Tutkimusmetodeja on kaksi: Pelille ja sen sääntökirjoille tehty käytettävyysanalyysi kymmenen heuristiikan (Nielsen 1993) avulla ja sitä täydentävä fokusryhmähaastattelu, jonka informantteina toimi neljä peliä pelannutta roolipeliharrastajaa. Saatujen tutkimustulosten lisäksi analyysiosassa arvioidaan myös käytettyjen tutkimusmetodien soveltuvuutta roolipelien käytettävyyden tutkimiseen.

Analyysista käy ilmi, että roolipelin huonolla käytettävyydellä on selkeä pelaamista haittaava ja pelin mielenkiintoa voimakkaasti alentava vaikutus. Liian monimutkaiset säännöt, pelin vieras kieli ja yleinen sopimattomuus käyttötarkoitukseensa hankaloittavat pelin oppimista, sääntöjen muistamista ja sitä kautta peliin uppoutumista. Käytetyt tutkimusmetodit havaitaan käyttöönsä sopiviksi ja heuristisen analyysin ja fokusryhmän tulokset toisiaan tukeviksi.

Avainsanat: käytettävyys, käytettävyyden arviointi, roolipelit, heuristinen analyysi, fokusryhmä

Table of Contents

1 Introduction

Usability as a term is seldom used in the context of role-playing games. More common subjects of usability discussions are household appliances, electronic devices or user interfaces in computer software. The last one, however, is not too distant from the world of role-playing games. In this thesis I liken the rules and conventions of traditional pen-and-paper[1] role-playing games to user interfaces, and the act of playing to that of using a piece of software. Just like a user of new software needs to take some time to know how to use it, to learn new concepts and to study and master skills, a process in which usability plays an important role, so does the player of a role-playing game need to come to terms with what the game is about and how that particular game works.

Each role-playing game is a unique package. Each one attempts to simulate an imaginary world in some way and from some sort of a viewpoint. This results in different rule texts and rule systems. Each game also requires that the participants know and understand the rules and systems well enough to use, interpret and apply them on the spot in the course of the game. This is especially true in the case of one participant, the game master, who describes the events of the game to the players and makes decisions on when and how rules are used and how the game world is interpreted through them.

The main purpose of any given role-playing game is to get enjoyable experiences through fiction that is created as, and shared between, a group. Because of this, it is only fair to assume that the game is more enjoyable if the fiction creation as a process can be made as seamless – as

---

[1] Players also refer to these as *tabletop role-playing games*. The two terms are interchangeable.

uninterrupted – as possible. Since this fiction creation process is also a game, there are rules to follow, but it is not at all irrelevant what the rules are like.

The main difference between technical devices and their manuals and role-playing games is the fact that role-playing games are both the product and the document all in one indivisible package. On one hand, the rules describe how to do things in the game world, but on the other, the rules themselves simultaneously make up the product that is being used.

1.1 Aim of This Study

This thesis studies the relationship of usability and role-playing games from several viewpoints. The main aim is to examine what kinds of effects poor usability can have on the role-playing game experience – the experience of play. The starting point for studying the effects of usability on the experience of play is that a usable role-playing game is one that has as few rule-usage related breaks in the fiction creation process as possible. This means that after familiarizing themselves with the documentation, players of a usable role-playing game, like the users of any usable product, would only seldom need to refer back to it because they can understand and remember the rules easily enough to use them intuitively in the course of the game. My hypothesis is that the break-ups in communication and information flow in a role-playing game have much more noticeable negative effects on the users than they would have in other products. Also resulting from this is the assumption that a usable role-playing game is more enjoyable, more fun to play, than one with usability problems. In other words, usability in this case translates most directly to user satisfaction and enjoyment.

While the main interest of this thesis is on studying how poor usability affects play, the thesis also studies if and how traditional usability measuring methods meant to assess the usability of

user interfaces and documentation can be applied to a new type of area, the study of role-playing games. This will also reveal whether or not role-playing games can, indeed, be likened to software interfaces or whether their usability should be measured in other ways.

1.2 Research Material and Methods of Analysis

The material selected for this thesis is one of the most popular and longest running role-playing game products, namely Dungeons & Dragons, more accurately its publication version 3.5, published in 2003. In short, Dungeons & Dragons is a role-playing game of epic fantasy, in which players take on the roles of adventurers, who face dangers and battle monsters to find treasures in a pseudo-medieval type fantasy world.

The motive behind selecting such a topic for research stems from my personal experience of having played several role-playing games for the past ten years, and after only fairly recently stumbling upon Dungeons & Dragons 3.5, noticing how it just seemed so much more difficult to play, and subsequently enjoy, than all the other games before. Coinciding with this notion were my studies in Technical Communication, which brought with them a definite interest towards the issue of usability in its various forms. Combining these two elements, I arrived at the idea that perhaps Dungeons & Dragons had poor usability, which might be the reason behind the game being more difficult and less enjoyable. At first, combining these two seemingly rather different worlds felt a bit awkward, but the further I delved into the issue, the clearer the similarities between role-playing games and other information products such as user interfaces and manuals became.

The usability of Dungeons & Dragons v. 3.5 shall be examined with two methods that are intertwined. First the interface and the manuals of the game are subjected to a heuristic

evaluation, which will reveal where their usability problems lie. Then the usability of the game is discussed in a focus group consisting of people who have actual experience from playing the game. The two research methods complement each other by pointing out the most obvious problems the game has and also by drawing attention to problems one or the other method might have missed or possibly interpreted incorrectly.

1.3 Structure of This Study

Games may at first glance appear simple and straightforward, but even the most common ones have quite sophisticated elements that make them work. It is important to understand what games mean in the context of this thesis before they can be properly analyzed. Chapter 2 presents definitions for games in general, and role-playing games in particular. As role-playing games are somewhat different from all other games, and also quite a marginal hobby, Chapters 2.1 and 2.2 will elaborate on what they actually are, how they are played and from where the fun in them comes. The chapters also define what is understood as role-playing games in the context of this thesis. As the concept of usability is at the centre of this thesis, Chapter 3 is dedicated to introducing and explaining it in this context. The ways in which usability affects the use of a product are explained, and the ties between usability and role-playing games are described in detail. Chapter 4 begins with an introduction of the Dungeons & Dragons role-playing game, my research material. It then goes on to describe the method of heuristic analysis and the way it was performed on the game in this case. The chapter continues by describing focus groups as a research method. This is followed by a report of the focus group interview I arranged and the results that were received therein. The chapter concludes with an estimation of the suitability of focus groups in this type of research. Chapter 5 concludes this thesis by drawing together and discussing the results of the study against the theoretical background presented before.

2 Games and Role-playing

Because games are a rather multifaceted phenomenon, it is necessary for this thesis to clearly define what games in general – and role-playing games specifically – are and are not before a comprehensive study of their inner workings can be performed. The following crystallized definition shall work as a base upon which the rest of the definitions shall rest: "A *game* is a system in which players engage in an artificial conflict, defined by rules, which results in a quantifiable outcome" (Salen & Zimmermann 2004, 80, italics in original). In traditional games this outcome is usually such that players receive a score of some sort, or that someone is declared winner, while others have to make do with defeat. These requirements sound fairly simple, but a successful game needs to fill other requirements as well.

One important aspect of games according to Salen & Zimmerman is that they are *systems* which facilitate something known as *meaningful play*. Meaningful in this sense means that players feel they can affect the game in some way. This feeling emerges "from the relationship between player action and system outcome; it is the process by which a player takes action within the designed system of a game and the system responds to the action" (2004, 34). This relationship also needs to be both "discernable" and "integrated", as Salen and Zimmerman put it. To be discernable, the game needs to clearly communicate things to the players so that they know what happened as a result of their action. Integrated, in turn, means that these actions are connected to the wider context of the whole game so that actions not only have immediate results, but can affect the experience of play at a later point. In short, discernability tells players what happened, while integration tells them how it affects the game now and in the future. (Ibid. 34–35.)

Every game can also be seen to reside somewhere along a continuum, which has at its opposite ends two systems, namely those of *rules* and of *play* (Caillois 2001, 13). These two poles are

known as *ludus*, and *paidia.* Ludus refers to the tightly structured, rules-governed games, while paidia refers to the frolicsome, free-form play in which children often engage. (Ibid.) As shall be shown later, role-playing games have elements of both of these opposite poles.

Salen and Zimmerman see game play as the experience of a game that stems from the participation of players. Game play can be strategic and competitive, performative and social, physical and sporting or lush and narrative. (2004, 309–310.) They crystallize the idea of play as: "Play [in general] is free movement within a more rigid structure", and further elaborate game play by saying that it "clearly embodies the idea of play as free movement within a more rigid structure (ibid. 304). They add that "the particular flavor of a game's play is a direct result of the game's rules" (ibid. 310). According to this, it can be said with certainty that rules are an inseparable part of any game, and that they have a major impact on how a game is experienced. As a final notion, it should be noted that games operate on three different levels of rules, as explained below:

> **Operational Rules**
> Operational rules are the "rules of play" of a game. They are what we normally think of as rules: the guidelines players require in order to play. The operational rules are usually synonymous with the written-out "rules" that accompany board games and other non-digital games.

> **Constituative Rules**
> Constituative rules of a game are the underlying formal structures that exist "below the surface" of the rules presented to players. These formal structures are logical and mathematical.

> **Implicit Rules**
> Implicit rules are the "unwritten rules" of a game. These rules concern etiquette, good sportsmanship, and other implied rules of proper game behavior. The number of implicit rules of Tic-Tac-Toe [alone] is vast and cannot be completely listed. […] However, implicit rules can change from game to game and context to context.

> (Salen & Zimmerman 2004, 5.)

In the following chapters we shall see if role-playing games, too, fit these descriptions, or if they actually deviate from what games are usually understood to be.

2.1 Pen-and-paper Role-playing Games

In this thesis I am only focusing on pen-and-paper role-playing games, or RPGs for short. This excludes other forms of role-playing games such as Live Action Role Playing, computer role-playing-games (CRPGs) such as World of Warcraft and different RPGs played on internet forums. Thus, any references to role-playing games or RPGs relate to pen-and-paper style role-playing, unless explicitly stated otherwise.

Defining role-playing games in an exhaustive, all-encompassing manner is nearly, if not altogether, impossible. The problem mainly arises from the fact that these games can include so many kinds of things and can be used to reach such different types of ends. Each published game gives its own definition of what a role-playing game is, and carries with it its own bias, focus and purpose. Different attempts at academically acceptable definitions outside of the context of a single game have also been made, but they only go to show that people understand and define role-playing games in various ways. This can be seen by comparing the differing views presented by Laws (2002), Pohjola (2004) and Hakkarainen & Stenros, for instance. Comparing these attempts at all-inclusively defining role-playing games shows that the views vary and that the writers, just as players, focus on different matters and see different issues as central to the experience.

However, in the context of this thesis, a definition of some sort is required, and even if the following views can or will not be accepted by everyone playing role-playing games, they are an

attempt to give the reader a definition that is general enough not to confuse, yet focused enough not to leave anything essential out.

2.1.1 Form

The common idea behind all role-playing games is that the participants, called *players*, take on the roles of fictitious persons, called *characters*, and in the framework of the game live out the lives of these persons, who are inhabitants of an imaginary game world, in some cases referred to as a *campaign setting*.

The typical role-playing session, i.e. one instance of play, is not very complicated in performance, but is rather difficult to describe in a clear, yet concise way to someone who has never experienced it. I shall, however, attempt to lay down some basics, which should be applicable to if not every single role-playing game, at least to a great majority. As I am using Dungeons & Dragons as research material for this thesis, it is only proper that we start with the definitions given by the game itself, and follow it by definitions from other sources.

> The D&D game is a fantasy game of your imagination. It's part acting, part storytelling, part social interaction, part war game, and part dice rolling. […]
> Your characters star in the adventures you play, just like the heroes of a book or movie.

(Player's Handbook 2003, 4.)

This gives us some idea of what is going on, but it does not really go very deep into what playing a role-playing game is really about.

A large and vital website and community of role-playing gamers called RPG.net hosts a lexicon

of common role-playing games-related terminology. Their definition of a role-playing game is

as follows:

> In a typical role-playing game, there is one Game Master (hereafter GM) and some players. The players are playing the roles of characters in an imaginary game-world which the GM describes and controls. The game goes through cycles where:
>
> 1. The GM describes the situation the characters are in;
> 2. The players describe how their characters react to the situation; and
> 3. The GM and players decide what happened as a result of those actions.
>   Step 3 often is determined by rolling dice, especially in complex or stressful situations such as combat.
>
> (RPG Lexica: PQR.)

The previous already gives a typical procedure, which goes on and on and repeats itself

throughout a session. However, in order to make things as clear as possible, one final definition

is in order. Even though it is quoted from an article concerning mostly Live Action Role-Playing

Games, the details, in this case, are the same:

> 1. The core of the game is role playing [i.e. playing a role] guided by rules. Each player takes control of one or more (although typically only one) character. A character is a fictional figure that the player tries to act (as role play).
> 2. The player will usually have full control of decision making at the character level. There is no author-audience relationship: Each player has a hand in developing a personal, perceived story.
> 3. The game is usually set in a fictional reality, which is communicated via the fictional contract. The contract is the shared understanding among the game participants of the game setting/world.
> 4. With very few exceptions, the games are supervised or guided by a GM, who assumes a variety of responsibilities depending on game type and style of play, notably, (a) facilitation of game flow, (b) environmental content, (c) administration of rules, and (d) engagement/entertainment. […]
> 5. At least two participants are required. In general, noting the above exception, these will be a player and a GM. Typically, these roles are fixed, although in some games, the roles are interchangeable. The players and GMs together are the participants of the game.
>
> (Tychsen, Hitchens, Brolund, Kavakli 2006, 254–255.)

Here we have enough material to explain what a typical role-playing game is all about. To summarize: One player is the game master (GM), whose responsibility is to adjudicate game rules, develop adventures for the characters, describe the fictional surroundings where the characters are and to role play the inhabitants of the game world. Each player typically controls one player character (PC for short), a fictitious persona with different personality traits, history and different abilities and qualities, who lives in a fictitious world. Players, including the game master, typically sit around a table and verbally portray their characters and actions. In a conflict situation, dice are rolled according to the rules of the game to arrive at a conclusion of how the situation progresses. If a role-playing session is looked at in retrospect, it results in a type of collaborated and dynamic narrative, which grew out both from the events the GM had planned beforehand and the way the players reacted to them as their characters. All the participants are thus simultaneously both the audience and the performers of this fiction.

Before going any further, however, it is useful to note one more thing about the status of role-playing games as part of the vast field of games in general. As per the definition of games by Salen and Zimmerman above in Chapter 2, role-playing games are a "limit case". This is because role-playing games seem to be lacking in one aspect of the definition of a game, namely *quantifiable outcome*. Role-playing games do not have a clear endpoint at which somebody would win the game or when players would receive a score. (2004, 81–82.) This is simply because RPGs, by nature, are open-ended. There is no set ending to the game, because it is usually the GM who designs the adventures player characters experience, and these events can basically be designed to go on for just as long as everyone playing the game wants to continue. The centrality of the open-endedness of role-playing games can also be noted in a fact that Pettersson mentions about role-playing games' history: the games actually had a difficult time

flourishing in the beginning, as they did not spark the interest of large game publishers exactly because they were not perceived as games at all (2005, 52).

Role-playing games can be framed as games, however, by looking at the activity as a whole. Even with no single quantifiable outcome, RPGs can still be seen as systems which facilitate many smaller quantifiable outcomes. These could be, e.g., the missions player characters complete within the game, personal goals players set for themselves, or the levels of power their characters attain. These smaller goals can have quantifiable outcomes, and role-playing games can be viewed as games among others, at least in this sense. (Salen and Zimmermann 2004, 81–82.)

It could be argued, then, that the lack of generic game traits is partly the reason behind why the experience of playing a role is such a central attraction for people who play role-playing games. Since there is no enjoyment as such to be derived from winning over the other players, the attraction of the game must come from the vicarious experiences of being someone else and living in another world.

2.1.2 Matter

Role-playing games are typically published in printed format, usually a book of around A4 dimensions and spanning several hundred pages. The contents of a role-playing book can usually be roughly divided into three types of information:

1) prose-like narratives describing the game world, which can be anything from Tolkienesque fantasy settings to alternative modern day or far future science fiction

2) a set of rules to solve various game events and facilitate play, and

3) numerical data about various rules-related things, usually laid out in the form of tables.

These three information types can be directly seen to relate to the DITA information types of *concept*, *task* and *reference* information. The DITA Standard Architectural Specification typifies concept information as follows:

> [C]oncept topics answer 'What is...' questions. […] Concepts provide background that helps readers understand essential information about a product, interface, or task. Often, a concept is an extended definition of a major abstraction such as a process or function. Conceptual information may explain a product and how it fits into its category of products. Conceptual information helps users to map their existing knowledge to tasks and other essential information about a product or system. (Concept.)

In a similar fashion the concept information in a role-playing game book is there to describe to the players what kind of an imaginary realm they will be adventuring in as their characters, and obviously to pique the players' imagination.

Task type information is described in the DITA specification as:

> Tasks are the essential building blocks for providing procedure information. A task topic answers the 'How do I?' question by providing precise step-by-step instructions detailing what to do and the order in which to do it. The task topic includes sections for describing the context, prerequisites, expected results, and other aspects of a task. (Task.)

In a role-playing rulebook, the task information tells players how to create characters who live in the imaginary world, and how the players can, through their characters, interact with said world, how to engage in meaningful play.

Reference type information is described in the DITA specification as:

> [R]eference topics are often used to cover subjects such as the commands in a programming language. Reference topics can hold anything that has regular content, such as ingredients for food recipes, bibliographic lists, catalogues, and the like. Reference topics provide quick access to facts. Information

needed for deeper understanding of a reference topic or to perform related procedures should be provided in a concept or task topic. (Reference.)

This type of information in a role-playing rulebook usually includes different lists or tables, such as tables of game world equipment or spells, or lists of rule modifiers for quick reference.

As there is a huge number of different role-playing games published to date, there is also an immense number of different game worlds and rule sets, but the vast majority of games follow the previous description quite accurately.

To an outside observer, a game session might look to some extent like a board game. There are people sitting around a table (usually) filled with different gaming paraphernalia, such as dice (various types with 4, 6, 8, 10, 12 and 20 sides), sheets of paper, pictures and drawings, and possibly maps and some tokens such as miniatures. However, the actual events of the game are not simply happening on the table in the manner of a board game, but mostly in the imaginations of the participants. Just like when reading a book, the players of the game imagine the events that take place. A fictional example of a gaming situation is described in Chapter 2.1.4.

The characters with which players play are in effect gateways through which players get to enter the imaginary realms. Rules-wise characters are typically expressed via an object known as a *character sheet* (see Appendix). It is a form-like piece of paper on which the imaginary person is represented by different numeric values for various physical or mental abilities, learned skills or other special talents. What these values actually mean depends on the rule system, but in short they tell how apt, talented or learned the character is in different matters. Just like real people, characters are better at some things and less able in others. When, in the course of the game the character needs to do something, his or her success largely depends on whether or not he or she has the required abilities or skills. A high strength rating, for instance, would

obviously help in situations where something needs to be lifted or carried. High values in navigational skills would help in guiding a ship from one port to another, and a character with high intelligence is more likely to solve a riddle than a less intelligent one would be.

In addition to the numeric descriptions, players often also write backgrounds for their characters, invent personality traits, members of the character's family and their friends. The result is a complete, fleshed out and ready to play fictional person. All of this planning is done before a game begins, and all of it works to help the players immerse themselves into their characters and into the world once the game is underway.

Characters are central to the role-playing experience, since they are a portal to the world of the game. But how do the players get them, and who decides what the numeric values, described above, shall be? Again, as in so many other issues involving role-playing games, there is a multitude of ways a character can be created. There are, however, always rules on how a character is created, and these rules usually make up a fair portion of an RPG book. In the early years of these games, characters were typically created at random, or "rolled up" (see Fine 1983). What this meant was that before the actual game took place, players would roll the dice according to the rules, once for each characteristic, and mark down the results on their character sheets. Then they basically had to make do with whatever the dice gave them. In more modern games players have more choice, and even though dice-based character creation mechanics still exist to some extent, there are many games now which operate on a, for example, *point-buy* rationale, where players are given a lump sum of *character creation points*, which they can then spend in the way they like, essentially buying the character's numeric values for prices set in the rules. This offers more creative opportunities, and allows for the players to play the character they themselves want to play.

Character creation in Dungeons & Dragons v. 3.5 can follow one of three models. The basic, standard one described at the very beginning of the rules goes through the steps of

1. **Rolling ability scores (for Strength, Dexterity, Constitution, Intelligence, Wisdom and Charisma)**. These are the six basic things a character is made up. At this stage, the players roll four six-sided dice, disregard the lowest score and add the rest of the results together. This yields a score from 3 (horrible) to 18 (tremendous). The players repeat this roll once for each ability, and record the scores. This method stays rather true to the early years of RPGs.

2. **Choosing the player character's race and class**. There are seven races available, namely human, dwarf, elf, gnome, halfling, half-elf, and half-orc, and eleven classes, namely barbarian, bard, cleric, druid, fighter, monk, paladin, ranger, rogue, sorcerer, and wizard. The races and classes each have their own strengths, weaknesses, specialities and so on, not to mention they naturally bring some type of flavour to the character.

3. **Assigning and adjusting the ability scores**. At this step the ability scores rolled above are assigned to the six abilities in the way players choose. Also, the races other than human have certain bonuses and penalties regarding the abilities (e.g. the halflings, being nimble and small, receive +2 to Dexterity, but suffer -2 to Strength), and these are addressed at this stage as well to arrive at the character's final ability scores.

4. **Reviewing a pre-generated starting package**. The game designers have created some combinations of character abilities suited for each class, and if players choose, they can use them directly or use them as guidelines to speed up the following steps.

5. **Recording racial and class features**. Each race and class provides some kinds of features (e.g. the elves have a trait called Low-Light Vision, meaning they can see twice as far as humans in poor illumination). Players need to record these on their sheets for further use in the game.

6. **Selecting skills**. The game has a list of different skills which the characters can have. Some classes are better suited for certain skills, which are known as class skills (e.g. the skill Perform is a class skill for the Bard). Players receive a sum of skill points, based on their ability scores, which they can use to buy different skills for their character.

7. **Selecting feats**. Feats are special features a character can have, and they either give the character some new capabilities or improve on existing ones (e.g. the feat Alertness grants the character finely tuned senses and makes it a bit easier for that character to notice things). Feats are fairly rare, and a starting character normally receives just one feat.

8. **Reviewing the character description**. Characters have many types of information regarding their background, such as their religion, age, height, etc. These are mostly used to personalize the character, and do not have a direct rules-related use.

9. **Selecting equipment**. Based on some of their choices so far, the players receive a sum of gold pieces (game world monetary unit), with which they can equip their character by buying them various items from different lists found in the book.

10. **Recording combat numbers**. The characters have different statistics that are used in a combat situation, such as hit points (health), armor class (how difficult they are to hit),

and initiative (how quickly they react). These depend on the character's abilities, race, class, feats and equipment.

11. **Filling in necessary details**. Finally the character's description is completed with a name, gender, appearance etc. These relate to step number 8.

(Player's Handbook 2003, 6–132.)

As can be seen, the creation of a character is quite a complex, multi-level process, which involves different character creation models and techniques and requires several different decisions. More discussion on the nature and usability of the character creation rules of Dungeons & Dragons in particular will be presented in Chapter 4.2.

2.1.3 Function

The aspect of role-playing, i.e. playing a certain role, was touched upon in the definitions of a role-playing game in Chapter 2.1.1. As it is a large part of the role-playing experience, and the major source of entertainment, it merits a more in-depth discussion.

Playing a role in a role-playing game may utilize many of the traits that are present in acting in general. Just like actors on stage in a theatre, players around the table can adopt mannerisms, change their speaking voice, take on accents or use various body movements to accentuate their characters' personas and make them come to life as individual persons. Actor-like performances works to the players' advantage as well, since well-defined characters provide them with a stronger link to the game and its world, and throughout this link they may be able to experience thrilling plot twists and real-like emotions. This whole process of "becoming the character" and "experiencing as the character" is what is known as *character immersion* (see Fine 1983, Pohjola 2004, and Pettersson 2005). In my view this is what typically provides for the biggest

thrills a role-playing game has to offer, although other types of immersion also exist (see Holter 2007, for example). In a way character immersion is similar to reading a riveting novel or watching a compelling film, but the aspect of actually taking part in the events yourself boosts the excitement much further.

Role-playing games are naturally also played for largely the same reasons other games are played: to have fun and to enjoy other people's company. However, the presence of a dramatic narrative and character immersion brings into the game an extra layer which is not present, or at least not as strongly, in other types of games. It can thus be claimed that because players get to be creative and play a large part in creating meaningful events – meaningful fiction – the elements of storytelling and immersion form a major source of enjoyment.

In fact, role-playing games are, according to Kellomäki, *ergodic texts*, that is, texts which require – and change their state through – user input. As the game master describes the situation, he or she is giving the starting conditions of the text. This is then followed by the players who give their own input to the situation through their characters. The input results in the altered state of the text, which is actualized through the game master describing the new situation. Players and game masters have different narrative rights in the course of a role-playing game, and this translates to varying rights in input-giving. The players' input consists of controlling their characters, and the game master has no right over them without a built-in rule mechanics reason (such as when characters are enchanted, go insane, or the like). Opposite to this, the game master controls all the other characters and aspects of the game world. (2003, 17–18, 77.)

As can undoubtedly be said at this point, role-playing games are very much a creative activity. Typically, creativity can be described through such elements as newness, uniqueness, personal interpretation, flexibility and fluency (see Ruth 1984, 14–17 and Heikkilä 1984, 92).

Also tightly connected with creativity is the idea of flow, a state of mind in which people are fully absorbed in what they are doing, and the world around seems to disappear or feels irrelevant (Csikszentmihalyi 1990). When fully immersed in character and the game world, the player has achieved this flow state. However, since role-playing games are still games, they need the rules in order to work.

Rules usually step into the picture when players attempt to do something challenging as their characters. To find out how the character fares in a given situation, dice are most commonly used as an arbiter. In some less typical systems, some type of cards, tokens, or the like might be substituted. Whatever method is actually used, its purpose is always to produce the element of randomness, of surprise. By rolling the dice and comparing the results with the character's abilities, the rule system is used as a type of *encoding/decoding system* (Stenros 2004, 77) to determine if the character succeeded or failed. In summary, we can say that

> [t]he core game mechanics vary a lot between role-playing games but many work on the basic premises that character actions with uncertain outcome are represented by the dice-rolls of the player (Dormans 2006).

As can be seen, rule mechanics work a bit differently in role-playing games than they do in conventional games, such as board games. More than just a type of description of what the game is about and how it is to be played (such as the rules of chess, for example), rules of a role-playing game are used as an interface into the world of the game. They do set limits to what players can and cannot do as their characters, but they do this by simulating the imaginary world, as it were. Fine states that dice rolling could actually be seen as *in-game* elements,

i.e. as the *diegetic*[2] situation's background forces that would exist in the real world, but which are lacking in the imagined world. Dice can thus be seen, for instance, as simulating a multitude of random natural elements. (1983, 90–91.)

But why are mechanics so important? Dormans suggests that dice rolling is an important aspect of RPGs, because in an ideal situation it introduces into the game the element of chance, which is still under the control of the player (2006). Gleichman explores the reasons behind mechanics in more depth. He mentions five reasons why role-playing games use rules altogether:

1. **Rules limit player options**. Rules, by default, limit the options players have within the game structure. Undesired player actions can be effectively blocked by rule design. Gleichman's examples for such a mechanic are advancement rules (experience points), requiring a certain Strength score for a particular action, or taking damage from falling great distances. This way, players cannot have their characters do whatever they please, and in doing so, the rules provide challenges to overcome.

2. **Rules provide meaningful player choices**. In addition to limiting, rules can also provide choices. Gleichman uses combat mechanics as an example. They can present the player with a diverse set of actions to choose from. This way the player has a hand in determining the outcome of the game events. This idea is mostly what Dormans refers to above, when talking about players controlling chance.

---

[2] Diegesis in the context of role-playing games is used as a term to refer to the fictional elements of the game. Diegetic events in a role-playing game are thus the imagined events that happen to the imagined persons in an imaginary environment.

3. **Rules inspire player action**. Some rules are there to push players to act the part more. Gleichman's example is from Call of Cthulhu. This horror RPG (as opposed to the majority of other role-playing games) has sanity rules that hint at what type of insanity the character is struck with after facing Lovecraftian monstrosities and other horrors.

4. **Rules replace player choice**. Sometimes mechanics can simply bypass any decision-making process. Gleichman mentions single-roll combat resolutions as one such mechanic, since they remove any tactical choices from the players. These types of rules should ideally be used, according to him, to quickly resolve irrelevant events so that the game can move quickly past the non-central issue.

5. **Rules provide an illusion**. Sometimes mechanics can be designed just to give the impression of choice. Gleichman gives an example of this by describing rule systems that provide multiple combat manoeuvres, which, after some research, turn out to actually contain one all-powerful method in a group of others that are always inferior. It seems as though a player could make meaningful choices, yet it is only an illusion. If it remains unnoticed, the effect is basically the same as in number 2. If it is noticed, however, players are quite likely to exploit this design feature (or design flaw, if you like) whenever it comes up.

(Gleichman 2003.)

Obviously the cases are not always this clear-cut, and Gleichman himself mentions that these rationales do not always work the way they are supposed to. These rationales can be seen as additions and parallels to much of what has been said about rules before. The following chapter

describes how all the elements of a role-playing game come together, and how an actual game might progress.

2.1.4 Symbiosis

The following is a short transcript-like text that describes a typical, in this case imaginary, Dungeons & Dragons game session. The purpose is to illustrate the way a role-playing game functions and how the players work together with the rules, their imaginations and each other to create fictional events. The characters and events that follow are completely made up, simply drawn from my experiences during the ten or so years of playing and game mastering various role-playing games. It is a simple scenario that could take place and later on lead to larger events in a role-playing game that anyone might game-master for a group of players.

The participants in this fictional game are the game master and three players. The players have the roles of a party of adventurers consisting of Grug, a male half-orc fighter, Elyan, a female human wizard and Hobnobbin, a male gnome bard. Before this point in the game, the player characters have spent the past four game sessions working for an underground resistance in a rural area that is trying to rid itself of its upstart duke, who is oppressing the people. We jump in at the start of a new session, at a point when the game master is just starting to lay the diegetic groundwork for the scene to come:

1   Game Master: [Describing the events of the game world to the players] All of you wake up in the morning after a good night's sleep in the upstairs of the Three Coins inn. The sun has just risen and shines through your room window. You are still feeling a bit weary after yesterday's travelling, but are otherwise feeling all right. What do you want to do?

2   Player 1 (Grug): [Describing the character's actions as if he was the character himself] I rise up, pull on my shirt, breeches and boots and head downstairs for some breakfast.

3   Player 2 (Elyan): [With similar way of description] I dress myself and take my spellbook from my back pack. I sit on the bed to memorize my spells[3].

4   Player 3 (Hobnobbin): [Again in a similar manner] I too put on my clothes and head downstairs after Grug.

5   GM: Okay, Player 2, it takes an hour for you to memorize your spells.

6   P2: Ok.

7   GM: Grug and Hobnobbin, you walk down the stairs into the tavern. The innkeeper is up and serving food to a band of dwarves sitting in the far corner. What do you do?

8   P1: Is the inn otherwise empty?

9   GM: Yes.

10   P1: We say good morning to all of them and then sit at a table.

11   GM: [Describing the game world] The dwarves don't look at you, but say something resembling "good morning". The innkeeper cheerily says hello and moves to your table. [As the innkeeper] What may I do for you this morning, sirs?

12   P1: [As Grug, speaking in a slightly growling voice, which the player feels the character has] I'll have mutton, some beef and the largest mug of ale you have.

13   P2: [As Hobnobbin, speaking almost hyperactively, this gnome's manner of speech]: I'd just like some white bread and cheese. And milk.

14   GM: [Describing] The innkeeper looks at you [GM looking at Grug's player] with eyes wide and his mouth slightly open. [As the innkeeper] That's quite a breakfast. But no matter, it's coming right up.

15   PM1: [Speaking as himself]

16   GM: [Describing] After a while the innkeeper returns with your food and you start to eat. You don't have too much time to eat however, before the front door flings open, and in march three of Duke Wilbur's goons dressed in leather armour. They march right up to the innkeeper and one of them grabs him by the shirt. The two others pull out daggers and point them towards the innkeeper. The first one says in a loud voice to the innkeeper: "You are late with your payments. It's almost like stealing. And the duke doesn't take kindly to thieves." What do you do?

---

[3] The game rules state that wizards must in a way re-learn their spells from a pre-written spellbook each time they have used them. Each spell is like a single use item in the wizard's head, which regenerate after a rest of 8 hours followed by a certain amount of time of studying the spellbook.

17   P1: [Speaking as Grug to Hobnobbin] Look, Wilbur's men. We should do something.

18   P2: [Speaking as himself to the GM] Have they noticed us?

19   GM: No, they're too busy roughing up the innkeeper, but they might turn any moment.

20   P2: We go upstairs to get Elyan.

21   P3: Do I hear anything?

22   GM: No. P1 and P2, roll for Move Silently [name of the skill] to see if you can slip out of the room and up the stairs unnoticed.

23   P1: [Checks the character sheet, rolls the dice, makes a quick calculation] Fourteen.

24   P2: [Similar actions] Oh man, a one. I only get seven.

25   GM: [Rolls the dice three times, then describes the action] Hobnobbin, you kick your foot on the stairs going up, but the three men don't turn around.

26   P1: When we get to our room, I tell her [Elyan] what's going on.

27   P3: I get my spell ingredient pouch.

28   P2: [Speaking out of character, to the other players] Okay, now what, there's only three of them there. We could take them easily.

29   P3: [Speaking as Elyan] Even though they're Wilbur's men, we can't just kill them.

30   P1: [As Grug] Yeah we can. I'll just get my axe. [As player] I put my armour on.

31   P2: [Now in character] How about we try to negotiate first and see how that goes?

32   P3: [In character] Yeah, let's do that.

33   P2: We walk downstairs. Are they still there?

34   GM: Yeah.

35   P2: I say this to them. "Who are you to bully an innocent, hard-working man in the middle of his busy day?"

36   GM: They turn around, letting go of the innkeeper. The leader takes a couple of steps towards you and unsheathes his short sword. He says [as the man] "You three are obstructing justice. Shut up and get out of here, or you'll be placed under arrest."

37   P2: [As player] I'll try to persuade them to leave him alone.

38   GM: How?

39   P2: [As player] Ummm, I'll give him a gold coin? I'll take out my coin purse and ask the guy how much the innkeeper owes.

40   GM: All right, roll Diplomacy [name of skill]

41   P2: Do I get a +2 for the purse? I can say I'll pay them some extra if they accept.[4]

42   GM: Hang on, I don't remember how it goes. I'll check [rummages through the rulebook for a while].

43   P1: [As player] Yeah, that might work, or he'll stab you to death.

44   P3: [As player] Yeah, in the eye like that guy in that film.

45   P2: [As player] What?

46   P1: [As player] A film about crusaders, I can't remember the name, but you should see it someday.

47   P2: [As player] Oh, okay. Who's in it?

48   GM: [Somewhat annoyed by the interruption] Yeah, you get a +2. So what are you going to do?

49   P2: So I hold out the purse and ask how much the innkeeper owes. [Rolls] Oh man, my rolls suck tonight! With the +2 that's thirteen.

50   GM: The man scoffs at your offer. He looks at all of you and says: "That's an attempt at bribery. You're all going down. Drop your weapons and follow us to the guardhouse."

51   P1: [As player] Ain't gonna happen. [As Grug] You'll never take us, graaahhhh!

52   GM: So what do you do?

---

[4] The rule system grants a discretionary +2 bonus for favourable circumstances to a roll.

53   P1: I'll raise my axe and run towards the leader.

54   GM: Alright, roll for initiative…[5]

As one can see, the discourse the participants are having is happening on multiple levels. There

are the players as their real world selves, the players describing game-related issues such as dice

roll results, the players speaking of their characters, i.e. telling what they do, and finally players

speaking as their characters. This division comes from Kellomäki, who studies the role-playing

discourse in much depth in his thesis (2003, 28–32). Here, however, it is enough to point out

that even though the players at the table have different ways of expressing what is happening,

everyone is usually able to understand what is going on and who and what exactly is being

referred to. As Kellomäki points out, the players are at the same time both the producers of

information as well as its recipients (ibid. 32). Players are not simply constructing the game

events for themselves, but also continually expressing their ideas and feelings to the other

participants. The other players are doing the same, so all in all the actual game session is

constructed of multiple messages going back and forth, both between the real-world people

playing the game as well as the fictitious characters living in their own imaginary world.

On item 42 of the example, one can see how the diegetic framework needs to be put on hold. In

a way, the fictional world is on "pause", and the players begin to drift away from the situation of

the game and back into the real world. Considering the drama of the situation, the game master

is naturally annoyed, because there was obvious tension building up to the point, but when the

---

[5] Initiative is a special roll made by anyone taking part in the upcoming combat. The one who gets the highest result
gets to act first, with the rest following in decreasing initiative roll order. Combat is such a complicated system to
describe textually, however, that it has been omitted for the sake of brevity.

rule they needed could not be remembered right away, the tension started to dissipate, along with the interest of players. As one can imagine, the follow-up to the situation could never be as gripping as it could have been, had the flow of the game not been interrupted.

Even though the game events described above are fictional in every sense of the word, they are certainly not alien to anyone who has ever played a role-playing game. The interruption of tension is one of the major issues covered in this thesis, and cases such as above are discussed in more detail in Chapter 4.

2.2 Different Types of Role-Playing Games

Role-playing theorists have presented different kinds of classifications into which RPGs could be divided. I shall only touch upon them briefly, since they have no major impact on this particular study. The reason behind presenting them is to help complete the framework and to describe the games a bit further. The classes into which role-playing games are divided (apart from the obvious, such as the genres of fantasy, sci-fi, or horror) usually come from the way the rules of different games work to simulate the world, the way they work as an interface to the game. And just like every user interface is one type of way of communicating with a system, so is the rule set of a game. The rule set defines the way players see the world. Seeing here is obviously not referred to in a visual sense as such, because describing events, people, surroundings and so on is the GM's task, but in an aesthetical, drama-creating sense, in the sense of seeing with one's mind's eye.

Edwards' *GNS theory* (Gamist, Narrativist and Simulationist), which expands upon John H. Kim's *Threefold Model* (2003) is a rather complex set of ideas and suggestions on the nature of role-playing games. However, the basic principle behind it is that role-playing games can be

divided into three categories, namely Gamist, Narrativist and Simulationist, according to the way the rules present the world and what kind of game play the rules are aimed at. In short, the categories represent player outlooks, i.e. what players are looking for when they play a certain type of game. Edwards notes that games usually fall rather accurately into one of the three categories, without very much crossover. (2006.) The following elaborations will explain the basis for these categorizations.

In a *Gamist system* (i.e. the rule set of the game) the rules usually aim towards a balance between the participants. The game rules facilitate a contest of sorts, which the players wish to win, a situation from which they derive the pleasure of playing. Usually the contest is between the player characters and their fictional opponents and also between the players of the game. As Dungeons & Dragons is mostly a gamist RPG, it is useful to elaborate on the issue some more. In a gamist system, according to Edwards, the players compete against each other on who is willing to take the greatest risks and who thus gains a sort of social appreciation. Thus a Gamist system is built so that each player gets a character that is similar to other player characters in power, i.e. each player has the same chance to shine, and all of them have the same starting point in the game framework. The rules are in sharp focus, because they are the only channel through which the players can compete with each other. The *game* aspect of the role-playing game is brought to the front, much in the way the rules in other games, such as rules in different sports, are important for the competition, and apply evenly to every participant. In short, while role-playing games themselves do not have a competitive element as such, the Gamist games have a sort of social competition between the players.

A *Narrativist system* is, or can be, a definite opposite to a Gamist type RPG. What a Narrativist player seeks for is a good story. Where in the Gamist system the balance or "fairness" of the rule

system is important, in a Narrativist system the rules work if they help to create meaningful, dramatic events. A Narrativist system might simulate the game world less through its "physical" attributes, and far more through what is perceived to be dramatically pleasing. For example, instead of having the nearly ubiquitous attributes of strength or intelligence, the characters in a Narrativist game might have attributes such as Self-loathing or Weariness, as they do in the Narrativist type horror role-playing game *My Life with Master* (see Czege 2003). It is through these mental states of the character that dramatic events are actualized in the course of the game, not through the character's physical attributes. Furthermore, the individual character's role in the whole of the narrative guides his or her actions, not simply the player's personal decisions.

A *Simulationist system* attempt, as the name suggests, to simulate the world of the game as well as it possibly can. In the words of Edwards, the system "'creates' a little pocket universe". Thus the player outlook is one of having an interface that is as close a simulation of the game world as possible. Again, as in the Gamist type, the rules might be really fine-grained in their scope, i.e. they go into small details with character actions, but the focus is on the game world's reality and its internal factors, not in the competition between player characters and non-player characters.

No matter what the game is, however, there are always rules to follow, and characters for the players to immerse in. This provides us with an interesting dichotomy, which shall effectively move us towards what role-playing games and usability have in common. This division comes clear when we think of the typical game situation where players are thinking through their characters, trying to decide on the best course of action, and what happens after that. Players can be seen to think through their characters in phrases such as "what would my character do?" or "what would I do?", and then, having reached a decision, receive orders from the GM to roll the dice. In thinking through the character, the player is within the world of the game, experiencing

matters vicariously. In rolling the dice, then, the player disconnects from the character in order to roll the dice, compare various numbers and so on, and to determine whether or not the character succeeded in doing whatever he or she was doing. The dichotomy is strikingly similar to that of *immediacy* and *hypermediacy* (Bolter & Grusin 1999, 4–5). Immediacy is a style of media presentation where the medium itself tries to become transparent or invisible. The opposing end, hypermediacy, is described as a style of media presentation where the medium brings itself to the foreground, attempts to make itself seen as much as possible. (Ibid.) This division could also be seen, in a way, relating to the two ends of the game playing continuum, of paidia and ludus, described in Chapter 2. Paidia, the free-form play can be likened to immediacy, and ludus, the rules-governed play to hypermediacy.

Players of role-playing games thus have two distinct modes of working, one of immediacy, of immersion to the imaginary world and events taking place there, the other of hypermediacy, of physically rolling dice, checking the character sheets, comparing numbers or referencing charts and tables. If the fun derived from a role-playing game mostly comes from the immersion, as stated in Chapter 2.1, working as little as possible in the world of rules would seem to be the desired way of playing.

3 Usability and Role-playing Games

Usability is an important aspect in any design that is meant for use, and may even be the thing that makes or breaks the product. But what does usability mean exactly? A usability standard, namely ISO 9241-11, defines it as follows: "[Usability refers to] the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use" (What is Usability?). Usability thus refers to the ease of use of a product.

Nielsen describes usability as five components, and as their effect on a user's ability to use a product. The components are learnability (the time it takes to learn to use the product), efficiency (the level of productiveness after users learn to use the product), memorability (the ease of remembering how the system works), errors (the number of errors users make and how easy it is to recover from them), and satisfaction (the subjective level of satisfaction users get from using the product) (1993, 26).

It could be argued that players of a role-playing game are not users in the traditional sense, since they do not simply use the product, but also act as makers and creators. If we follow the definition of usability, given above, and apply it to role-playing games, we can re-word it in RPG context as follows: Usability refers to the extent to which a role-playing game can be used by players to achieve meaningful game play and character immersion and to create interesting fiction with effectiveness, efficiency and satisfaction when playing the game with each other.

Users always need to be trained to use new products. To lessen the burden of learning, technology developers should design products to be easy and intuitive to use. This is, however, one of their major challenges. They need to "bridge the gap between what users know and what they need to know" (Shneiderman 2002, 46). This holds true in the case of role-playing games as well. We can argue that since each game is a bit different and each simulates the diegetic events in its own way, each game also forces its players to learn to understand, interpret, use, and apply it to move the game forward. This is most true in the case of the game master, as he or she needs not only be a rules expert, but also everything from a designer of stories and plot twists to an architect, a non-player character designer, a good actor, a confident public speaker, a social arbiter, a soothsayer, a general organizer, an intermediary and everything in between.

If, on top of this, the rule system is very complicated and difficult, there is quite a lot to do for one person.

An ongoing trend in designing usable products is to follow what is known as human-centred design, i.e. the design process follows the actual users and their needs instead of those doing the designing. As Nielsen states, users are not designers, and designers are not users (1993, 12–13). To avoid long and hard learning processes and tedious manuals, products are designed to be as intuitive as possible. Furthermore, it can reasonably be argued that even good quality manuals may not always help, if the product is terribly hard to use.

As users need to be taught to use the product in any case, there are theories of how this should be done. One popular theory is the minimal manual approach, which basically means that users should get only little up-front instruction and be active quickly, even if they then make some mistakes (Carrol, Smith-Kerker, Ford, Mazur-Rimetz 1987). Good examples of this are the short Getting Started guides (Shneiderman 2002, 47) that are delivered with a variety of consumer electronics, for example. Many role-playing games also subscribe to this approach, even though they do not include such guides, but simply encourage players to start playing at an early stage without attempting to memorize or even to read through all the rules. However, the method is not always that good in use, especially with a group of experienced players, who have started with a game they have not played before. Even though they would understand the basics fairly quickly, basic rules only provide for basic play.

Assume someone in a role-playing group has bought a new game, and is very thrilled with the game world, so much so that he or she would like to plan a campaign for the other players. If, however, the group starts playing the game without too much rules learning, what would most certainly follow is constant referencing of the rule book, many misunderstandings, and certainly

"cracks" in the diegetic framework, when something that just happened to work because of misunderstood rules is later realized not to have been possible at all. Furthermore, it results in quite a lot of frustration for the GM, whose great plans for the game are wasted in the players' learning of the rules.

One obvious, and problematic, issue for the planning of usability is that users are not at all the same, and do not know the same things. Although he is only talking about user interfaces, Shneiderman's words surely apply to any technical device or design:

> Users approach new software tools with diverse skills and multiple intelligences. Some users need only a few minutes of orientation to understand the novelties and begin to use new tools successfully. Others need more time to acquire knowledge about the objects and actions in the applications domain and the user interface. (2002, 47.)

The players of a role-playing game are naturally in a similar situation with every new game. Everyone has some sort of an idea of what role-playing games are, maybe even what they should be, depending on how much previous experience players have with other RPGs. Especially these presumptions, whether they be derived from previous play experience, from other players, or the media, for example, can have a strong effect on how one particular game and its rule system is interpreted, and what is expected of them. This also affects the way a new rule system is used and how exactly the players are trying to use it. Accordingly, problems may arise if the rule system is used to reach ends not suited for that particular type (see Chapter 2.2).

Shneiderman suggests that one way of improving interface design would be to support evolutionary learning and to take a level-structured approach. What is meant by this is a system in which the user learns little by little, by starting with simple building blocks, and as he or she becomes more skilful, receives more things to work with. He refers to the types of tutorials in different software interfaces, which have been embedded into the interface so that as the user

progresses, he or she gets tips and hints and learns by doing small things first and then moving onto more challenging tasks, all the while being mentored by the system. (2002, 47.) I feel this approach has been utilized to some extent in role-playing games by and large, since many games come with a short, ready-made adventure that players can start with. These are not, however, usually designed in the way of a tutorial, i.e. they do not follow the formula of evolutionary learning. It might be possible to design such an adventure to some extent, but the dynamic nature of role-playing games might naturally make this rather difficult, if not altogether impossible.

Shneiderman also supports what are known as *predictable designs* regarding interface design. What he means by this is that users are able to gain familiarity and confidence quickly, because they have a clear model of what will happen after each selection. He gives the following example:

> You expect, after putting a book in an electronic shopping cart, that you can remove it or return to it a week later. Predictable designs apply meaningful metaphors, such as a shopping basket or e-mail in-box, and familiar conventions, such as the use of Save, Print, Open and Close. (2002, 65.)

Role-playing games could be predictable designs, but the question is: How far? It is only natural that designers would like their products to be new, fresh and innovative. Especially if the aim is to renew the field of RPGs, to make a game that is purposely different, the known and familiar conventions might feel like an unnecessary burden, and draw unwanted parallels to games already in existence. In this regard it would seem acceptable to re-invent the role-playing jargon as well. If, however, the system follows familiar concepts and conventions, there should be no reason not to use the language with which players are familiar. This is, in part, also what Nielsen means in talking about user-centred designs, when he suggests designers speak the users' language (1993, 123). Improving usability often means that the user needs less time to learn, can

more easily remember how to use less frequent functions, makes fewer mistakes than before, and can achieve more in a shorter amount of time (Ovaska, Aula, & Marjaranta 2005, 14).

It should be noted, however, that not all games are demanding in the same way. Some are rather minimalist altogether, and address fairly familiar issues. This makes it easy to start playing them even without previous knowledge of role-playing games at all. On the opposite end of the spectrum, there are games that have very odd and distant settings and/or premises, and/or very complicated rules. It can be argued, however, that complex rules do not necessarily make a game more interesting, sophisticated, better or more satisfying, but can actually be less optimal for game play. How my research subject measures in this regard, is the focus of the following chapter.

One important thing to note relating to role-playing games is the fact that they are, indeed, the product and the manual all in one. The manual, i.e. the rulebook, does not actually describe a product that is somehow physical or external, but actually simply writes out and explains the mathematical formulae with which the game designers wish to simulate the game world. It is thus rather difficult to separate the manual from the product in the case of role-playing games. The manual, in effect, is describing itself and helps the users use itself.

4   Analysis of Research Materials

As mentioned, in this study I am using the Dungeons & Dragons v. 3.5 role-playing game as my research material. The analysis that follows will serve two main purposes. First, it will show the ways in which poor usability affects game play experiences in role-playing games. Second, it shall also show how well the kinds of research methods I have chosen can be used to study role-playing games.

I shall utilize two research methods, which are tied into one another. First, I shall perform a usability analysis on the game, using usability heuristics devised by Nielsen (1993). The results from this analysis will then work as discussion topics in a focus group interview performed on a group of people who have actual play experience with the game. The interview will point out if the hypotheses I have presented hold true or not, and if my usability analysis was accurate. Also, as my viewpoint to the game is that of a GM's, and the interviewees have only played the game, the interview will also point out if we have paid attention to the same usability problems.

4.1 Research Subject: Dungeons & Dragons v. 3.5

Dungeons & Dragons is published by an RPG publisher by the name of Wizards of the Coast, and is the longest running and top-selling role-playing product to date. The game has its roots in miniature war games, in which players move miniatures across terrain to do battle against an army guided by another player. The first steps towards Dungeons & Dragons were taken in the seventies, when the game's other creator, E. Gary Gygax, started adding fantasy elements to his games to keep his player's interest up. The other person credited for the creation of Dungeons & Dragons, Dave Arneson, began running games in which each player guided only one individual unit instead of several troops. Players reported immense attachment to the single soldier they were playing. Gygax and Arneson began developing material for what was to be named The Fantasy Game, in which players formed a party of adventurers and delved into underground dungeons in search of monsters and treasure. (Pettersson 2005, 51–52.)

The Fantasy Game was rather quickly renamed Dungeons & Dragons and the first edition was published in 1974 in the USA through Gygax' own publishing company Tactical Studies Rules, because large game publishers were not interested in it. For a long time, Dungeons & Dragons and role-playing were used practically synonymously, on one hand because of the impact the

game had, and on the other, because there were no actual challengers that would have provided for anything different (Pettersson 2005, 52). Since then, the game has undergone several editions, spin-offs and re-writes all the way from the late seventies up to this day. The latest edition, 3.5, came out in 2003, published by Wizards of the Coast. Version 4 is set to come out in mid-2008.

Unlike most role-playing games, which are contained in one basic book, which can later be supplemented by extra source material published later, the basic Dungeons & Dragons game comprises of three core rulebooks. A gaming group needs to have at least one copy of each in order to play the game correctly. The three books are called Player's Handbook (core rulebook I), Dungeon Master's Guide (core rulebook II) and Monster Manual (core rulebook III). As the names suggest, the first one is aimed at the players while the second one is for the game master (called Dungeon Master, or DM for short, in this particular game). The third book is also mainly meant for DM perusal, because it has descriptions of mythical and magical creatures and beasts, which the player characters come up against in the course of the game. The following gives a more in-depth description of what each book, the material of my research, contains.

Player's Handbook

The *Player's Handbook* is, as the name suggests, information mostly pertaining to the players (as opposed to the DM). It includes, as the book itself states, "all the rules players need to create characters, select equipment, and engage in combat with a variety of supernatural and mythical foes" (2003, 4). The Player's Handbook is divided into 11 chapters and contains a glossary of commonly used terms and the character sheet for photocopying at the end. The 11 chapters begin with going over the steps of character creation and describe the different races and classes

the characters might present, and skills, feats and equipment the characters can have. The rest of the book is dedicated to explaining the various rules regarding combat, adventuring and magic use.

On one hand, the name of the book is apt, but on the other, it is somewhat misleading. Even though the players have been separated thus from the DM, the Dungeon Master still needs to know the rules presented in this book as well, for it is his or her responsibility to oversee the character creation and the game all in all.

Dungeon Master's Guide

As mentioned, the *Dungeon Master's Guide* is a reference book meant for the Dungeon Master. The book says it provides the DM with knowledge on "how to design an adventure, a campaign or an entire game world" (2003, 4). The Dungeon Master's Guide is divided into 8 chapters, which describe matters related to running the game, using the rules, planning for adventures, creating non-player characters, creating campaigns, modifying character classes, and a list of ready-made magic items with rules on how to create more. In a way the book could be seen as a "How To" guide regarding the material presented in the Player's Handbook. The Dungeon Master's Guide attempts to give guidelines on how to run the game, how to get the players interested in the game and how to describe game events. It also has something of an expansion to the combat and movement rules given in the Player's Handbook.

Monster Manual

The *Monster Manual* is basically a collection of a multitude of mythical and fantastical creatures both unique to the game and those derived from different real mythologies. The book basically just contains hundreds of ready-made statistic blocks for monsters the player characters can encounter, and rules on how to individualize these ready-made monsters or how to create

completely new ones. As the main idea behind Dungeons & Dragons is that of a brave party of adventurers who go on adventures, the monsters within the Monster Manual are the foes the DM sets as challenges for the players to beat in the course of the game.

The monsters vary in their level of challenge so that the DM can always find something that matches the party's level of ability. The creatures have been assigned a Challenge Rating, which shows the DM how difficult it is to overcome so that he or she can place a creature or creatures of optimum difficulty to face the player characters, thus providing for a challenging but still winnable situation. While most of the creatures are hostile from the player's viewpoint, some of them are benign, and can be used more as non-player characters than simple foes to overcome.

Campaign Setting

Even with three core rulebooks, the Dungeons & Dragons game still lacks one thing that is common in the field of role-playing games mainstream, as mentioned in Chapter 2.1.2: the game does not have a campaign setting, i.e. a game world description of its own, just a set of generic fantasy elements that provide a toolbox of sorts. Naturally the elements given in the books, such as the fantasy races (elves, halflings, half-elves, gnomes, dwarves and half-orcs), descriptions of typical fantasy milieu weapons (swords, daggers, spears, longbows, etc.) and equipment (different armours and shields as well as other "medieval" items such as torches, lanterns, horses and carts, etc.) and various magical items. This, according to Pettersson, has been the case from the very beginning of the game, and the core books would seem to give the impression that the DM should build his or her own fantasy world with the tools provided, possibly based on real world mythologies and the creations of fantasy writers (2005, 56). This is the way I myself went about when acting as the Dungeon Master for my own group of players. Everyone was eager to play, and planning for a fantasy world of one's own seemed like an interesting undertaking.

There are, and have practically always been, however, several separately available campaign settings, which give detailed descriptions of imaginary nations, creatures and so forth (ibid.). Some of them, such as Greyhawk, are rather generic and, for lack of a better word, typical fantasy settings, while others, such as Spelljammer, are quite far removed from the Tolkienesque vistas of medieval-like worlds (see Särkijärvi, 2008). The fact still remains that Dungeons & Dragons v. 3.5 has no ready-made world of fantasy of its own in the core rulebooks, just a listing of things that the players can use to piece together a campaign setting of their own, if they do not wish to separately acquire a fourth book or more.

4.2 Heuristic Analysis of Dungeons & Dragons v. 3.5

The heuristic analysis that follows was done by leafing through the rulebooks and by thinking back to the different situations where usability issues came up during my two years of Dungeon Mastering. While the analysis may not be as deep and detailed as it could be, it is detailed enough for the purposes of this thesis, and its results are further complemented by the focus group interview that follows. First I shall introduce the analysis method in short, followed by some experiences of poor usability that arose when playing the game. I shall follow this by describing each heuristic in detail and by analysing the game using the heuristics. The chapter ends with some concluding remarks and discussion on the suitability of heuristic analysis for the analysis of role-playing games.

Heuristic evaluation of a user interface is, in short, performed by "looking at an interface and trying to come up with an opinion about what is good and bad about the interface" (Nielsen 1993, 155). In this thesis I shall utilize Nielsen's ten usability heuristics (ibid. 115–153) in order to come to a conclusion about the usability of Dungeons & Dragons v. 3.5. The reasons for choosing Nielsen's heuristics for this analysis were twofold. First, these heuristics are simple,

yet elaborate way of testing a product's usability. Second, I wanted to see how well they could be ported from the world of computer interfaces to the world of role-playing games.

Before going on to the actual heuristic analysis I shall present some observations and experiences I have had with Dungeons & Dragons in the light of the five usability criteria, which were presented in Chapter 3. As stated before, the usability of a system depends on the system's learnability, efficiency, memorability, number and severity of errors and user satisfaction. The following describes the kinds of problems I ran into in the few years of playing the game, and the heuristic evaluation that follows will point out the in-depth reasons behind these problems.

Even though being a long-running role-player, Dungeons & Dragons had managed to evade me for quite some time, and I had played other games for eight years or so before finally entering a group of D&D players. The group was running Dungeons & Dragons v. 3.5. Compared to other games I had played, e.g. RuneQuest, Stormbringer, Call of Cthulhu or Cyberpunk 2020, just to name a few, D&D, as previously mentioned, seemed terribly complex and, in want of a better term, verbose. There were three books instead of the typical one, each written in fairly small print, with numerous tables and so on.

Despite the initial shock, however, I later bought the game for myself, for it was, and is, the top-selling role-playing product, and I wanted to have a closer look. I took the role of the Dungeon Master, and gathered my group to play. None of the players had ever played the game before either, so we all started on the same level, so to speak. The game took a very long time to learn, and I cannot say I ever fully learned it well enough to avoid referencing the rulebook in any situation that was not among the most common ones. The most likely reasons for this were that there simply were so many rules to remember and also that there seemed to be no logic behind

them, or at least that logic was never made transparent enough to make the rules become intuitive.

After about two years of fairly active gaming (about one session every other week or so), I felt rather exhausted and frustrated, and so did the players. The complexity of the game was constantly coming in the way of our fiction creation, and the multitude of little rules just felt like they only worked to hamper the experience. This naturally had an obvious effect on the efficiency of play, because all action had to be put on hold whenever a rule check was needed.

In a way, one could take the efficiency of a role-playing game to mean the amount and ease of creating high quality game fiction, but since the quality of game fiction is an individual value judgement, it is not as such generalizable. However, there are some things that seemed to create negative feelings towards the fiction creation process. Especially the combat system dragged our enthusiasm to the ground, because D&D is mostly built upon the idea of a party of brave people that goes on adventures, slays monsters and recovers treasure. The combat system is the most complex part of the whole game, and it felt rather impossible to hold on to the feeling of an epic battle when the world had to be constantly put on hold for rule checks.

The combat orientation of Dungeons & Dragons is most clearly made plain by a quick overview of the rules, the vast majority of which are either directly meant for combat situations, or at least have most use in one. The second, possibly even stronger indicator towards the combat-centredness is the fact that the characters can practically only get new skills, feats, and the like by gathering experience points. It basically is an awarding system built into the heart of the rules of the game, and through it the characters accumulate experience points whenever they win combats, i.e. defeat monsters, and once they have enough of said points, they can advance to the next level of proficiency. This way they gain all sorts of benefits and in effect become more

efficient in combating monsters. Because combat is practically the only way characters can improve their skills and abilities, combat is the thing players are driven towards even if they would like to do something else. The rules just do not support other types of gaming.

The memorability of the system was not that good either, and some players never managed to remember even some of the most common and widely used rules. There were naturally also some errors present, but that would seem to be the case with every role-playing game I have ever played. However, it might be possible to reduce their severity with different design decisions. Finally, all the previous issues tie into the amount of user satisfaction.

User satisfaction is, in my opinion, the most difficult area of the usability of a role-playing game to discern clearly. It is obvious that the unwanted interruptions in the flow of the game naturally decreased the satisfaction, so in that regard one might say user satisfaction was not always met. However, user satisfaction in role-playing games comes from so many sources completely removed from the system itself that factoring that into the game's usability is just not sensible. Such things as gripping plot lines, interesting non-player characters, fantastic game world descriptions or designs and lifelike player characters have everything to do with the collective creativity of the participants and next to nothing with the actual rule system. In short, we all had immense amounts of fun and numerous satisfying game sessions, even if we were at the same time terribly annoyed by the rule system.

In the following, then, I shall take a look at each of Nielsen's ten heuristics, and try to find out why exactly the game felt to have poor usability relating to the five parts described above. Since Nielsen's heuristics relate to computer interfaces, however, not every heuristic is viable directly. In such cases I have attempted to present an interpretation that suits the role-playing game environment, and describe the usability through this interpretation.

4.2.1 Simple and Natural Dialogue

The first heuristic revolves around the ways in which information is presented to the user. According to Nielsen, interfaces should be as simple as possible, they should match the user's task in the most natural way possible and ideally present just the information the user needs at any given time. Information should also be displayed close to other relevant information, and it should be laid out according to the gestalt rules (closeness, closure and similarity) of human perception. Graphic design can also help users focus on the important aspects through the use of different colour, typefaces, white space and so on. Furthermore, given the normal reading direction, information that is presented first usually gets the most attention. The "less is more" rule also applies to the choice of features and interaction mechanisms for a program, because every new feature means one more thing for the users to learn (and possibly use erroneously). This also results in the manual becoming bigger, more intimidating and harder to search. He does note that users should be provided with alternative interaction techniques when appropriate, but that for training, users should first only be given the single, general method that is preferable in most common situations. It is possible to teach the user other methods at a later stage, but they should not be introduced when they will only confuse the novice user. (1993, 115–123.)

The first heuristic is a rather broad combination of different things, but is obviously relevant to the case of role-playing games in general and Dungeons & Dragons in particular. The case of "less is more" regarding the features available is so complex that I shall return to it as the last thing in this heuristic. First I shall analyze the other issues.

At first glance the rule books seem quite useful. For instance, headings are set in different typeface and in turquoise colour as opposed to the otherwise black text on white background.

They are easy to identify and find. The books use numbered and bulleted lists, bolding and italics and different sidebars quite successfully, and tables have every other row coloured. The biggest problem regarding layout is the fact the actual body text itself is quite small, and the pages have really been stuffed full of text. The amount of available white space is minimal, and the spacing between words, lines and paragraphs is definitely small. Otherwise the layout is professional.

The importance and relevance of the information presented in the books is also not always very clear. For example, the starting pages of the Player's Handbook (2003, 4–6) contain an introduction to the game, and include some short and useful explanations to central concepts of the game and role-playing games in general as well as the things players need to play the game. Then, however, the introduction goes on to explain the rule system intricacies, which does not seem to be at all necessary for a player who has just picked up the book for the first time. A concise introductory explanation of the rules can be useful, but to go into fine detail already in the introduction will only work to confuse the reader.

The number of features available to the user at the beginning is a difficult concept to define, because each playing group naturally decides what the best way to proceed is. Some might want every player to read through the Player's Handbook, for example, before they even consider playing, while some might wish to begin with only the Dungeon Master familiar with the rules. The Player's Handbook states:

> You don't have to memorize this book to play the game. Once you understand the basics, start playing! Use this book as a reference during play. When in doubt, stick to the basics, keep playing, and have fun. (2003, 5.)

However, nowhere does it clearly state what these basics actually are, so the real level of proficiency needed is left to the discretion of the users themselves. In this case, as we can

assume the Dungeon Master to have the most knowledge of the game, he should be the person

to decide what these basics are. And yet, even though the Dungeon Master's Guide has a section

named Teaching the Game, the only reference to the elusive basics is:

> Once the PCs are created, don't worry about teaching the players all the rules
> ahead of time. All they truly need to know are the basics that apply to
> understanding their characters (how spells work, what AC means, how to use
> skills, and so forth). (2003, 6.)

The number of features available in the game system is truly staggering. This is already obvious

from the fact that the manuals are presented in three different volumes, each more than three

hundred information-filled pages long. As previously stated, the rule system mostly revolves

around the combat system. Combat rules alone in the Player's Handbook take up 27 pages, and

this only explains what kinds of actions the characters can do, how attacks are made rules-wise,

how the characters' condition changes from taking damage or how the characters can move

around during combat. The combat section does have a Combat Basics sidebar, which gathers

on one page all the essential things that have to do with combat, but as the rule system is so

complex, the sidebar cannot possibly hold enough information to accommodate smooth and

flowing game play. After all, compressing 27 pages of detailed information into one page is just

not possible.

All in all, it seems like the designers of the game wanted to cover every possible idea the players

could possibly have regarding actions in combat. This has led into a state where different actions

have been divided into different action types known as standard actions, move actions, full-

round actions, free actions and miscellaneous actions. Each category furthermore includes

different types of actions a character can take, and each has to some extent their own rules to

follow. There is also a list of special attacks, all of which are more complex and complicated

than the standard attack a character can perform with his or her weapon of choice.

While it is understandable, and to some extent deriving from Dungeons & Dragons' war game history, the choice to try and document – and give special rules for – every possible combat manoeuvre the players could imagine, would seem to work against itself in the usability of the system. Instead of being an all-encompassing system of things one can do, it becomes a defining and confining system of things one can do. When every move is categorized, organized and has a special rule, the players have no choice but to accept the game's vision of what is and is not possible in a combat situation. The rules become a list of "legal moves" from which the players can choose, and they need to know all of them in order to play the game to its full extent. Furthermore, the Dungeon Master's Guide presents even more combat rules, and quite many of the creatures presented in the Monster Manual have special abilities that require the use of individual add-on rules explained in the monster's description. The rules also require the use of the whole range of dice, i.e. four-sided, six-sided eight-sided, ten-sided, twelve-sided die, and twenty-sided dice. None of this seems is neither simple nor natural.

4.2.2 Speak the Users' Language

The second heuristic regards the choice of words and the ways information is linguistically presented to the user in the system. Nielsen states that user interfaces' terminology should be based on the users' language rather than system-oriented terms, and that whenever possible the dialogues should be in the users' native language. Words in general should not be used in non-standard meanings, unless a meaning that would be non-standard in general use is the standard use in the user community. This also means that speaking the users' language does not always mean that the interface should consist of a vocabulary built of few choice words that are in common use. Quite the contrary: when the user population uses a specialized terminology, the interface should use it as well. Furthermore, when describing actions and interactions, the system should view them from the perspective of the user, not of the system. (1993, 123–126.)

Probably the most obvious usability problem with Dungeons & Dragons from the users'

perspective in this case is that the game is, indeed, printed in English. While English language

proficiency is nowadays fairly widespread, and people with even an average handle on the

language could be presumed to be able to operate most computer interfaces, for example, role-

playing games are a different matter. The rule structures as such can be understood even in a

foreign language, but they still need to be referenced in the foreign language during the game

itself. This might be troublesome to some users, but even more problematic is the case of

different diegetic elements. For instance, the players need to come up with apt translations for

all the weapons, equipment and, most importantly, the fantastical creatures, if they wish to play

in their native language and avoid their characters' speaking a strange mix of languages. Some

knowledge can naturally be lifted from other sources of the same genre, such as fantasy movies

or books. From them the players most likely already know the translations for familiar fantasy

elements such as swords, shields, bows, dragons, orcs or giants. But what about translations for

more exotic things such as glaive, guisarme, splint mail, dust mephit or dire bear? It is not

enough to understand what these things are; the players need to be able to comfortably refer to

them during the game, in their own language.

The non-nativity of the language was often a problem, especially when I acted as the game's

Dungeon Master, because it was difficult to come up with translations for all the creatures and

other fantasy elements I wanted the characters to face. Obviously it might have been possible to

run the game in a sort of a mix of Finnish and English, but that would have felt even more out of

place, and would have given the fiction a somehow semi-finished undertone and a feeling

spuriousness. One further issue with the language used in the books was the fact that, with the

game being of American make, all the measurements are given in the Imperial system. Players

more familiar with the metric system might obviously have trouble coming to terms with inches,

feet and pounds. Such a thing makes understanding, and immersing into, the game world needlessly difficult.

In a way, speaking the users' language in role-playing games in general is a two-edged sword. The whole hobby is a fringe activity in the large scale of things, so it is only natural for a specialized vocabulary to appear and develop. In this Dungeons & Dragons succeeds very well, because the game in its first manifestation set a type of de facto vocabulary of role-playing games, and v. 3.5 follows the tradition, keeping much of the original terminology. Since Dungeons & Dragons has had such a large impact on the whole of role-playing it is only useful to keep on using the vocabulary that has become the standard among the users. One simple example of how the system uses the users' special language is the simple word 'dice'. To the general population the word most likely brings to mind the six-sided cubes familiar from so many board games. To a role-playing hobbyist, however, the word can mean anything from a four-sided "caltrop" to a twenty-sided, almost spherical object, and beyond. To this end, the system also uses shorthand descriptions when referring to the different dice by using the prefix "d" followed by the number of sides. For example, the four-sided dice is called a d4 and the twenty-sided a d20.

Dungeons & Dragons works variably in describing interactions from the users' perspective. For example, on the first pages of the Player's Handbook, there is a short section describing what the players need in order to play. The wording follows the logic of directly addressing the user with phrases such as "what you need", or "your group needs". However, just a little below that, when explaining the type of dice, the book turns the tables and discusses things from the designers' perspective with phrases such as "we describe". (2003, 5.) This is just one isolated

incident, however. Most of the books directly address the reader, and tell what the users can or need to do, not what the system does.

4.2.3 Minimize User Memory Load

The third heuristic is concerned with the number of instructions a user needs to remember in order to use a system successfully. Nielsen writes that in order to minimize the users' memory load, the system should be built upon on a small number of rules that stay the same all the way through the user interface. This is simply derived from the fact that if the system is dependent on a very large number of rules, the users will have to learn and remember all those rules, which makes them nothing but a burden. On the other hand, if the system is not governed by any overall logic at all, the user has to learn every element on its own. It is thus impossible to work the system without already knowing (and remembering) everything. Using generic commands in the interface makes similar things happen in different circumstances. This enables the user to work the system only by learning a few commands. These generic commands do not need to perform exactly the same function in all circumstances; the main point is that users can think of the command as a single unified concept. (1993, 129–132.)

As we have already seen with the previous two heuristics, Dungeons & Dragons does not work very well in order to minimize the user's memory load. Even though there is seemingly only one "generic command" to resolve all game events – namely that of rolling a d20 and adding the relevant modifiers – this notion is somewhat misleading. The Player's Handbook states:

> Dungeons & Dragons uses a core mechanic to resolve all actions in the game.
> This central game rule keeps play fast and intuitive. […] Whenever you
> attempt an action that has some chance of failure, you roll a twenty-sided die
> (d20). To determine if your character succeeds at a task (such as attacking a
> monster or using a skill), you do this:

- Roll a d20.

- Add any relevant modifiers.

- Compare the result to a target number.

> If the result equals or exceeds the target number (set by the DM or given in the rules), your character succeeds. If the result is lower than the target number, you fail. (2003, 4–5.)

While this is not inaccurate as such, it is still a gross oversimplification of the situation. Most problems arise from the line "add any relevant modifiers", because the number of modifiers to be used in each situation can vary immensely. As an example we can take a look at using skills, which is, in comparison to combat, a fairly simple action. To find out if a character succeeds in using a skill, a skill check is performed. This happens by applying the following formula: 1d20 + skill rank + ability modifier + miscellaneous modifier (ibid. 61). Skill rank refers to the amount of training a character has had, ability modifier to his or her natural ability, and miscellaneous modifiers any and all things that might affect the situation. At its worst, all this might result in a situation as described in the following.

Let us assume a player is playing a character who is an elven ranger with goblins as his favoured enemies. The DM has set up a situation where the character has the chance to notice a small group of four goblins hiding in dense underbrush. First the DM needs to roll Hide checks for all the goblins to determine how difficult it is for the character to spot them. This would require the DM to roll the d20 four times and to add the relevant modifiers. This means checking the rules for hiding, which tell the DM that the roll will be modified by +4 for the creatures' small size. The rules also tell the DM to refer to about 70 pages forward, to check how differing degrees of concealment affect the roll. In this case, the DM might choose to give the goblins a +10 bonus for their good concealment. If any of the goblins would be moving, the roll for that particular

goblin would be modified by a -5 penalty. If any of the goblins would happen to have a feat called Stealthy, that goblin would get a +2 bonus. In the worst case scenario, the DM would have four different situations, four different rolls and four different combinations of modifiers, finally resulting in four different target numbers for the player trying to spot the goblins. Once the difficulty is finally determined, the player would roll to see if his character spots the goblins. The player rolls a d20 and adds his skill ranks and ability modifiers, which is in itself trivially simple. Then he would need to add the modifiers. As the character is an elf, he gets a +2 bonus for his keen eyesight. Since he is also a ranger, the rules for Spot tell him to refer to about 40 page backwards to see how much the bonus is for spotting favoured enemies. If the DM asked for the roll when the character was more than 10 feet away from the goblins, each 10 feet would count as a -1 penalty. If the character were also distracted by something else, he would incur a -5 penalty.

Some of the modifiers, such as the skill rank and ability modifier would have been counted and marked down on the character sheet beforehand, but the miscellaneous modifiers would have to be applied when rolling. Thus the actual roll for the player might be, for example: 1d20 + 7 (for skill rank and abilities) + 2 (for favoured enemy) -3 (for the distance) -5 (for talking to a fellow character), which would then yield the spot result. And this would only happen after the DM had rolled a similar set of rolls for each individual goblin in hiding. For a simple situation with the premise of "There are goblins hiding in the underbrush, will he notice them or not?" all this seems terribly complex, time consuming, frustrating, and entirely impossible to remember, which it naturally is.

4.2.4 Consistency

The heuristic of consistency is the most basic of the usability principles. Similar information should be presented in the same place and in similar manner throughout the interface in order to help its recognition. (Nielsen 1993, 132–134.)

Since consistency is such a central notion of usability, it is difficult to name things which only have to do with consistency. In a way, consistency is always tied into something else, and issues with consistency have already been pointed out in the previous heuristics, and more shall be presented in the following ones. I would also see consistency in the case of role-playing games to also refer to the way things are presented to the players and if the rules follow the same logic throughout or if there are small, individual rules for different cases or if the procedure-like game processes such as character creation or multi-part actions go logically from the first step to the last.

If we only look at the way information is laid out in the books, consistency would seem quite good. The layout is consistent throughout, tables have been populated by following the same logic and look, and the three books themselves follow the same logic in presentation throughout, even though their subject matters differ.

Perhaps the one thing that seems most inconsistent with the game is the way it presents itself. An analysis of the rules gives the game a strong gamist (see Chapter 2.2) impression, yet the game in its various descriptions of itself tries to claim to be all of the three at once. The Dungeon Master's Guide presents three styles of play, namely Kick in the Door, Deep-immersion Storytelling and Something in Between, as equal options in the ways the game could be played (2003, 7–8). Still the rules strongly favour the first, while the second would require the players to mostly disregard all the rules, since they have little to no use in deep-immersion

role-playing. This is not, of course, impossible, but it begs the question if the game is still the same game if the original rules have no place in it.

One other example of the lack of consistency can be seen in the way characters are created for the game. Taking a look back at the description of the character creation process in Chapter 2.1.3, we can see that it is not entirely unified and homogenous, but more a mixture of several different systems. For instance, there is the traditional method of rolling ability scores, but still they can be modified or switched around after the fact, as it were. In a similar manner, the skill point distribution is completely up to the player's discretion, after the pool of available points has been determined. Even further, the character's equipment is bought with in-game currency as opposed to character creation points or other similar asset. While not necessarily a design flaw as such, the variety of different rule systems in the creation process might work to confuse the player.

Furthermore, the rule system, on one hand, encourages the players to approach their character-in-development from a character concept point of view, meaning that the player should first have a rough idea of what kind of a character he or she would like to play, because the character is not created completely at random. Then, on the other hand, the character creation rules begin by randomly generating the characters' abilities, their primary resource and most defining factor. Even though the ability scores can be switched around during character creation, the whole process is a bit of a gamble, because the player can never quite get the character he or she wants to play, because the dice determine the starting conditions. In addition to this, if the players follow the character creation rules in the order they are written (which would seem like the most logical order to proceed with procedural instructions such as these), they will arrive at some of the issues concerning character concept only at the very end. These are rather relevant

things such as the character's background, name, appearance, and so on. Of course, since the definition of character concept is not explicitly described in the rulebooks, this apparent inconsistency might only be a result of my own idea of what is central to a character's concept clashing with the game writers' idea.

4.2.5 Feedback

The fifth heuristic describes the way in which the system or interface should report its status to the user. Nielsen states that the system should be informing the user about what it is doing all the time, as well as telling the user how his or her input is being interpreted. Feedback should also not only be tied to errors, but the system should provide positive feedback, and it should provide feedback as soon as possible. The feedback given should also not be expressed in abstract and general terms, but clearly inform the user of whatever is going on. Informative feedback is also extremely important, because no feedback leaves users guessing what is happening, or in the case of system error, what is wrong. (1993, 134–138.)

This heuristic cannot be tied into role-playing games very well, because the system and its states are completely in the hands of the participants. It is the responsibility of the players, and the DM in particular, to tell how each situation unfolds. As presented in Chapter 2.1.2, the whole process of playing the game is a sort of exchange of states through feedback. Since the whole process is the participant's responsibility, it cannot be as such used in the evaluation of the game's usability. Obviously there is some relevance in the speed at which the user can give the feedback to the other participants, but that mostly results from other aspects of the usability of the game.

A certain type of parallel could be found in the way the books instruct the players and DMs to describe different situations, such as the ways magic spells look, how enemies react to being wounded in combat, or how the DM should describe different scenes. Naturally good and vivid

descriptions will enhance user satisfaction in this case, but since the case is such a subjective one, it becomes a value judgement based on each evaluator's sense of good and gripping drama, and cannot therefore be used as a measurement of the system's feedback quality. To some players, detailed descriptions of a violent and mortal combat might provide immense satisfaction, while others might simply become bored or distracted. The quality of feedback in this case is thus more a feature of the users themselves than that of the system.

4.2.6 Clearly Marked Exits

The sixth usability heuristic for interfaces considers the ways the user feels comfortable and assured when using the system. As Nielsen states, users should be provided with easy ways out of as many situations as possible in order to increase their feeling of being in control. Undo and escape functions will encourage users to rely on exploratory learning, since they can try out different actions, knowing there is a way back or out without ill effects. User interface design should have as a basic principle the fact that users will make mistakes no matter what, and it should therefore be as easy as possible to recover from the errors. (1993, 138–139.)

The concepts of undo or escape in the sense of software interfaces placed into the world of role-playing games is a peculiar one. As previously stated, role-playing games always attempt to simulate some sort of existence, at least to some extent. While real life, sadly, yet lacks the option of undoing one's actions after the fact, some fictional worlds of course might. However, since one primary aspect of the fun in role-playing games is making choices for the characters, it could be argued that an undo function would only work to diminish the impact of said choices. If everything could be reversed, the players and/or characters would not need to take responsibility for their decisions, since all the bad choices could always be erased. Dungeons & Dragons, however, offers exactly this type of undo function in the form of different spells that

restore life to a dead character. While these spells are not everyday or cheap, they are still available for an affordable price, and are also available to player characters as class benefits. The feeling of a life-threatening adventure, an epic battle, or a self-sacrificing heroic death for the greater good become less intriguing, when the characters performing them live with the knowledge that they could return from the dead whenever someone is willing to take the effort, pay the price, and click the figurative undo button.

4.2.7 Shortcuts

Heuristic number seven is concerned with how to speed up user actions after they have learned to use the system. Nielsen writes that even though users should be able to operate an interface just by knowing a few general rules, experienced users should be able to perform frequently used operations especially fast, using dialogue shortcuts. The interface should facilitate the user to jump directly to the desired location in large information spaces, or to be able to reuse their interaction history. (1993, 139–142.)

This heuristic is again one that is not very viable in the context of role-playing games. This simply results from the fact that there really are no dialogue shortcuts one could take as such, since all interactions are in the control of the participants. Some things might be considered as shortcuts of sorts, though. For example, the shorthand descriptions of dice rolls, e.g. 2d10+4, naturally speed up play, since they are immediately clear and faster to interpret than the proper linguistic rendering of its meaning (roll two ten-sided dice, sum the outcomes and add four to the result). Since, however, this way of marking the dice rolls is used throughout the Dungeons & Dragons game from the very first pages onwards, it is not really a shortcut as such, rather a form of special language for a set group of users.

Another design feature that might at first be viewed as a shortcut is the fact that the character sheet (see Appendix) has ready-made formulae, and a space for the results for calculating different values for often used elements, such armour class, skill modifiers, or saving throws. Again, however, since this is not a faster way that more advanced users could use, but a basic feature of the system, it is not so much a shortcut as it is a feature of the system, similarly used by all users. Furthermore, even though there are spaces in the sheet reserved for often used values that would otherwise need to be calculated separately each time they are used, they only help the game work faster by so much. The complexity of the rule system and the number of possible miscellaneous modifiers is so high (see Chapter 4.2.3) that the benefit received from having ready-calculated values ends up being quite small.

4.2.8 Good Error Messages

As Nielsen states, error situations are important factors in usability, because they are situations in which the user is in trouble and likely unable to use the system, and because they present opportunities for helping the user understand the system better. Systems should have both good error messages as well as good error recovery. (1993, 144–145.)

As with exits before, error messages, too, are not as such directly a part of the usability of a role-playing game, and for the same reasons. Error messages or error recovery are not a part of the system of the game, but the responsibility of the players themselves, and hence the error messages and recovery are done by the users, not by the system. It is obvious, though, that an RPG system in which other parts of usability are handled with skill and work well, it is much easier for the participants to notice and recover from errors. Easily searchable manuals or clear rule texts altogether will help the players notice if they are doing something wrong and also find the correct way of doing things once an error has been noticed.

4.2.9 Prevent Errors

Preventing an error situation from occurring is, as Nielsen notes, even better than having the good error messages discussed above. A way to reduce the number of errors can be done by the system by asking users to confirm that they really mean to do what they instruct the system to do. (1993, 145–148.)

Following the error messages above, preventing errors, too, is not as such a part of the usability of an RPG. The closest thing to error prevention in a role-playing game would most likely be other players, who ask whether a player really wishes to go on with an action they deem unwise or foolishly perilous in the diegetic framework or who note when a player is about to use the wrong rules, roll the wrong type of dice or something similar. Again, however, none of these are in any way results of the design of the game itself. Naturally, if the usability issues that do apply are in order, there is less need to prevent any errors in the first place.

4.2.10 Help and Documentation

The last heuristic offers the idea that an ideal system would be one that is so easy to use that no further help or documentation is needed to supplement the user interface itself. This goal, however, cannot always be met, largely due to the fact that most user interfaces have so many features, which in turn warrant a manual and possibly a help system. The existence of a manual or a help system do not, however, mean that the interface can be poor in usability. In other words, a manual should not in any way reduce the usability requirements of the interface itself. Users do not usually read manuals, or when they do, they are usually in some sort of panic and need help as soon as possible. To this end, manuals should be easy to search. The two main search tools in printed documentation are the index and the table of contents. The information should be presented to the user in task-oriented format, sequenced in the order the user will need

it. Sequences should be numbered, and specific instructions will be more understandable when tied into conceptual models, such as diagrams. Applying the instructions is easier if they are presented in step-by-step form and can be referred to, rather than remembered, while performing the task. In one sense documentation can be seen as extra features of the system itself, and a big and hard to search manual will only further complicate it. (Nielsen 1993, 148–153.)

As was stated in Chapter 2.1, role-playing games as products are, in essence, just documentation and help systems, toolboxes for the players with which to simulate fiction. In this sense the heuristic about documentation cannot be used as such, for without documentation there would not be a game. The documentation is not a complement to a system, it is the system. Then again, the rules of the game do exist without the documentation, but cannot be acted upon without some reference and knowledge of their existence. As stated before, the rule system of Dungeons & Dragons v. 3.5 has a huge load of features, all of which are explained in detail throughout the three rule books.

Based on my evaluation, the rulebooks of Dungeons & Dragons as documents have good usability. The three books have different colour covers, so it is quick and easy to distinguish them from each other just by looking. The books have tables of contents, indexes, glossaries and other types of quick reference lists both in the first and in the last pages of the books. The layout, apart from the small typeface, is done well, and text is in the majority of cases clear in its meaning. In some cases, where the rules are very complex, there is the danger of misinterpreting them. This, however, is not necessarily the fault of the documentation itself, but simply of the complexity of the rules and the difficulty of acting upon them. Tasks which have several parts are generally explained as step-by-step lists. Things such as the combat actions of grappling or overrunning an opponent or sundering (breaking) an opponent's weapon are explained in the

Player's Handbook in step lists of three or four steps each. The step lists do not, however, only have one, single-sentence structures, but rather explain the cases in several sentences per each step. This can make following some of the rules complicated, because the user needs to read and remember several lines of text for each step of the action. The books also use different diagrams and drawings to help the players understand the more complex rules, most of which are again tied into combat situations. Some examples such as flanking or charging opponents or the increased attack range of larger than human-size creatures are accompanied by illustrations.

It would seem that the designers of the books have wanted to avoid placing the same information in more than one place in the texts. This will naturally increase the consistency of rules, when there is no chance that the same rule has been explained differently in two places, but it does sometimes make using the books a bit difficult. In cases where a rule from some other part of the book, or from a different book, is relevant to whatever the players are reading at the moment, the books give a page reference. This can sometimes overly complicate the situation, since the player now practically needs to read two or more pages simultaneously. In most cases this could have been avoided by simply restating the relevant rule where it was needed instead of, or accompanied by, the page reference. All in all, however, the documentation itself leaves little to improve upon.

4.2.11 Concluding Remarks on the Heuristic Evaluation

As the analysis has shown, the biggest problems of the usability of Dungeons & Dragons v. 3.5 lie in the complexity of the rules and the number of features of the game system. There is simply too much information for anyone to be able to remember at once, which results in constant breaks in the narration, fiction creation and the immersion. As a result, the immersion of the players is hindered as the flow state is disrupted. Chapter 2.1.3 framed role-playing games as a

creative activity, but a rule system that constantly forces its users away from the creative mindset, and away from the immediacy mode of working mentioned in Chapter 2.2, simply does not provide a good basis for immersive playing.

From the results received through this heuristic analysis it can easily be seen that usability heuristics originally devised for the user interfaces of computer software can, indeed, be used to evaluate the usability of a role-playing game. Some adaptations naturally had to be made due to the fact that RPGs are the product and the manual all in one, and some of the heuristics were not suitable to use in RPG product context at all because they referred to issues that lie in the hands of the participants. All in all, however, the heuristics and their suitability for this type of use go to show that role-playing games can successfully be likened to a computer software interface and be evaluated with similar criteria.

4.3 Performing a Focus Group Interview

This chapter shall describe what a focus group is, how one is arranged and what should be taken into account when organizing one. The chapter also describes the setting I used for my own focus group interview, and at the end of the chapter the discussion topics of my focus group are described.

In short, focus group is a type of interview, in which the interviewees form a heterogeneous group of four or more people, and are then interviewed as a single group. The method mostly yields qualitative information. Typically focus groups are used in usability testing to deepen an earlier analysis, to explain surprising or conflicting results or to question results obtained in earlier research. (Parviainen 2005, 56–61.) In this study the purpose is mostly that of deepening

earlier analysis, although the chance of obtaining new information or of receiving new viewpoints is not excluded.

Davis, Steury & Pagulayan write about computer games, but the similarities are so great that their views can be almost taken as such in the context of an RPG as well. They note some shortcomings of using focus groups in game-related studies:

> [They] can be useful for concept generation in the initial stages of a project or for obtaining a better general understanding of a problem space in some circumstances. However, they are poor at providing specific, actionable data that help game designers make their games better for several reasons. In focus groups, consumers are often asked to give their reactions to abstract gaming concepts or ideas rather than the implementation of the concepts (though this may sometimes be the case). Judgments about the value of a concept can be dramatically different from judgments of the concept's practical implementation in a game. Focus groups are also susceptible to a host of group pressures that impact the quality of the information they yield. One or two group members may dominate the discussion, while contributions from less vocal members are lost. (2005.)

While the critique above has merit, I feel confident that in this case using focus groups as a research method is justifiable. I am studying a complete, finished product with which both the moderator and the interviewees have long experience. The interviewees have also known each other for quite a long time, and the group dynamic is such that group pressure most likely is not an issue, and as such does not have a negative effect on the results. See the following chapter for a more in-depth discussion on the flow of the actual interview.

The typical focus group interview, as Parviainen mentions, is moderated by a person who is the interviewees' peer, and thus understands and speaks their language and is generally familiar with the subject matter. This way the moderator is readily accepted and understood by the interviewees, and the moderator has more credibility. This type of peer moderation can be especially useful when studying subcultures, highly specialized professions, specific parts of a

society, or certain age groups. (2005, 55.) This is one of the reasons I have chosen focus groups as my second research method. I can act as the expert on both role-playing games and usability, and discuss both subjects with ease and be understood by my interviewees, and also thus moderate the discussion towards the subjects I am studying. Furthermore, as Parviainen continues, contrary to Davis et al. above, focus groups is an ideal method when the researcher wants to find out about user needs, likes, subjective reactions and possibly receive improvement ideas on usability (2005, 55). Since all of the above are, at least to some extent, the aim of this research, it is only reasonable to use a method that supports these goals.

In the following I shall present the typical flow of a focus group interview from start to finish. The following four steps and their clarifications come from Parviainen (2005, 56–61). In between each step I describe how each step was handled in my own research.

1. Recruiting participants and forming focus groups

- The optimal group size can change, but 6–8 people is usually a good number. This should result in a balance between each participant getting to have their say and keeping a lively conversation.
- The participants should be as heterogeneous as possible, i.e. the users should be as different as possible.

I recruited one group of interviewees. It consists of four people, two men and two women, all between the ages of 20 and 26. All the participants had played Dungeons & Dragons v. 3.5 before. While the number of people taking part is low compared to the number of people usually taking part in a focus group, it can be justified through the fact that four people is the average size of a typical role-playing game group. The number of people is thus in line with the research subject.

The group of interviewees was made up of people who had all played Dungeons & Dragons game mastered by me over the period of about two years. To some of them it was their first role-

playing game ever, while others had played other RPGs for several years before. None of them had tried Dungeons & Dragons before, however.

My expectations regarding the interview results were, in some sense opposite to each other. On one hand, I was expecting to see quite a lot of variation in opinions between the interviewees simply based on their difference in experience. I assumed that the more experienced interviewees would have more refined views on the issue and simply more to say about it because they had played various different role-playing games over several years. On the other hand, I was aware of the fact that all the participants of the group had been exposed to my personal views and interpretations of this particular game before, since I had been their game master. I assumed that because of this, their opinions on the game in general would be somewhat in line with what I myself feel. In short, while the interviewees formed a heterogeneous group by virtue of having very different backgrounds, there was the chance that their views on the matter would be rather uniform.

There are some issues in the above description that merit further commenting. As Parviainen, too, mentions, it is important to take into consideration some matters that affect the quality of conversation. Even though the participants should be different from each other, they still need to be similar enough in order for there to be common opinions and meanings. If the participants' opinions collide too harshly, hurt feelings or awkwardness may ensue. The moderator should also keep a close eye on the group dynamic, so as not to break it and make the situation unnatural. (2005, 57.)

2. Preparation for the research situation

- The optimal situation would be that a pilot study be done before the actual one in order to locate any problems or other difficulties.
- The optimal location for the interview is peaceful and quiet, preferably a room with a table that could hold refreshments and allows for the participants to relax.

I did not have the chance to arrange for a pilot study, because resources were too limited.

Willing interviewees were difficult to find, and the scope of the research to be done for this

thesis was already quite extensive for a study of this size.

The interview was performed in the home of one of the interviewees, a fact which had several

benefits. First, the space was familiar to all of the interviewees already, so they were more

relaxed than if they had been in an unfamiliar place. Similarly, I as the moderator felt at ease

and could better focus on the interview situation. Second, there was ample room, enough chairs,

a large table and other paraphernalia necessary for the interview. Third, I assumed the familiar

place to work as an encouragement for them to speak more openly about their feelings towards

Dungeons & Dragons, and to remember actual game play situations in which they ran into

usability problems.

3. Performing the interview

- It is best to break the ice first, e.g. with each participant introducing themselves or by the moderator serving refreshments. It is also important to note to everyone that the interview is confidential and that a person cannot be singled out from the final research publication. Furthermore, everyone is taking part out of their own free will and is free to exit the situation if they so please, without the fear of repercussions.
- The moderator should encourage everyone to participate in the conversation and should even promote small arguments to thoroughly plumb the issue. A strict line should still be drawn between a fruitful argument and one in which someone gets insulted or the argumentation gets out of hand.
- The moderator should ask open questions, which do not merit a simple *yes* or *no* answer. Good questions are clearly formulated, easy to

- understand and neutral, and can be either highly structured or very open and theme-like.
- Questions are presented in a logical order, in which general questions get asked first, followed by the narrower ones, and less intimate questions leading into more personal issues.
- The interview is recorded either by writing down the viewpoints or by recording audio and/or video. If recording is used, it should be made known to all participants. If someone does not want to be recorded, the devices need to be shut off.

Breaking the ice was no problem with the group, because all the participants already knew the moderator and each other. The questions I used were very open-ended, almost theme-like. Most of the more specific ones were derived from the results of the heuristic evaluation I performed on Dungeons & Dragons v. 3.5 in Chapter 4.2, while the more general ones were drawn from the theoretical issues discussed throughout Chapter 2. The discussion topics are listed below, in the order they were presented to the group. I feel the order and structure of the topics quite successfully followed the logic of asking general questions first and narrower and more intimate ones later.

The following lists the themes planned for discussion in the focus group interview:

- General feelings towards Dungeons & Dragons as a game, good and bad experiences.
- The ways the game did or did not respond to expectations the players had.
- The idea that role-playing gamers are not only users but also makers and creators.
- The ways a role-playing rulebook should be used (read through and memorized before ever playing / only used as a reference material when needed / something in between).
- The effect of having to reference rules during the game.
- The effect of using so many different dice.
- The effect of foreign language and an unfamiliar system of measurements.
- The general searchability and usability of the rulebooks as reference material.
- The learnability of the rules and issues helping or hindering the process.
- The feeling of logic and intuitiveness of the rules.
- The source of fun in role-playing games.
- The methods and ways of immersion.
- The characteristics of a good and usable role-playing game and rulebook.

As none of the interviewees had anything against recording the interview, I audio-recorded it and later simply listened to the tape and made the necessary observations and conclusion from there. The selection and relevance of the recording method is discussed further below.

4. **Analyzing the material**

- The resulting material is the comments made by the participants of the focus group. Depending on the method used to safekeep this material, the analysis is made either from transcriptions, recordings, written notes or the simply the interviewer's own memory. The method is naturally also dependent on the aim of the research.

Transcribing the recordings was not, in my view, required in this particular case, as the research focuses on finding opinions and ideas. Transcription would naturally be ideal, if the interview situation itself was crucial to the study. That, however, was not the case here, and thus the recordings sufficed. Nevertheless, since the situation is never completely irrelevant, I kept notes on the group dynamic, and especially paid attention to any unexpected reactions or situations that occurred during the interview. The main points of these notes are presented with the results in the following chapter. I also used the notes to keep myself aware of my role as the moderator, and noted down any cases in which my own actions might have resulted in a surprising reaction from the interviewees.

4.4 Results of the Focus Group Interview

In the following the results from the focus group interview are elaborated on. I present the background information of the interview first, and follow that with a report of the interviewees' opinions and views.

4.4.1 Background Information on the Interview Situation

The interview took about an hour, during which the group discussed the themes and questions I had planned. The interview was held in Finnish, the native language of all participants. I myself took on a role of mostly observing and guiding the interviewees so as not to influence their feelings and opinions. The interviewees' opinions were in line with my hypotheses, and thus provide support both for the findings of the heuristic analysis as well as for the views on role-playing games in general that I have presented in the previous chapters.

The group dynamic worked well during the interview, everyone had an equal share in the time spent presenting their views, and no hurtful confrontations took place. One interviewee at times seemingly took on a role of a secondary interviewer, asking other interviewees to be more specific or to clarify something they had said. Since the follow-up questions were fully in line with what I myself would have asked, and since they did not seem to upset the group dynamic, I did not see it necessary to intervene, especially as this habit did not come up more than a couple of times during the interview.

All the interviewees took on a rather official tone of voice and manner of speech when the interview started, but that lessened, if not disappeared, as the interview went on. As I had a short discussion with the interviewees afterwards, they confirmed that the simple presence of a recording device was the most likely reason for their atypical behaviour. In spite of the official speech, the situation was altogether comfortable. The interviewees were almost surprisingly unanimous in most cases, and after the interview no one reported having said anything against his or her own feelings. With these observations I feel comfortable in the fact that the results of the interview are valid and correspond with the interviewees' true opinions.

The two themes of fun in role-playing games and the ways of immersion were not individually discussed, because they constantly came up in the interview. The presence of these two themes is thus also visible throughout the following report.

4.4.2 Elaboration on the Interviewees' Responses

The interviewees reported having had fun while playing Dungeons & Dragons v. 3.5, but they also found numerous problems with the game as well as features that were not to their liking. The rules were seen as all-round in the sense that there were lots of them, but also as definitely combat-focused. They reported feeling that there was very much material available, such as different pieces of equipment, various deities and monsters, but also that the material in itself did not awaken a feeling of interest. Furthermore, they felt that since the game seemingly tries to list everything there is, it limits creativity by generating a feeling there is nothing else. This covered both the rules of the game as well as the diegetic elements, such as the equipment available. This observation would seem to be in line with what has been said before about the one-dimensional rules, the amount of micro-level detail and the lack of a campaign setting.

The number of rules and the way they went into fine detail were reported to have been somewhat surprising and not entirely corresponding with the mental model the interviewees had of role-playing games before they first played the game. The concept of an adventuring party, however, was reported to have been a familiar one and that Dungeons & Dragons did excel in presenting that. This can be seen to follow the usability ideal of predictability that was discussed in Chapter 3.

The idea that players are not only users of a role-playing game, but also the creators and makers of the game attracted unanimous support. The interviewees felt that the game simply would not be that interesting if the players themselves did not constantly affect what happens in it through

their own actions. They reported that the dynamic, constantly changing and unpredictable advancement of the game events was what brought enjoyment. Compared to a computer interface, which was seen as rigid and unchanging, a role-playing game was seen to be flexible and modifiable. The rules and the material were likened to a toolbox or a piece of clay, both as metaphors of something that helps creativity, but does not do anything on its own. The game was, however, mostly seen only as facilitating the Kick in the Door style of play, and the idea of playing a game of Deep-immersion Storytelling with the rules of Dungeons & Dragons was mostly seen as a silly idea. This view and the reasoning behind is exactly the same as the one I presented in the heuristic analysis (see Chapter 4.2.4).

The interviewees felt that it is necessary to read the rule books before playing the game, if not for anything else then at least so that everyone knows what is in them. The amount of information was, however, seen as impossible to remember. As a result, they felt the rulebooks have to be referred to far too often, which in turn slows down the game play. One interviewee said that having to take a break to reference a rule book while trying to immerse in the game world and its events was the equivalent of "running head-first into a wall". The rest echoed the view by adding that needing to take a break effectively worked as a sore reminder that the whole thing is just a game and that everything was just based on the rules.

The high frequency of dice rolls that are needed in the gaming situation was also seen as a factor that draws attention away from the immersion and towards a meta-level thinking where the players keep on hoping to roll well, instead of feeling the situation through the character. The interviewees were unanimous in feeling that the rules are constructed in a way that leads to optimizing the character and winning every time instead of creating interesting plot twists. For instance, they felt the rules resulted in a situation where it is not sensible, or even possible, to

end a combat so that the player characters were taken prisoner. Practically all combats end with one side running out of living combatants.

The number and variation of the type of dice the game utilizes aroused different opinions. On one hand, the dice were not felt to complicate playing too much, and the different types were felt to bring variation to the game. On the other hand, the interviewees felt that much less dice, and dice rolls, would suffice and possibly even be better for playing and for the usability of the game.

The matter of language was actually quite a large issue for the interviewees. As the game is written in English, and uses the Imperial measurements, the Finnish players felt it was somewhat difficult to get a handle on things. Especially when they first started playing, the measurements were a big stumbling block. Later on, however, they reported having got more used to them, after which they became more usable. The interviewees compared their experiences with the only Finnish language role-playing game they had played, Kätyrin osa[6], and noted that they never had any problems remembering or understanding that game's terminology, while with Dungeons & Dragons such pauses were frequent and slowed down playing and hindered immersion. Otherwise the interviewees felt that the language of Dungeons & Dragons in general was understandable and that especially the illustrations were helpful.

The interviewees reported that the books were not very easy to search, and pointed out the fact that the way information linked to other information somewhere else was somewhat frustrating,

---

[6] Kätyrin osa is the Finnish translation of Paul Czege's (2003) game My Life with Master. While the game is far simpler in its rule structure and has much less terminology than Dungeons & Dragons, the interviewees' point about the ease of using one's native language in a role-playing game is valid.

which echoes the observations made in the heuristic evaluation. The interviewees felt that after using the books for some time they began to learn where to find the information they frequently needed just through the repetition of finding the same spot again and again.

The interviewees generally felt that the learnability of the game was especially poor. They reported that even after two years of playing the game, they were still quite confused with the rules. They noted that, in addition to there being simply too much to remember, the way the rules worked did not seem to follow an intuitive pattern, which made memorizing individual rules much harder. They also mentioned that as there are so many different modifiers going back and forth and interacting with each other, at times seemingly arbitrarily, it just was not always possible to remember what modifier modified what or why. These views strongly echo the results of the heuristic analysis (see Chapter 4.2.3).

The combat rules were generally felt to be far too complex and hindering. The interviewees reported that small, individual and rarely used rules were far too numerous. They said the result of this was that these rules were often not remembered in the situation where they should have been used, and it was only noticed after the fact that a rule had been missed or used incorrectly. As an example the interviewees used the lists of feats, the certain types of special abilities that grant a character some bonus in some highly focused, specific thing. On average, the frequency of use of a given feat was so low, and the bonus it granted was so small that it was all too easy to simply forget the whole feat ever existed. The interviewees felt this to be quite counter-productive, considering the fact that the feats were obviously meant to be used during the game. On one hand they were written in the rules and thus a part of the game. Furthermore, they were a part of each character's abilities and thus in effect defined each character in some way. On the other, however, they had such a small role that they were too easily forgotten about when they

should have been used, and were only remembered with some bitterness after the moment their usefulness had passed. In addition, even though the feats were a part of each character, they were not seen as actually lending anything to the character's persona or the fiction creation. They just felt as arbitrary ways of making the character a fighting machine that was only a bit different from the next character. The interviewees also felt that trying to come up with a diegetic reason for a character to have such feats after selecting them at character creation was simply backward. As a closing remark, they noted that there actually were very little in the way of character persona building tools in the rules, especially when compared to the immense number of optimizing-oriented lists of different combat proficiencies. These views correspond with the results of the heuristic analysis about simple and natural dialogue (see Chapter 4.2.1) and minimizing user memory load (see Chapter 4.2.3).

The combat orientation of the game was not entirely seen as a bad thing, however. As a matter of fact, the interviewees reported that having a simple, all-out game of fighting monsters and collecting treasure, without very much character immersion, would actually be fun, but the game should then be designed namely for that purpose and, most importantly, have simple and quick-to-use combat rules. This, however, was not seen to be the case with Dungeons & Dragons. The interviewees felt that because of the game's terribly complex rules and endless calculations, even a simple battle takes hours to resolve and the progress of game events is tiresomely slow.

As concluding remarks, the interviewees reported that a good role-playing game should have good illustrations both to create the right atmosphere with certain types of images and also to explain the rules with diagrams and other explanatory illustrations. Furthermore, these two types of images should be kept separate, in other words they should only have one function. The interviewees also mentioned that examples are very welcome, especially when more difficult

concepts or rules are explained. Also mentioned was an idea that the rule book could have a continuing, developing example of a single game session or the like, and that this example would be referred to throughout the books whenever necessary. Searchability was seen as an important factor, with an index as its main search tool. The text should be clear and oriented not towards creating an atmosphere, but simply towards explaining the rules as intelligibly as possible. The atmosphere could be created through the actual play examples and the appearance of the book itself. The length of the rule book was also seen as an important usability factor, simply because a short manual was seen as much easier to just pick up and read through and memorize. Game rules should be simple, flexible and applicable to every possible situation in the same way. The interviewees hoped for rules that would not attempt to explain and give a ruling on every possible thing the players might come up with but to provide for a type of resolution mechanic that could be modified to work in every situation.

5 Conclusion

Games are a phenomenon that takes on many different forms. Still, from the simplest game of tic-tac-toe to complex and multi-layered systems, each game has something in common with the next one. All games have rules, which form the framework in which the players can move and affect the outcome of the game through their actions. Role-playing games are in the more complicated end of the spectrum of games, and they also differ from most other games.

At the centre of a role-playing game is the character, an imaginary person guided in an imaginary world by a real world player. The surroundings of this imaginary world are described by a specialized player known as the game master, whose responsibility is to plan for adventures the other players can experience through their characters. The game is mostly experienced in the collective imagination of the participants, and rules are used to solve situations which have

uncertain outcomes. The characters are described by different details such as abilities, skills and the like on a character sheet, and the conflict situations are solved by rolling different dice. Role-playing games' fun mostly stems from the feeling players get from immersing themselves in the imaginary character, the imaginary world and the imaginary events taking place.

The rules of a role-playing game form an interface to the world of the game, and depending on how usable the rules are, the easier it is for the players to immerse themselves in the game. Usability in the context of role-playing games can be likened to the usability of a computer software interface, and the usability of a role-playing game is affected by many of the same characteristics that determine the usability of a user interface. The five traditional principles of usability – learnability, efficiency, memorability, errors and user satisfaction – are all applicable to role-playing game products. The first three have direct relevance to how the game is experienced, and the latter two are direct results of the first three.

The research done in this thesis on the Dungeons & Dragons v. 3.5 role-playing game points out several usability problems. Both the heuristic analysis of the game product and the focus group interview shows that players have difficulty in keeping up the immersion they enjoy because of the complexity of the rule system. The rules are next to impossible to memorize well enough to use in the game situation, and continued breaks are needed to check the correct use of the rules. The rules were also found to be so complex that even when their use is remembered or checked from the rulebooks, applying them to the game situation takes up such a long time that the tension of the situation dissipates and the fun is diminished. The foreign language used in the games was also found to be a problem considering the usability and thus the enjoyment. As the purpose of the game is to create interesting and meaningful fiction as a group, having to use a foreign language slows down the process and makes speaking about in-game elements awkward.

The unfamiliar Imperial measurement system used by the game was also found out to slow down the game quite considerably, and was seen as a hindrance to getting a proper handle on the world of the game.

The usability research methods of heuristic analysis and focus groups that were used in this thesis proved to be very suitable in the study of role-playing games and the effect poor usability has on the experience of play. While all the usability heuristics were not directly applicable to the game product itself, most yielded obvious results even on a surface-level analysis. The focus group interview brought to light much of the very same issues raised by the heuristics. In the end, it can be said that usability problems translate rather directly into diminished enjoyment and increased frustration for the players of the game. Problems in usability most strongly impact the players' immersion into the game, and thus undermine the very thing that makes role-playing games interesting in the first place.

The properties role-playing games have when compared to the rest of the field of games make them a very interesting subject of study. The links between the usability and the enjoyability of role-playing games could certainly be studied in much more depth than what a thesis of this size is capable of. For example, analysing the effect of playing a foreign language game with one's native language should certainly provide for ample research opportunities. The many ways language affects the fiction creation process and the whole interpretation of the game events are quite likely too numerous to even mention here. The usability of a foreign language game and its native language translation could also be compared. Several versions of the same game and the changes in usability between them could also be compared, and the ways the changes in usability affect game play could be analysed.

Other types of research could focus on the intricacies of the effects role-playing games and their players have on each other. It would be interesting, for instance, to find out just how much of the final thrill of playing the game is derived from the role-playing product itself and how much of it comes from the participating players. Finding out about the different ways role-playing games are experienced by each participant and the reasons behind these differences would also be very interesting study subjects. All in all, role-playing games as a phenomenon would seem to offer immense possibilities for academic research to anyone interested in finding the origins of fun.

Bibliography

Works Cited

Bolter, J. D., & Grusin, R. (2000). *Remediation: Understanding New Media*. The MIT Press.

Caillois, R. (2001). *Man, Play and Games* (transl. Meyer Barash). Urbana and Chicago: University of Illinois Press.

Carrol, J. M., Smith-Kerker, P. L., Ford, J. R., and Mazur-Rimetz, S. A. (1987–1988). The Minimal Manual. *Human-Computer Interaction* 3, 2, 123–153.

Concept. DITA Version 1.1 Architectural Specification. Retrieved January 9, 2008, from http://docs.oasis-open.org/dita/v1.1/OS/archspec/dita_spec_22_info_concepts.html

Csikszentmihalyi, M. (1990) *Flow: The Psychology of Optimal Experience*. New York: Harper and Row.

Czege, P. (2003). *My Life with Master*. Half Meme Press.

Davis, J. P., Steury, K., & Pagulayan, R. (2005). A survey method for assessing perceptions of a game: The consumer playtest in game design. *Game Studies*, *5*(1).

Dormans, J. (2006). On the Role of the Die: A brief ludologic study of pen-and-paper roleplaying games and their rules. *Game Studies*, *6*(1). Retrieved November 22, 2007, from http://gamestudies.org/0601/articles/dormans

Edwards, R. Gamism: Step On Up. *The Forge: Gamism: Step On Up*. Retrieved November 27, 2007, from http://www.indie-rpgs.com/articles/21/

Edwards, R. System Does Matter. *The Forge: System Does Matter*. Retrieved November 21, 2007, from http://www.indie-rpgs.com/_articles/system_does_matter.html

Fine, G. A. (1983.). Shared Fantasy: Role Playing Games as Social Worlds. University of Chicago.

Gleichman, Brian. *Rationales for Mechanics (or the Case for Designer Notes)*. RPG.net, 2003. Retrieved December 20, 2007, from http://www.rpg.net/news+reviews/columns/elements14jan03.html

Hakkarainen, H., & Stenros, J. The Meilahti Model. *The Meilahti School*. Retrieved November 21, 2007, from http://www.saunalahti.fi/~hohakkar/meilahti/model.html

Heikkilä, J. (1984). Luovuuden osa-alueet ja niiden kehittäminen. In *Luovuuden ulottuvuudet*. Eds. Haavikko, R & Ruth, J. Espoo: Weilin+Göös.

Holter, M. (2007). Stop saying "immersion"! In *Lifelike*. Knudepunkt 2007. Retrieved November 22, 2007, from http://www.liveforum.dk/kp07book/lifelike_holter.pdf

Kellomäki, J. (2003). Simulaatio ja kerronta – roolipeli ergodisena tekstinä. Helsinki.

Kim, J. H. (2003). Threefold Model. Retrieved January 7, 2008, from: http://www.darkshire.net/~jhkim/rpg/theory/threefold/

Laws, R. D. (2002). *Robin's Laws of Good Game Mastering*. Steve Jackson Games.

Montola, M., & Stenros, J. (Eds.). (2004). *Beyond Role and Play: Tools, Toys and Theory for Harnessing the Imagination*. Ropecon ry. Retrieved from http://www.ropecon.fi/brap/brap.pdf

Nielsen, J. (1993). *Usability Engineering*. Boston: Academic Press.

Ovaska, S., Aula, A., & Majaranta, P. (Eds.). (2005). *Käytettävyystutkimuksen menetelmät*. Tampere: Tampereen yliopisto, tietojenkäsittelytieteiden laitos.

Parviainen, L. (2005). Fokusryhmät. In *Käytettävyystutkimuksen menetelmät*. Tampere: Tampereen yliopisto, tietojenkäsittelytieteiden laitos.

Pettersson, J. (2005). *Roolipelimanifesti*. Helsinki: Like.

Pohjola, M. (2004). The Manifesto of the Turku School. In Entertainment Computing - Icec 2004: Third International Conference.

Reference. DITA Version 1.1 Architectural Specification. Retrieved January 9, 2008, from http://docs.oasis-open.org/dita/v1.1/OS/archspec/dita_spec_22_info_refs.html

RPG Lexica:PQR. Retrieved November 21, 2007, from http://wiki.rpg.net/index.php/RPG_Lexica:PQR

Ruth, J. (1984). Luova persoona, prosessi ja tuote. In *Luovuuden ulottuvuudet*. Eds. Haavikko, R & Ruth, J. Espoo: Weilin+Göös.

Salen, K., & Zimmerman, E. (2003). *Rules of Play: Game Design Fundamentals*. MIT Press.

Shneiderman, B. (2002). Leonardo's Laptop: Human Needs and the New Computing Technologies. Cambridge (Mass.): MIT Press.

Song, S., & Lee, J. (2007). Key factors of heuristic evaluation for game design: Towards massively multi-player online role-playing game. *International Journal of Human-Computer Studies*, *65*(8), 709-723.

Stenros, J.(2004). Notes on Role-Playing Texts. In *Beyond Role and Play*. Eds. Markus Montola and Jaakko Stenros. Solmukohta. Also available online at: http://www.ropecon.fi/brap/brap.pdf.

Särkijärvi, J. (2008). Dungeons & Dragonsin loputtomat maailmat. *Roolipelaaja 14,* 52–55.

Task. DITA Version 1.1 Architectural Specification. Retrieved January 9, 2008, from
    http://docs.oasis-open.org/dita/v1.1/OS/archspec/dita_spec_22_info_tasks.html

Tychsen, A., Hitchens, M., Brolund, T., & Kavakli, M. (2006). Live Action Role-Playing
    Games: Control, Communication, Storytelling, and MMORPG Similarities. *Games
    And Culture*, *1(3)*, 252-275.

Viinamäki, H. (2004). Translating a Technical Manual with a Special Focus on Usability.
    Tampere.

What is Usability? Usability Professionals' Association. Retrieved on January 17, 2007 from
    http://www.usabilityprofessionals.org/usability_resources/about_usability/definitions_
    of_usability.html

Research Material

Dungeon Master's Guide: Core Rulebook II. (2003). Wizards of the Coast.

Monster Manual: Core Rulebook III. (2003). Wizards of the Coast.

Player's Handbook: Core Rulebook I. (2003). Wizards of the Coast.

Appendix: Dungeons & Dragons v. 3.5 Character Sheet, Front

DUNGEONS & DRAGONS®
CHARACTER RECORD SHEET

CHARACTER NAME

PLAYER

CLASS AND LEVEL

RACE   ALIGNMENT   DEITY

SIZE   AGE   GENDER   HEIGHT   WEIGHT   EYES   HAIR   SKIN

ABILITY NAME	ABILITY SCORE	ABILITY MODIFIER	TEMPORARY SCORE	TEMPORARY MODIFIER
STR STRENGTH				
DEX DEXTERITY				
CON CONSTITUTION				
INT INTELLIGENCE				
WIS WISDOM				
CHA CHARISMA				

HP HIT POINTS — TOTAL — WOUNDS/CURRENT HP — NONLETHAL DAMAGE — **SPEED**

AC ARMOR CLASS — TOTAL — = 10 + [ARMOR BONUS] + [SHIELD BONUS] + [DEX MODIFIER] + [SIZE MODIFIER] + [NATURAL ARMOR] + [DEFLECTION MODIFIER] + [MISC MODIFIER] — DAMAGE REDUCTION

TOUCH ARMOR CLASS   **FLAT-FOOTED** ARMOR CLASS

INITIATIVE MODIFIER — TOTAL = [DEX MODIFIER] + [MISC MODIFIER]

SAVING THROWS

	TOTAL		BASE SAVE		ABILITY MODIFIER		MAGIC MODIFIER		MISC. MODIFIER		TEMPORARY MODIFIER	CONDITIONAL MODIFIERS
FORTITUDE (CONSTITUTION)		=		+		+		+				
REFLEX (DEXTERITY)		=		+		+		+				
WILL (WISDOM)		=		+		+		+				

BASE ATTACK BONUS [ ]   **SPELL RESISTANCE** [ ]

GRAPPLE MODIFIER — TOTAL [ ] = [BASE ATTACK BONUS] + [STRENGTH MODIFIER] + [SIZE MODIFIER] + [MISC MODIFIER]

ATTACK	ATTACK BONUS	DAMAGE	CRITICAL

RANGE	TYPE	NOTES

AMMUNITION _____ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐

ATTACK	ATTACK BONUS	DAMAGE	CRITICAL

RANGE	TYPE	NOTES

AMMUNITION _____ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐

ATTACK	ATTACK BONUS	DAMAGE	CRITICAL

RANGE	TYPE	NOTES

AMMUNITION _____ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐

ATTACK	ATTACK BONUS	DAMAGE	CRITICAL

RANGE	TYPE	NOTES

AMMUNITION _____ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐

ATTACK	ATTACK BONUS	DAMAGE	CRITICAL

RANGE	TYPE	NOTES

AMMUNITION _____ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐

SKILLS

MAX RANKS (CLASS/CROSS-CLASS) [/]

CLASS SKILL?

SKILL NAME	KEY ABILITY	SKILL MODIFIER		ABILITY MODIFIER		RANKS		MISC MODIFIER
☐ APPRAISE ■	INT		=		+		+	
☐ BALANCE ■	DEX*		=		+		+	
☐ BLUFF ■	CHA		=		+		+	
☐ CLIMB ■	STR*		=		+		+	
☐ CONCENTRATION ■	CON		=		+		+	
☐ CRAFT ■ (_____)	INT		=		+		+	
☐ CRAFT ■ (_____)	INT		=		+		+	
☐ CRAFT ■ (_____)	INT		=		+		+	
☐ DECIPHER SCRIPT	INT		=		+		+	
☐ DIPLOMACY ■	CHA		=		+		+	
☐ DISABLE DEVICE	INT		=		+		+	
☐ DISGUISE ■	CHA		=		+		+	
☐ ESCAPE ARTIST ■	DEX*		=		+		+	
☐ FORGERY ■	INT		=		+		+	
☐ GATHER INFORMATION ■	CHA		=		+		+	
☐ HANDLE ANIMAL	CHA		=		+		+	
☐ HEAL ■	WIS		=		+		+	
☐ HIDE ■	DEX*		=		+		+	
☐ INTIMIDATE ■	CHA		=		+		+	
☐ JUMP ■	STR*		=		+		+	
☐ KNOWLEDGE (_____)	INT		=		+		+	
☐ KNOWLEDGE (_____)	INT		=		+		+	
☐ KNOWLEDGE (_____)	INT		=		+		+	
☐ KNOWLEDGE (_____)	INT		=		+		+	
☐ KNOWLEDGE (_____)	INT		=		+		+	
☐ LISTEN ■	WIS		=		+		+	
☐ MOVE SILENTLY ■	DEX*		=		+		+	
☐ OPEN LOCK	DEX		=		+		+	
☐ PERFORM (_____)	CHA		=		+		+	
☐ PERFORM (_____)	CHA		=		+		+	
☐ PERFORM (_____)	CHA		=		+		+	
☐ PROFESSION (_____)	WIS		=		+		+	
☐ PROFESSION (_____)	WIS		=		+		+	
☐ RIDE ■	DEX		=		+		+	
☐ SEARCH ■	INT		=		+		+	
☐ SENSE MOTIVE ■	WIS		=		+		+	
☐ SLEIGHT OF HAND	DEX*		=		+		+	
☐ SPELLCRAFT	INT		=		+		+	
☐ SPOT ■	WIS		=		+		+	
☐ SURVIVAL ■	WIS		=		+		+	
☐ SWIM ■	STR*		=		+		+	
☐ TUMBLE ■	DEX*		=		+		+	
☐ USE MAGIC DEVICE	CHA		=		+		+	
☐ USE ROPE ■	DEX		=		+		+	
☐ _____	___		=		+		+	
☐ _____	___		=		+		+	
☐ _____	___		=		+		+	

■ Denotes a skill that can be used untrained.
☐ Mark this box with an X if the skill is a class skill for the character.
* Armor check penalty, if any, applies. (Double penalty for Swim.)

Appendix: Dungeons & Dragons v. 3.5 Character Sheet, Back

CAMPAIGN

EXPERIENCE POINTS

GEAR

ARMOR/PROTECTIVE ITEM

TYPE	AC BONUS	MAX DEX

CHECK PENALTY	SPELL FAILURE	SPEED	WEIGHT	SPECIAL PROPERTIES

SHIELD/PROTECTIVE ITEM

AC BONUS	WEIGHT	CHECK PENALTY

SPELL FAILURE	SPECIAL PROPERTIES

PROTECTIVE ITEM

AC BONUS	WEIGHT	SPECIAL PROPERTIES

PROTECTIVE ITEM

AC BONUS	WEIGHT	SPECIAL PROPERTIES

OTHER POSSESSIONS

ITEM	PG.	WT.	ITEM	PG.	WT.
			TOTAL WEIGHT CARRIED		

LIGHT LOAD	MEDIUM LOAD	HEAVY LOAD	LIFT OVER HEAD	LIFT OFF GROUND	PUSH OR DRAG
			EQUALS MAX LOAD	2 × MAX LOAD	5 × MAX LOAD

MONEY

CP —
SP —
GP —
PP —

FEATS
PG.

SPECIAL ABILITIES
PG.

LANGUAGES

Initial languages = Common + racial languages + one per point of Int bonus

SPELLS

DOMAINS/SPECIALTY SCHOOL:

0:

1ST:

2ND:

3RD:

4TH:

5TH:

6TH:

7TH:

8TH:

9TH:

SPELL SAVE
DC MOD

ARCANE SPELL FAILURE %

CONDITIONAL MODIFIERS

SPELLS KNOWN	SPELL SAVE DC	LEVEL	SPELLS PER DAY	BONUS SPELLS
		0		0
		1ST		
		2ND		
		3RD		
		4TH		
		5TH		
		6TH		
		7TH		
		8TH		
		9TH		

REINIKAINEN, ARTTU: Roolipelit ja käytettävyys – pelisuunnittelun vaikutus pelikokemukseen

---

Suomenkielinen lyhennelmä

Johdanto

Käytettävyys on käsite, joka tyypillisesti mielletään erilaisten laitteiden tai esimerkiksi tietokoneohjelmien käyttöliittymien ominaisuudeksi. Tässä tutkimuksessa perinteisiä pöytäroolipelejä tutkitaan käytettävyyden valossa. Roolipelin säännöt rinnastetaan käyttöliittymiin, pelien sääntökirjat käyttöohjeisiin ja pelien pelaaminen käyttöliittymän käyttämiseen. Aivan kuin tietokoneohjelman käyttäjän, myös roolipelin pelaajan täytyy perehtyä käyttämäänsä tuotteeseen ja oppia uusia käsitteitä, tietoja ja taitoja. Roolipelien erikoisuutena muihin teknisiin laitteisiin ja niiden käyttöohjeisiin verrattuna on se, että roolipelit ovat sekä tuote että käyttöohje samassa, erottamattomassa paketissa.

Roolipelissä pelaajat ja pelinjohtaja kokoontuvat yhdessä luomaan kerrontaa, pelifiktiota, sääntöjen avustamana. Roolipelin pelaamisen tavoitteena on tuottaa pelaajilleen miellyttäviä kokemuksia tämän ryhmässä tapahtuvan luomisprosessin kautta. Tästä syystä voidaan olettaa, että peli on sitä nautittavampaa, mitä vähemmän prosessiin tulee keskeytyksiä.

Tässä tutkimuksessa käytettävyyden ja roolipelien suhdetta tutkitaan useasta lähtökohdasta. Ensisijaisena tarkoituksena on tutkia millaisia vaikutuksia huonolla käytettävyydellä on pelikokemukseen. Lisäksi tavoitteena on tarkastella perinteisten käytettävyystutkimuksen metodien soveltuvuutta roolipelien tutkimiseen. Tämä osoittaa myös sen, voidaanko roolipelit todella rinnastaa käyttöliittymiin.

Aineistoksi tähän tutkimukseen on valittu menestyksekäs eeppinen fantasiaroolipeli Dungeons & Dragons v. 3.5. Tutkimuksen aiheen ja aineiston valinnan taustalla ovat omakohtaiset huonot käyttäjäkokemukset kyseisestä pelistä ja sen pelattavuudesta. Tutkimusmetodeja on kaksi: Nielsenin (1993) muotoilema heuristinen käytettävyysanalyysi sekä fokusryhmähaastattelu. Metodit ja niillä saadut tulokset tukevat ja täydentävät toisiaan ja osoittavat pelin käytettävyyspuutteet.

Roolipelit ja käytettävyys

Pelit ovat monimuotoinen ilmiö ja roolipelit ovat peleinä erikoislaatuisia. Peli on järjestelmä, jossa pelaajat ratkaisevat sääntöjen puitteissa keinotekoisia ongelmia ja jonka lopputulos on mitattavissa (Salen & Zimmerman 2004, 80). Roolipelit ovat tosin siitä erikoisessa asemassa, että niillä ei ole mitattavissa olevaa lopputulosta, koska pelaajat eivät kilvoittele keskenään, vaan kuvitteellisen pelimaailman haasteita vastaan. Roolipelillä ei myöskään ole määrättyä loppupistettä, vaan peliä voidaan jatkaa niin kauan kuin osanottajat haluavat. (Mts. 81–82.)

Roolipelien määrittely kaikenkattavasti on haastavaa, minkä osoittaa jo erilaisten yksityiskohtaisuuteen pyrkivien määritelmien eroavaisuus toisistaan (ks. Laws 2002, Pohjola 2004 ja Hakkarainen & Stenros). Edellä mainittuja määritelmiä yleisluontoisemmin roolipelejä voi kuvailla seuraavasti: Eroistaan huolimatta jokaisen roolipelin lähtökohtana ovat pelaajat, jotka ottavat kuvitteellisessa pelimaailmassa elävien hahmojen roolin. Yksi pelaajista toimii pelinjohtajana ja kuvailee muille pelaajille mitä heidän hahmonsa pelimaailmassa näkevät. Pelaajat kertovat suullisesti mitä heidän hahmonsa tekevät ja pelinjohtaja kertoo, miten pelimaailma ja sen asukkaat reagoivat hahmojen tekemisiin. Roolipelin sääntöjen avulla määritellään kullekin hahmolle ennen peliä erilaisia kykyjä ja taitoja. Itse pelitilanteessa sääntöjä käytetään tilanteissa, joissa hahmojen tekojen lopputulokset eivät ole ennalta

arvattavissa, tai kun hahmot yrittävät tehdä jotakin heille haastavaa. Sääntöjä käytetään hahmon kykyjen ja taitojen sekä erilaisten nopanheittojen yhdistelmänä, jossa noppa toimii arvontavälineenä ja luo siten jännitettä. (RPG Lexica:PQR, Tychsen ym. 2006.)

Roolipelin mielenkiinto muodostuu kuitenkin muista seikoista kuin nopan tuottamasta jännityksestä. Pelien kiehtovuuden keskiössä on uppoutuminen pelimaailmaan, immersio (Fine 1983, Pohjola 2004, Pettersson 2005). Pelaajat kokevat pelimaailman tapahtumia hahmonsa kautta ja saavat näin voimakkaitakin välillisiä kokemuksia toisena henkilönä olemisesta. Eläytyminen kuitenkin yleensä muuttuu hankalaksi, jos sääntöjä joutuu käyttämään liiaksi. Eläytymisen ja sääntöjen välinen yhteys on samanlainen kuin Bolter & Grusinin esittämä erilaisten mediamuotojen jako välittömiin ja hypermediaalisiin esitystapoihin. Välittömässä esityksessä itse media pyritään naamioimaan näkymättömiin. Hypermediaalinen esitystapa puolestaan tuo itse median näkyviin ja korostaa sitä esityksen välikappaleena. (1999, 4–5.)

Käytettävyydellä ymmärretään erilaisia asioita. Yleisimpinä näistä lienevät kuitenkin Nielsenin esittämät kriteerit tuotteen käytön opittavuudesta, tehokkuudesta ja muistettavuudesta sekä käytön yhteydessä tapahtuvien virheiden määrästä ja käyttäjän yleisestä tyytyväisyydestä tuotteeseen (1993, 26). Vaikka roolipelien pelaajat eivät ole pelkästään tuotteen käyttäjiä perinteisessä mielessä, vaan yhtä lailla pelin tekijöitä ja luojia, edellä annetut kriteerit pätevät myös roolipelien arviointiin. Jokaisen tuotteen käyttäjät joutuvat opettelemaan uusia taitoja ja hankkimaan uudenlaisia kykyjä käyttääkseen tuotetta (Shneiderman 2002, 46–47). Sama pätee roolipelin pelaajiin. Jokainen peli on omanlaisensa kokonaisuus ja vaatii uudenlaisten sääntöjen opettelua ennen kuin pelaaminen on mahdollista. Käytettävyyden parantamiseksi on ehdotettu erilaisia keinoja, muun muassa minimaalista ohjeistusta ja käyttäjien nopeaa ohjaamista tehtäviin jopa virheiden uhalla (Carroll ym. 1987) sekä erilaisia pika-aloitusoppaita

(Shneiderman 2002, 47). Molempia voisi teoriassa soveltaa myös roolipeleihin, mutta ei aivan suoraan. Koska säännöt ovat käyttöliittymä, eikä mitään erillistä, ulkoista käyttöliittymää ole, peliä ei voi käyttää joko opettelematta kaikkia sääntöjä tai palaamatta sääntökirjan pariin jatkuvasti kesken pelin.

Yleisesti ottaen tuotteen käytettävyys paranee, kun käyttäjän on nopeampi oppia käyttämään tuotetta, ja kun hän sitä kautta saa tehtyä enemmän samassa ajassa. Yhtä lailla käytettävyys paranee, jos käyttäjä muistaa helpommin myös harvoin käytettyjen toimintojen suorittamistavat tai jos hän tekee aiempaa vähemmän virheitä. (Ovaska ym. 2005.) Nämä seikat pätevät sellaisinaan täysin myös roolipeleihin ja niiden käytettävyyteen.

Aineisto ja analyysi

Tutkimuksen aineistona on Dungeons & Dragons v. 3.5 -roolipeli, jonka on julkaissut amerikkalainen Wizards of the Coast vuonna 2003. Kyseessä on eeppinen fantasiaroolipeli, jonka miljöö voitaneen lyhimmillään esittää jonkinlaisena rinnastuksena Taru Sormusten Herrasta -kirjojen ympäristöstä. Pelin perusajatuksena on pelaajahahmojen muodostama ryhmä seikkailijoita, jotka etsivät aarteita ja taistelevat hirviöitä vastaan erilaisissa ympäristöissä.

Peli on englanninkielinen ja koostuu kolmesta erillisestä peruskirjasta: Player's Handbook on nimensä mukaisesti ohjekirja ensisijaisesti pelaajille, mutta sisältää myös suurimman osan pelin säännöistä, eli myös pelinjohtajan on luettava tämä kirja sekä myös osattava säännöt parhaiten. Dungeon Master's Guide on ohjekirja pelinjohtajalle ja se sisältää lisää sääntöjä sekä ohjeita siitä, miten peliä tulisi peluuttaa sekä miten suunnitella ja ohjata pelin kulkua. Monster Manual sisältää satoja erilaisia hirviöitä, joita pelinjohtaja voi käyttää pelaajahahmojen vastustajina näiden seikkailuissa. Poikkeuksena roolipelien yleisestä olemuksesta Dungeons & Dragonsissa ei ole valmista pelimaailmaa, vaan tarjolla on vain erilaisia "rakennuspalikoita" varusteiden,

kulkuvälineiden, taikaesineiden ja fantasiaolentojen muodossa, joiden pohjalta pelaajien ja pelinjohtajien mitä ilmeisimmin oletetaan luovan oma pelimaailmansa. Tilanne on ollut samanlainen pelin ensimmäisistä versioista lähtien (Pettersson 2005, 56). Valmiita pelimaailmoja on myynnissä erillisinä kirjoina (ks. esim. Särkijärvi, 2008), mutta itse en sellaista koskaan ole hankkinut, vaan peluuttanut peliä itse luoduissa ympäristöissä.

Dungeons & Dragonsia analysoidaan tämän tutkimuksen puitteissa kahdella tavalla. Ensin pelin säännöille (käyttöliittymä) ja dokumentaatiolle (sääntökirja) suoritetaan lyhyehkö heuristinen analyysi Nielsenin kymmenen käytettävyysheuristiikan (1993, 115–153) avulla. Toisena tutkimusmetodina on fokusryhmähaastattelu, jonka pohjana toimivat edellä mainitun heuristisen analyysin tulokset sekä tutkimuksen teoriaosassa esitetyt näkemykset roolipelien luonteesta ja yhteydestä käytettävyyteen.

Heuristisessa analyysissa tarkastellaan tuotetta ja yritetään määritellä mikä siinä on hyvää ja mikä huonoa (Nielsen 1993, 155). Analyysin työkaluna toimivat edellä mainitut kymmenen heuristiikkaa, jotka määrittelevät käytettävän tuotteen ominaisuuksia. Analyysissa huomattiin, että kaikki kymmenen heuristiikkaa eivät sovellu sinällään roolipelien tutkimukseen. Sopivimmat kymmenestä koskivat yksinkertaista ja luonnollista informaation välitystä, asioiden esittämistä käyttäjän kielellä, käyttäjän muistikuorman minimointia, johdonmukaisuutta sekä ohjeiden ja dokumentaation laatua.

Analyysin tuloksena Dungeons & Dragons havaittiin käytettävyydeltään enimmäkseen huonoksi. Suurin ongelma on se, että sääntöjärjestelmä, eli pelin käyttöliittymä, on aivan liian monimutkainen muistettavaksi ulkoa. Lukuisat pienet säännöt ja spesifeissä tilanteissa vaikuttavat muuttujat johtavat siihen, että eläytyminen ja immersio joudutaan hyvin usein keskeyttämään sääntötarkistuksia varten. Sääntöjärjestelmästä tulee vaikutelma, että pelin tekijät

ovat pyrkineet antamaan oman säännön kaikelle mahdolliselle, mitä pelaajat ikinä voisivatkaan keksiä sen sijaan, että käytössä olisi yleistasoinen säännöstö, jota voisi helposti soveltaa eri tilanteisiin. Tästä syystä käyttäjälle muodostuu helposti kuva, että jokainen sääntö on osattava, tai sen puutteessa tarkistettava, sen sijaan, että säännöistä tehtäisiin omia päätöksiä.

Tieto on lisäksi usein esitetty kirjoissa monessa eri paikassa, mikä hankaloittaa tiedon löytymistä ja sen sisäistämistä. Samaan johtaa myös se, että peli on englanninkielinen ja käyttää lisäksi suomalaiselle vierasta, brittiläistä mittajärjestelmää tuumineen, jalkoineen ja nauloineen. Lisäksi kaikelle englanninkieliselle pelinsisäiselle fantasiaterminologialle ei ole yksiselitteisiä suomenkielisiä vastineita, mikä myös hankaloittaa pelin pelaamista ja pelin maailmaan uppoutumista.

Pelin suurin johdonmukaisuuden puute ilmenee tavassa, jolla peli esittää itsensä. Vaikka sääntöjärjestelmä on hyvinkin yksityiskohtaisesti ja selkeästi painottunut hahmojen ja hirviöiden välisiin taisteluihin, kirjoissa yritetään antaa kuva, että sääntöjärjestelmää voisi käyttää minkälaiseen pelaamiseen hyvänsä, että sen avulla voisi käsitellä minkälaisia aiheita tahansa. Sääntöjen tarkoituksenmukaisen taistelupainotteisuuden johdosta yritykset pelata Dungeons & Dragonsia jotenkin toisin johtavat kuitenkin turhautumiseen, koska järjestelmä ei väitteistään huolimatta tue toisenlaista pelaamista.

Pelin sääntökirjat ovat dokumentteina tarkasteltuna melko onnistuneita. Kirjoissa on hakemistoja, sanastoja ja yksityiskohtaiset sisällysluettelot, jotka auttavat tiedon etsimistä. Myös layout on pääsääntöisin hyvä, vaikka käytetty kirjasin onkin varsin pientä ja siksi voi tuottaa ongelmia joillekin käyttäjille. Erilaisia kuvia, taulukoita ja värityksiä on käytetty kirjoissa onnistuneesti tiedon jaotteluun ja esityksen selkeyttämiseen. Monimutkaisia sääntörakennelmia on pyritty selkiyttämään vaiheittain etenevillä ohjeilla ja esimerkeillä. Yhteenvetona voidaan

sanoa, että Dungeons & Dragonsin käytettävyysongelmat eivät niinkään keskity dokumentaation laatuun, vaan käyttöliittymän monimutkaisuuteen ja siitä johtuviin ongelmiin.

Toisena tutkimusmetodina käytettiin fokusryhmää. Fokusryhmä on eräänlainen haastattelutyyppi, jossa haastateltavat muodostavat mahdollisimman heterogeenisen ryhmän, jota haastatellaan yhdellä kertaa. Metodilla saadaan pääsääntöisesti laadullista informaatiota, ja se on yleinen tutkimustapa käytettävyystutkimuksessa. Haastattelun moderaattorina toimii henkilö, joka on haastateltavien vertainen ja tuntee haastattelun aihepiirin hyvin. (Parviainen 2005, 55–61.) Tutkimuksessa käyttämäni fokusryhmä koostui neljästä ihmisestä, joista puolet oli miehiä, puolet naisia, iältään 20–26-vuotiaita. Kaikki haastatteluun osallistuneet ovat pelanneet Dungeons & Dragonsia noin kahden vuoden ajan, ja olin itse toiminut heidän pelinjohtajanaan. Olin näin ollen myös sopiva moderaattori fokusryhmälle, koska olin heidän vertaisensa sekä aiheen suhteen asiantuntija-asemassa. Haastateltavat keskustelivat noin tunnin ajan antamistani aiheista, jotka koskivat samoja asioita kuin heuristisen analyysini sekä joitain teoriaosassa käsiteltyjä aiheita.

Haastateltavien vastauksista havaittiin lukuisia yhdenmukaisuuksia heuristisen analyysin tuloksiin. Pelin sääntöjärjestelmää pidettiin aivan liian monimutkaisena opeteltavaksi ja muistettavaksi, jatkuvien sääntötarkistusten koettiin häiritsevän eläytymistä erittäin voimakkaasti ja vieraan kielen ja mittajärjestelmän hankaloittavan omaksumista. Taistelusääntöjen monimutkaisuus ja määrä koettiin erityisen häiritseväksi, sillä haastateltavat kokivat taistelun olevan pelin keskiössä ja monimutkaisten sääntöjen hankaloittavan aivan turhaan tätä pelille oleellista toimintaa. Kokonaisuudessaan haastateltavien näkemykset tukivat ja vahvistivat heuristisen analyysin aikana saatuja tuloksia.

Loppupäätelmät

Pelit ovat monimutkainen ilmiö ja roolipelit muihin peleihin verrattuna ovat erityisessä asemassa rakenteensa vuoksi. Pelin keskiössä on hahmo, jonka tekemisiä pelaaja kuvailee suullisesti. Hahmo toimii kuvitteellisessa pelimaailmassa, jonka toiminnasta vastaa pelinjohtaja omalla kerronnallaan. Pelinjohtajan vastuulla on kuvitteellisen maailman toiminta, sen asukkaat ja tavat, joilla se reagoi pelaajahahmojen toimintaan. Konfliktitilanteet ratkaistaan pelissä sääntöjen avulla erinlaisia nopanheittoja käyttäen.

Roolipelin säännöt muodostavat käyttöliittymän pelin maailmaan, ja mitä helpommat nuo säännöt ovat käyttää, sitä helpompi pelaajien on uppoutua pelin maailmaan ja antaa sääntöjen painua taka-alalle. Huono käytettävyys säännöissä puolestaan vetää pelaajat takaisin todelliseen maailmaan ja haittaavat eläytymistä.

Tutkimusaineistona olleen Dungeons & Dragons v. 3.5 -roolipelin analyysi heuristiikkojen ja fokusryhmän avulla osoitti lukuisia puutteita pelin käytettävyydessä. Liian monimutkainen sääntöjärjestelmä tekee pelin opettelun äärimmäisen hankalaksi ja hankaloittaa pelin pelaamista ja eläytymistä, aiheuttaa turhautumista pelaajissa ja sitä kautta heikentää myös pelin nautittavuutta merkittävästi. Tutkimus osoittaa myös, että käytettävyys roolipelien yhteydessä voidaan rinnastaa erilaisten käyttöliittymien käytettävyyteen. Tämän johdosta tutkimukseen käytetyt metodien voidaan nähdä soveltuvan myös roolipelien käytettävyyden mittaamiseen ja arviointiin.

Jatkotutkimuksen kohteena roolipelit ovat erittäin hedelmällisiä: Pelien käytettävyyttä voisi tutkia syvällisemmin ja spesifimmin. Myös kielen vaikutus pelin kokemiseen sekä pelaajien keskinäinen vuorovaikutus vaikuttavat innostavilta aiheilta. Kaiken kaikkiaan roolipelit tarjoavat mittavasti tutkimusaiheita sille, joka tahtoo selvittää, mistä pelien hauskuus muodostuu.