

# **Design Values of Digital Role-Playing Games**

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This thesis is about the design values of digital role-playing games. Design values is an underresearched topic whereas digital role-playing games has become a chart-topping genre. Design values refer to designers' individual values and principles that guide the design process and so take part in shaping its outcome.

With their flexible rules and lack of quantifiable outcomes, role-playing games are an exception among games. Role-playing games have had to adapt to the digital medium and they may be closer to digital games and their conventions than their tabletop origins, but they offer experiences distinctive enough to warrant their own genre in digital gaming.

The goal of this study was to discover design values from digital role-playing game postmortems to see what values drove their design decisions. The postmortems were gathered from an online publication, Gamasutra, and they covered 16 digital role-playing games within 15 years. Using content analysis and affinity diagram, the study identified six value categories ranging from pure design values to more general game development values.

Player expression focused on strengthening the experience that players' characters are their own and that the game world reflects their actions. Player engagement saw value in broad appeal, cooperation, simple controls, exploration, immersion and clear goals that all provide to attaining players and keeping them engaged with the game. Gameplay prioritization put an emphasis on gameplay and its seamless integration with other game elements. Open design valued openness to design input in a collaborative environment. Restrained design emphasized simplicity and quality. Development management focused on issues arising from leadership, ambition, adaptability, efficiency and team spirit.

Keywords and terms: role-playing games, video games, game design, game industry, design research, content analysis, affinity diagram

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## 1 Introduction

With their flexible rules and lack of quantifiable outcomes, tabletop role-playing games are exceptional games that escape most definitions. As role-playing games have entered the digital medium, they have had to give up their rule flexibility and lack of quantifiable outcomes. Some modern games have attempted to convey the more freeform way of role-playing by introducing social aspects and game mastering to digital role-playing games. Although role-playing games are nothing new to academic research, digital single-player role-playing games have garnered somewhat less attention.

Design and values are two complex phenomena that may only be approached at a surface level within the scope of this thesis. Design values refer to designers' individual values and guiding principles that direct the design process and ultimately shape its outcome. There exists very little research on design values that are framed in this way, which is one reason among many to make it a very challenging domain to study.

The source of data used for this study was game postmortem articles. Postmortems are documents or meetings that look back into a project with hindsight and find out its successes and shortcomings. Content analysis and affinity diagram were the methods used to discover game design values within the documents. Such value findings may provide insight into the design of digital role-playing games.

Analysing the postmortems resulted in six value categories of player expression, player engagement, gameplay prioritization, open design, restrained design and development management. The value categories are organized to begin with pure design values dealing with role-playing games and to have them gradually shift towards the more general and developmental values that were discovered.

The thesis is divided into seven parts. After this introduction, Chapter 2 provides definitions for play, games and role-playing games and explores role-playing games' transition into the digital domain. Chapter 3 looks into the definitions of design and provides a theoretical framework for design values. Chapter 4 is a methodology chapter that explains how the research was conducted. Chapter 5 goes through the research findings in detail. Chapter 6 summarizes the findings and discusses their meanings and

limitations. Chapter 7 concludes the thesis with an overview, direction for future research and closing thoughts.

## 2 Role-playing games

"In a roleplaying game, anything is possible. [--] But it is still a game, and as a game, this book has rules [--] But, to cite a cliché, rules are meant to be broken. Unlike other games, roleplaying games are famous for being fluid when it comes to rules [--]."

–*A Song of Ice and Fire Roleplaying* (Schwalb 2009, 4)

This chapter builds on the basis of the study by defining games and role-playing games as well as discussing role-playing games' adaptation to the digital medium.

### 2.1 Defining games

In their academic textbook on game design, *Rules of Play: Game Design Fundamentals*, Salen and Zimmerman stated that "the goal of successful game design is the creation of meaningful play" (Salen and Zimmerman 2004, 33). While meaningful play is a relatively new concept as introduced by Salen and Zimmerman, the interest here lies in the broader term play. At what point does play become a game?

A recognized historian, Johan Huizinga has paved the way in defining play. As Huizinga put it, animals have been playing long before any human civilization and therefore play is older than culture. (Huizinga 1949, 1)

Roger Caillois (1958, 3) has expanded on Huizinga's work on defining play. His definition of play includes the following characteristics: Engaging in play has to be free as in not obligatory nor forced. It exists within predetermined time and space. It is uncertain as to how exactly things will play out. It does not generate real life goods of any kind and ends in a situation identical to the one before playing. Play is governed by rules separate from the real world. It also includes an awareness in the players that it is unreal and pretension. (Caillois 1958, 9)

Caillois classified different forms of play into four categories: agôn, alea, mimicry and ilinx, or games of skill, chance, simulation and vertigo, respectively (Caillois 1958, 12). He also set these playful activities on a continuum between ludus and paidia: ludus has rules and is structured whereas paidia is spontaneous and freeform (Caillois 1958, 27).

The closer a play activity is to the ludus end of the continuum, the more it begins to resemble a game as opposed to play.

Salen and Zimmerman (2004, 72) offered two perspectives on the relationship between play and games: games as a subset of play and play as a subset of games. In the former perspective, games are considered a certain type of playful activity. In the latter perspective, games are recognized as complex entities involving rules, play and culture.

Games exist in frames set in time and space more strictly defined than in less structured forms of play. Salen and Zimmerman (2004, 95) called this boundary the magic circle. Essentially, within the game – within the magic circle – there exists an alternate reality with its own rules and possibilities. The lusory attitude, as described by Salen and Zimmerman (2004, 97), denotes an attitude required to enter into playing a game. Similar to the effect of suspension of disbelief, a player is required to accept the alternate reality set by the game and its rules.

Play and games have been studied from numerous perspectives and no game definition fits all types of game and play activity. Salen and Zimmerman (2004, 80) have examined various game definitions and have come up with a synthesis of their own. They define that "a game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" (Salen and Zimmerman 2004, 80).

The problematic part of this definition is the requirement of having a quantifiable outcome, which is not the case with all games. As Salen and Zimmerman (2004, 80) explained, puzzles, role-playing games and open-ended games in general do not fit the definition exactly: sometimes there are no outcomes and at other times they are not quantifiable.

Non-digital role-playing games could essentially continue forever as long campaigns. The same is true on the digital frontier as well, as open-ended games such as massively multiplayer online games can be played indefinitely with players constantly finding new goals for themselves. Additionally, the content of many such online games is dynamically changed over time, making them something akin to living and evolving virtual worlds.

When it comes to puzzles, they only have a single correct solution that is not quantifiable. The point-and-click adventure game genre is essentially a narrated series of puzzles at its core, and as such it does not fit the definition of games either. Salen and Zimmerman concluded that despite any clashing definitions, these borderline cases are significant parts of gaming cultures and that in the end it is a matter of framing. (Salen and Zimmerman 2004, 81)

Within this thesis, role-playing games in digital and non-digital mediums are both treated as games as there exists no valid all-encompassing definitions for games. It is a matter of framing. However, the distinction between games and play – or *ludus* and *paidia* – is in key position here, because role-playing games are one of the exceptions that situate somewhere in the middle of the continuum, yet there exists a general consensus on them being games. In the following section, focus will be turned solely onto role-playing games.

## **2.2 Defining role-playing games**

As was previously discussed, role-playing games tend to be an exception when it comes game definitions. According to Hitchens and Drachen (2009, 5), arriving at a general definition for role-playing games might not even be possible without the definition being too vague. There exists numerous applicable definitions for role-playing and games separately, but few authors have attempted to define role-playing games as a single entity (Hitchens and Drachen 2009, 4).

It is worth noting that role-playing does not connote a gaming context per se, as role-playing without any gaming involved is practiced in various fields such as education, psychology and performance (Hitchens and Drachen 2009, 5). Strong parallels can be drawn between role-playing and children's pretend play (Montola 2012, 102).

According to Montola (2012, 105), role-playing was first developed in the field of psychology as a psychiatric treatment in the forms of psychodrama and sociodrama.

The history of recreational role-playing games is generally seen to have begun with *Dungeons & Dragons* first published in 1974 (Dormans 2006; Hitchens & Drachen 2009). According to Montola (2012, 108), the first version of *Dungeons & Dragons* resembled more of strategy wargaming before the game later shifted its focus from armies to individual warriors with deep personalities. With its 40-year history, role-

playing games have since then developed into several distinct directions, the advent of digital role-playing games being the most relevant to this thesis.

Hitchens and Drachen stated that it is debateable whether role-playing games have to require any role-playing at all (Hitchens and Drachen 2009, 6). There is a sometimes derogatory term roll-player that exemplifies the type of player who does not really role-play in a role-playing game, but focuses solely on the game's mechanical aspects. Many digital role-playing games feature little to no actual role-playing as well. Just as there does not have to be actual role-playing involved in a role-playing game, games other than role-playing games can be role-played. Role-playing can be framed as a way of playing instead of as a system, making it possible to role-play any game by layering additional meanings on top of the base game (Montola 2012, 119).

Hitchens and Drachen (2009, 16) have analyzed forms of role-playing games to have come up with a combined definition. To summarize the lengthy definition, a role-playing game is set in an imaginary world that players are free to explore with their individual characters. These characters have quantitative or qualitative abilities and personality that develop over the course of the game. At least one of the participants – that can be computer software – is a game master controlling the game world and adjudicating the game rules. Players have a wide range of ways to interact with the game world. Role-playing games have narrative elements that are co-created as the play progresses. See Hitchens and Drachen (2009) for a more detailed description of these facets.

Role-playing games are commonly divided into tabletop<sup>1</sup>, live action role-play and digital role-playing games (Hitchens and Drachen 2009; Montola 2012, 11; Järvinen 2008, 332). This division is most evident in the physical form the role-playing activity takes: talking and imagining in tabletop role-playing, acting out in live action role-playing and interacting in virtual environments in digital role-playing (Montola, 2012, 11). There are other role-playing game sub-categories such as freeform, systemless and pervasive, but their status as truly distinct categories is debateable (Hitchens and Drachen 2009, 4).

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<sup>1</sup> In the context of role-playing games, the terms pen-and-paper and tabletop are interchangeable. Only the latter term is used in this thesis.

Järvinen (2008, 332) has created a synthesis of game genres and hierarchies from various popular, industry and academic sources (see Figure 2.1). In the synthesis, role-playing games are further divided into the subgenres of tabletop, live-action and digital.

GENRE	Subgenre	System behaviour relations	Common themes	Game technologies	Game examples
ROLE-PLAYING GAMES	tabletop	Puzzle/adventure, Game-simulations/social, Strategy/race & displace	Fantasy, Sci-Fi, War, History, etc.	pen & paper, dice	<i>Dungeons &amp; Dragons, White Wolf</i>
	live-action (larp)	Puzzle/adventure, Game-simulations/social, Strategy/race & displace	Fantasy, Sci-Fi, War, History, etc.	physical	<i>White Wolf: Mind's Eye Theatre</i>
	digital	Puzzle/adventure, Action/adv.	Fantasy, Sci-Fi, War, History, etc.	digital	<i>Ultima series, Final Fantasy series, Baldur's Gate</i>

**Figure 2.1.** Role-playing game classification as synthesized by Järvinen (2008, 332).

Several authors have deliberately left single-player digital role-playing games out to have a focus on online role-playing (e.g. Montola 2012, 11). With an opposite approach, Barton (2008, 5-11) included only single-player digital role-playing games in his book *Dungeons and Desktops: The History of Computer Role-Playing Games* as he classified online and social digital role-playing games as experiences too different from the traditional computer role-playing games. Dormans (2006) categorized massively multiplayer online role-playing games as separate from other digital role-playing games. This thesis covers all forms of digital role-playing games under the digital umbrella term.

With role-playing games, the shift from the fluidity of rules and gameplay occurring through social interaction into the digital medium has not been a perfect conversion. Essentially, the shift in medium replaces human game masters with software and limitless freedom with pre-created content that brings forth major limitations to interactivity. Role-playing games have been said to be the most complex type of game to design (André LaMothe 2001, in Hallford 2001, xxii).

Digital role-playing games such as *Neverwinter Nights* (2002) and *Vampire: The Masquerade - Redemption* (2000) have attempted to close the gap by allowing human game masters to intervene on the adventure and by providing tools for rapid content creation. Even if the presence of a human game master manages to bring the digital experience closer to traditional tabletop role-playing, in terms of role-playing and freedom there is no real competition between the two. (Hitchens and Drachen 2009, 11)

There is a piece of public design documentation on *Torment: Tides of Numerera* that well summarizes the challenges with digital role-playing games in relation to their tabletop counterparts:

"The experience we're trying to capture is like an encounter in tabletop RPG play, where you can use your abilities in creative ways just by describing, to the GM, what you want to do. While obviously we can't create as dynamic an experience as a human GM can, Crises are an attempt to capture some of that same sense of flexibility and creativity in how you determine your objectives and how you solve problems to achieve them." –*Torment: Tides of Numerera* (Saunders and Kopman 2013)

Hitchens and Drachen (2009, 11) note that the biggest difference between single-player digital role-playing games and massively multiplayer online role-playing games is the sheer amount of players, which can be in the thousands. Similar comparisons can be drawn between tabletop and live action role-playing, with the latter typically including a lot more players. With the emergence of online role-playing games, it can be seen as a full circle of role-playing games going back to their roots of playing with other people (Sandy Petersen 2001, in Hallford 2001, xxv).

Salen and Zimmerman note that digital single-player role-playing games are often structured with a winning outcome similar to adventure games (Salen and Zimmerman 2004, 81). In massively multiplayer online role-playing games, the explorable areas tend to be larger and their total play time far exceeds that of single-player digital role-playing games. As players spend more time with their characters – or in character – than in other games, they tend to grow more attached to them (Hitchens and Drachen 2009, 12).

Some digital role-playing games combine pre-scripted narrative with an open game world that players are free to explore. *The Elder Scrolls V: Skyrim* (2011) is a relatively recent example of this approach. Such games feature a main storyline that does not end the game upon its completion. Instead, players remain free to continue exploring the game world even further. This supports emergent play and players setting up their own goals for themselves.

### 2.3 The role-playing game genre in digital games

As this thesis focuses on digital role-playing games, we must take a look at what qualifies as such. What places a digital game into the genre of role-playing games?

Dictionary.com defines genre as "a class or category of artistic endeavor having a particular form, content, technique, or the like: the genre of epic poetry; the genre of symphonic music<sup>2</sup>." Genre definitions are not strict and with creative works there is always room for interpretation. Yet, at the same time, genres are well established among players, developers, publishers and the media with all of them using genres as guides and reference points.

Barton (2008, 4) argued that two games regarded as role-playing games may actually have very little in common. Barton (2008, 3) lifted adventure, strategy and multiuser online games as separate but related experiences from what he regarded as computer role-playing games.

Unlike role-playing games, adventure games do not feature character differentiation nor variant outcomes through luck or the player character's skills. Strategy games often put players in a position of godlike avatars that control armies instead of singular characters. Multiuser online games – including massively multiplayer role-playing games – focus on socializing and contributing to the community with such a strong emphasis that they are notably different experiences from the computer role-playing game experience. (Barton 2008, 5-11)

Järvinen (2008) explained problems with trying to define genres. First, genres evolve over time and it is rarely an outright simple task to identify the trait that puts a certain genre label on a game (2008, 304). For role-playing games as well as for other genres, much of it is convention. Second, genres are collectively defined and redefined by everyone for several purposes. As Järvinen (2008, 333) summarizes:

"Game genres are found in the junction of game themes, system behavior, and emotions and moods, where they are articulated both by game developers, marketing, journalists, audiences – and theorist-designers, as in here." (Järvinen 2008, 333)

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2 <http://dictionary.reference.com/browse/genre>

This would imply that the potential for genres exist within games themselves, but genre definitions become rather liquid and elusive with participants from all walks of life and with various uses for them take part in their definition.

Digital role-playing games, especially single-player games, may be more closely related to other digital games than to the more traditional role-playing games, but it is also an established and distinct genre among digital games. In the next chapter, another critical concept to the study will be introduced: design values.

### 3 Design values

"Designers seem to develop their own programme of intellectual endeavour. This results in what we have called 'guiding principles'. These can be seen as a design philosophy or a set of values about what designers hold as important in their own domain." (Lawson 2005, 300)

Design and values are two complex phenomena. Combined together, design values make an exciting yet challenging area of study. With such an intricate subject, it is necessary to introduce the concepts of design, design values and ultimately that of game design values. This chapter continues to build on the basis of my study by discussing and defining design and values.

#### 3.1 Defining design

Similarly to games, defining design is not a straightforward task; one with no universally accepted definitions available. There have been suggested definitions such as "to initiate change in man-made things" (Jones 1970, 4) and "the performing of a very complicated act of faith" (Jones 1966, in Jones 1970, 3). Lawson (2005, 33) discussed that although such definitions apply on a general level, they provide no tangible understanding of the design process. Lawson (2005, 33) also suggested that it is the search itself that is more meaningful. This sentiment echoes the previously discussed difficulties in defining games and how meaning arises from searching around the borders (Salen and Zimmerman 2004, 82).

Lawson (2005) has written in his book *How Designers Think – The Design Process Demystified*, "this book is not about science, art or technology, but the designer cannot escape the influences of these three very broad categories of intellectual endeavour" (Lawson 2005, 13). In addition to utilizing their breadth of skill and knowledge, designers deal with extremities such as precision and vagueness, systematic and chaotic thinking as well as imagination and calculation (Lawson 2005, 4). Lawson noted that while designers need a wide variety of skills, different design fields require a different balance of skills (Lawson 2005, 32). For example, some design fields emphasize artistic sensibilities more strongly than mathematical approaches.

Lawson (2005) presented a model of the design process as an iterative cycle between analysis, synthesis and evaluation (Lawson 2005, 39). These phases are linked to each other in both directions, which means design processes do not follow these phases in any given order. As Lawson noted, simply knowing this process does not make anyone a better designer (Lawson 2005, 39). Lawson presented another, a more complex model of design containing the activities of formulating, moving, representing, evaluating and reflecting (see Lawson 2005, 292).

In his book *The Reflective Practitioner: How Professionals Think in Action*, Schön (1983) discussed how professionals – such as designers – think and operate. He expressed the view that professionals depend on their tacit knowing-in-action, intuitively knowing more than they can articulate (Schön 1983, 49). This knowing-in-action is ordinary practical knowledge that can be applied without thinking why, how or where it was obtained (Schön 1983, 54). This intuitive control and knowledge becomes more and more automatic over time, which may cause specialized experts to lose their sight of the bigger picture. According to Schön, a high degree of specialization can lead to a narrowness of vision and break apart an earlier wholeness of experience and understanding (Schön 1983, 60).

As opposed to knowing-in-action, reflection-in-action is a concept of actively thinking about the activity at hand (Schön 1983, 54). Schön used jazz musicians as an example of reflection-in-action: to successfully improvise as a group, there is a need for constant awareness of the other musicians and of one's own actions (Schön 1983, 54). In essence, there is constant uncertainty at play that is harnessed by observing, reflecting and adjusting to it. According to Schön, working under uncertainty is not identified with professionalism the way technical expertise is; for technical experts, uncertainty is a sign of weakness (Schön 1983, 69). However, uncertainty lives at the very core of the design process. Jones' earlier definition of design expressed the aspect of uncertainty well enough to stand repetition: "The performing of a very complicated act of faith" (Jones 1966, in Jones 1970, 3).

### **3.2 On design values**

Value is a multifaceted word that can be defined within numerous frames. Generally it means the worth of something. While pairing it up with the word design limits its scope

significantly, the term design value itself is bound to produce miscommunication within the context of this thesis. The vast majority of value studies within the domain of design research turned out to be about ethics. Belman et al. (2011) described values conscious design as follows:

"To clarify what we mean by 'values conscious design,' we describe games as 'values conscious' when their designers have systematically considered the moral, social, and political resonances of design features." (Belman et al. 2011, 2)

Even as many of these design value studies were in the domain of game development – and as important research as it is – they were not the type of design values that this thesis had a focus on. Barr (2008, 11) has defined value within his dissertation as "an enduring belief that a specific mode of conduct is preferable to other potential modes of conduct", which is an adaptation from Rokeach's (1973, 5) definition. Applied to design values, the definition's scope is reduced to preferring a certain way of conducting *design*.

What this thesis aimed to capture was design values as defined by authors such as Lawson and Holm. Lawson (2005, 159) wrote of guiding principles, which is a term less likely to cause terminological confusion than values. Holm (2006, 1) defined design values within the context of his dissertation as ideas, beliefs, attitudes, orientations, and underlying assumptions, and he explicitly mentioned that ethics were not covered in the work. Design values refer to a designer's value base that affects the design process and ultimately its outcome.

As was discussed in the previous chapter, puzzles have hard time fitting into game definitions, because they only have a single non-quantifiable outcome. Design, on the other hand, can be framed as the exact opposite: even as design problems may have puzzle-like qualities, there are no correct or even optimal answers to them (Lawson 2005, 221). Given the same design problem, individual designers arrive at very different solutions. According to Holm, the differences can be explained by distinctive individual design values (Holm 2006, xi). Lawson (2005, 159) explained how – contrary to a vast amount of design literature – designers never enter design projects as a blank canvas, but instead bring along their personal motivations, beliefs, values and attitudes to their

work. Whereas guiding principles mold each design project, each design project in turn molds the designer's guiding principles (Lawson 2005, 179).

The awareness of personal values, the importance given to them and the conviction of their rightness varies from designer to designer and may have considerable effect on the design process (Lawson 2005, 160). Also Holm (2006, 25) stated that designers may simply not be aware of their own value base. Holm argued that architecture and industrial design would benefit from a more explicit awareness of their values (Holm 2006, xii). According to Kuittinen and Holopainen (2009), game design activity is similar to other design fields, which implies on the aforementioned benefits being applicable to a wider range of design fields.

In his study of design values in architecture and industrial design, Holm has organized design values into five groups of aesthetic, social, environmental, traditional and gender-based design values. These categories contain further distinctions such as "artistic aspects and self-expression", "the spirit of the times", "structural, functional and material honesty", "simplicity and minimalism", "nature and organic", "classic, traditional and vernacular aesthetics" and "regionalism" all under the aesthetic values category. See Holm (2006) for an in-depth look at these value distinctions. (Holm 2006, 219)

Schön also discussed the variety of styles and contending schools in design, with some following the methods of great men, some trying to achieve simplicity and some aiming to show true craftsmanship of materials, among others (Schön 1983, 78). This plethora of schools of thought can be confusing especially for design students new in the field (Schön 1983, 78).

The content of the aforementioned design values or guiding principles will not be more extensively reviewed within the scope of this thesis, nor do the same design values appear in the findings. So far in this chapter, design has been looked into from a general point of view as well as from a design value perspective. The final design section considers design values specifically in the domain of games.

### 3.3 On game design values

As was previously stated, game design does not differ from other design fields as a process (Kuittinen and Holopainen 2009). Thus, design values exist within the field of game design as well. In this section, value changes in game cultures are discussed and previous research on game design values will be presented.

Within its 40-year history, the game industry has expanded from arcade halls to personal computers, from offline to online play, from the home environment to mobile devices and even from games to non-game services in the form of gamification. Arguably, one of the biggest changes in gaming history has been the rise of casual games, which started to happen during the first half of the 2000s. Casual games offered entertainment for the non-gamer audience with simpler gameplay and more approachable themes. In 2012, nearly half of game players were female and over a third of game players were over the age of 36 (Entertainment Software Association 2013). According to Juul (2010, 146), it was the game design of the time that was earlier preventing more varied audiences from getting into games. Games today offer everything between time and skill demanding hardcore games and easily approachable casual entertainment.

All of this change has diversified the design values existing within the field of game design. Kultima (2009) has researched game design values in casual games and argued that due to these changes, we may have to reshape our impressions on what is regarded as good in games. As the still young game industry has been maturing, it has started to offer more variety and – especially regarding designers – schools of thought. This naturally leads to more distinctive value bases between individual game designers. Juul (2010, 78) argued that game designers and players carry with themselves the history of games that prevents them from working with a clean slate; a notion similar to Lawson (2005) as discussed before.

There exists a large body of design values research concerning game design. However, the most prevalent approach to values is an ethical one. Casual games have been researched with notions to design values. Kuittinen et al. (2007) have described casual game features using concepts such as learnability, simplicity, fast rewards, pleasant content, forgiving gameplay and short play sessions. Kultima (2009) has researched casual game design values and has abstracted the values of acceptability, accessibility,

simplicity and flexibility. Juul (2010, 30) presented five casual game design principles of pleasant fiction, usability, interruptibility, optimal difficulty and positive feedback. Whereas Kultima (2009) referred to design values like Holm (2006), Juul's (2010) choice of term, design principles, resembles that of Lawson's (2005) guiding principles mentioned earlier.

This concludes the look on design, design values and game design values. Being such a complex subject, only the surface has been scratched within the scope of this thesis. The goal here has been to introduce the basic concepts and related design research. The following chapter explains the methodology behind the study.

## 4 Methodology

Scientific research methods are generally divided into quantitative and qualitative, although the division is mostly an artificial one as many researches and methods have qualities of both. In their simplest forms, quantitative and qualitative research are about numbers and words, respectively.

The goal of this study was to find out what kind of design values have been driving the design of digital role-playing games. The data source used in the study was a collection of role-playing game postmortem documents spanning 15 years from a game industry website called *Gamasutra*. With a data source consisting of text and a goal of finding value statements within, a qualitative approach that let meanings arise from the data seemed ideal.

### 4.1 Method

Huberman et al. (2013, xvii) wrote that there is a wide range of methods available for qualitative data analysis and that the different approaches can be combined and customized for each research project's individual needs. Alasuutari (2011, 39) divided qualitative data analysis into two phases of abstracting observations and solving the puzzle. Huberman et al. (2013, 13) had a similar viewpoint with an added phase in the middle: data condensation, data displaying and drawing and verifying conclusions. In this study, the data was condensed by coding it and displayed in the form of an affinity diagram.

With a data source consisting of text and a goal of finding value statements within, content analysis was chosen. As a more structural approach became necessary, affinity diagram provided clear goals and satisfying results. These two methods will be presented next.

#### 4.1.1 Content analysis

In addition to being one of the most common qualitative methods, content analysis can also be considered as a loose theoretical framework. Most qualitative analysis methods are more or less based on content analysis. (Tuomi and Sarajärvi 2007, 91)

A method was needed to reveal embedded design values within text documents. Content analysis carefully analyzes every word to find hidden nuances and meanings (Huberman et al. 2013, 8). Krippendorff (2004, 46) stated that content analysis can be used for reflecting values, attitudes, interests and the focus of attention among other things. As was discussed in the previous chapter, Holm (2006, 1) defined values within his dissertation in a very similar manner. These were exactly the points of interest in this study.

Being as diverse a method as it is, there are numerous ways of conducting content analysis. In its most simplified form, it can be said to have two phases: to first simplify the data with codes and to then interpret the codes. Tuomi and Sarajärvi (2007, 89) instructed that the number of unique codes should not go into several dozens, because the whole point of the method is to compress the source documents into a more understandable and trackable format. Huberman et al. (2013, 12) clarified that the term *data reduction* is not used, because the data is only strengthened by compressing it. Researches done with content analysis are sometimes criticized for being incomplete; content analysis summarizes content, but further conclusions have to be drawn (Tuomi and Sarajärvi 2007, 103).

Pinelle et al. (2008) have researched game usability by content analyzing game reviews and they proceeded to quantify their codes. Petrillo et al. (2009) have content analyzed game postmortems and they also quantified their results. There are opposing arguments on the quantification of content analysis. According to Tuomi and Sarajärvi (2007, 121), it rarely provides relevant data, because the sample size in qualitative analysis tends to be small. Neuendorf (2002, 14) sees content analysis feasible only as a quantifying method. Krippendorff (2004, 87) states that while using counting in content analysis may be convenient, it is not a requirement for getting valid answers to research questions. With these opposing arguments about, content analysis is treated as a qualitative method within this study.

Content analysis can also be applied to tracking trends over time. Krippendorff (2004, 49) mentioned examples relevant to this study such as the value changes in inspirational literature and the value changes in U.S. political party platforms. Predicting future changes is also possible by extrapolating; going beyond available data points. However,

changes in design values over time were not studied within this thesis for research scope and sample applicability reasons.

#### ***4.1.2 Affinity diagram***

Resembling grounded theory, affinity diagram is a bottom-up method that builds up from individual notes into higher hierarchies to reveal common issues and themes. Individual categories in the hierarchy are never predefined, but instead they are formed around the data itself. This way notes are never forced into artificial – and ultimately false – categories and the final affinity diagram speaks the notes' language. (Beyer and Holtzblatt 1998, 156)

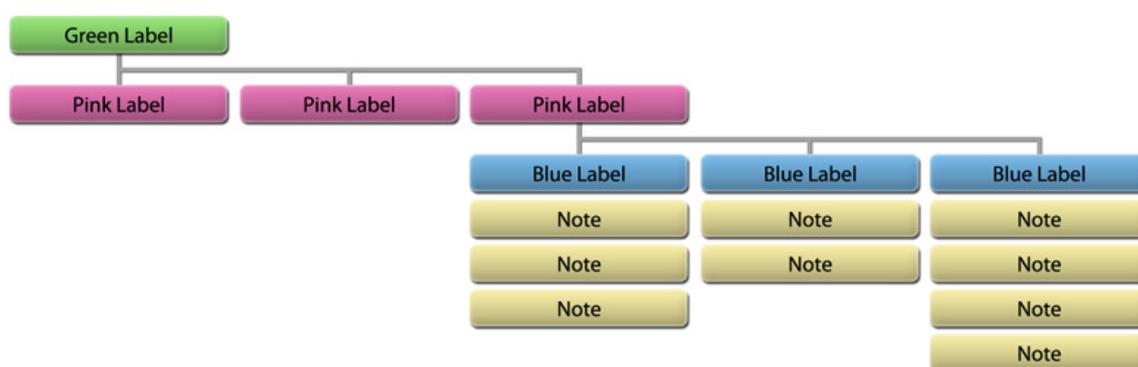
First, the data is coded as is usual to content analysis, except that instead of creating fewer codes more widely applicable, each code – hereby referred to as notes – is unique and written in first person as if the data was directly communicating to the researchers. The amount of notes varies, but it is typically about 1500 (Beyer and Holtzblatt 1998, 156) or about 500 to 1000 (Holtzblatt et al. 2005, 161). The method's origins are in Japan and it could originally handle a smaller set of 200 notes (Beyer and Holtzblatt 1998, 155).

One by one, the notes are organized onto a wall, with groups starting to form from notes communicating similar things. This is a strongly intuitive process, and as Beyer and Holtzblatt (1998, 156) clarify, there is no justification required when placing the notes. However, with new groups being formed and notes constantly changing their place, it will slowly start to take shape into a more justifiable whole. Beyer and Holtzblatt (1998, 160) suggest limiting the amount of notes in a single group to four to create more deep distinctions between the groups.

Beyer and Holtzblatt (1998, 156) suggest using a team, preferably one person per 100 notes, to allow the affinity to be built on a single day. This allows to keep the affinity's structure fresh in mind while also being able to discuss the notes and their placement with others (Beyer and Holtzblatt 1998, 162).

The process continues by adding levels of hierarchy to the groups of notes. For each group, a blue label summarizing the group's content is created. Next, similarly to grouping notes, the blue labels are organized together into groups of similar themes.

This is then repeated two more times, adding pink and green labels, respectively. Except for the top-level green labels, it is important to write the labels in actual sentences and in a way as if the affinity would be directly communicating with the notes' voice. As the top of the hierarchy, the green labels can be more generalizing in nature. (Holtzblatt et al. 2005, 160)



**Figure 4.1.** The figure above shows the basic structure of a condensed affinity diagram. Individual notes are grouped under blue labels, which in turn are grouped under pink labels. Green labels collect together similar pink labels and function as the titles of individual issues discovered.

The process results in an affinity diagram that is able to communicate a story with the data source's voice. In the case of this research, it was the game developers' voice communicating of design values in the context of digital role-playing game development.

## 4.2 Data source

Game postmortem documents were decided on as the source of data for this study for their potential to include value statements made in hindsight. Next, the data source and the sampling process will be introduced in detail.

### 4.2.1 Postmortems

"Sometimes, in the relative tranquility of a postmortem, they think back on a project they have undertaken, a situation they have lived through, and they explore the understandings they have brought to their handling of the case. They may do this in a mood of idle speculation, or in a deliberate effort to prepare themselves for future cases." (Schön 1983, 61)

According to Hamann (2003), a postmortem is a document written by one or more production team members after or at the end of a game's development cycle. The purpose of a postmortem is to improve production processes by documenting what went right and what went wrong. Hamann (2003) stated that postmortems generally deal with high-level issues, basically forgetting all the day-to-day issues that might have had the biggest impact on the game development process. However, with a value study, a high-level approach seemed ideal.

As postmortems are hindsight analyses on their subject, there was an expectation that they would show reflections of design values upon deeper inspection. Initially, game reviews were considered as the source of data, but an early analysis revealed postmortems to be more promising in value content. Additionally, postmortems can provide inside knowledge on design values from people who have often been on the project from the start.

*Gamasutra*<sup>3</sup> is a resourceful and professionally-oriented website focusing on the game industry. At the time of sampling, it had a collection of 192 postmortems spanning over 18 years and, more specifically, 16 role-playing game postmortems spanning 15 years. This made it a good choice of source for game postmortems, although neither *Gamasutra* nor postmortems in general are without potential problems. As postmortems are written by game developers themselves, they may be too involved and biased to write about their craft objectively. As they are also written afterwards, a postmortem may contain assumptions and justifications rather than accurate information on the process. Also, as published postmortems are publicly available, they may have been written with marketing considerations in mind.

#### **4.2.2 Sampling**

Sampling is necessary, because not every occurrence can realistically be included in any research. In this case, the postmortems were limited to a single genre, which produced a sample of a competent size for the scope of this thesis and no further sampling criteria was necessary.

Krippendorff (2004, 175) stated that the content analyzer's personal background and familiarity with the subject can be a definitive asset. The chosen genre was role-playing

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3 <http://www.gamasutra.com>

games, because of my familiarity with them in both digital and non-digital formats. Role-playing games were an interesting choice also because they often contain elements such as action, strategy, puzzle and adventuring, which are all distinctive game genres on their own. Role-playing games can be seen as the melting pot of genres.

Game genres were then fetched for all of the 192 postmortems found in *Gamasutra* from two sources, *GameSpot* and *Wikipedia*. *GameSpot*<sup>4</sup> is a professional video game journalism website that launched in 1996, making it the among the few gaming websites that date as far back as the postmortems did. *Gamespot* has a limited and consistent set of genres and each game can only belong to a single genre. The eight genres found among the postmortems were action, adventure, driving, puzzle, role-playing, simulation, sports and strategy.

Another source for the genres was used to catch any games that might have fallen between categories. *Wikipedia*<sup>5</sup>, a free encyclopedia editable by anyone, provided a good second opinion for two reasons. First, games in *Wikipedia* can belong to multiple genres, which nearly eliminates any borderline situations. Second, the genres in *Wikipedia* are not standardized nor coherent, which made it a fluid counterpoint to *GameSpot's* more rigid classification.

All games that were categorized as role-playing games in either source were selected in the sample. There was only a single case of minor discrepancy between genres on the two services: *Deus Ex* was classified as an action game on *GameSpot* and an action role-playing game on *Wikipedia*. Essentially, *GameSpot* and *Wikipedia* were in complete agreement on the game genres, which left the sample free of categorical conflict.

The sampling process resulted in 16 role-playing game postmortems that were published between the years 1996 and 2011. According to Tuomi and Sarajärvi (2007, 85), considering sample size for a master's thesis was not seen as a priority and it is generally rather small in qualitative studies. Krippendorff (2004, 123) mentioned studies where increasing sample size beyond 12 did not produce significantly more accurate results in content analysis. Within this context, this study's sample size of 16 seems at the very least adequate if not a bit excessive for a master's thesis.

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4 <http://www.gamespot.com>

5 <http://www.wikipedia.org>

### 4.2.3 Overview of the sampled games

To be able to follow the findings better, this section provides a brief overview of the sampled games in a chronological order.

*Dark Sun Online: Crimson Sands* was released in 1996 and developed by *Strategic Simulations, Inc.* It was one of the first graphical massively multiplayer online role-playing games, which may have contributed to its short-lived life. Its postmortem article was written by associate producer André Vrignaud.

*System Shock 2* was released in 1999 and developed by *Irrational Games* and *Looking Glass Studios*. It is a first-person game with exploration, shooting and role-playing game elements. The postmortem article was written by project director Jonathan Chey.

*Vampire: The Masquerade – Redemption* was released in 2000 and developed by *Nihilistic Software*. Based around the tabletop role-playing game *Vampire: The Masquerade*, the digital game features a multiplayer mode where one player can take the game master's role. However, this feature was expressed to be seriously flawed (Barton 2008, 369). Its postmortem article was written by Lead Programmer Robert Huebner.

*Deus Ex* was released in 2000 and developed by *Ion Storm*. It is a cross-genre game that features exploration, shooting and role-playing elements in a simulation-based game world. Its postmortem article was written by producer and project director Warren Spector.

*Diablo II* was released in 2000 and developed by *Blizzard North*. It is a hack and slash game with a dark fantasy theme. As a sequel to *Diablo*, the series fans had high expectations for the game, and despite some of its more problematic aspects, it proved to be extremely successful (Barton 2008, 320). The postmortem article was written by project lead and design lead Erich Schaefer.

*Baldur's Gate II: Shadows of Amn* was released in 2000 and developed by *BioWare*. It is a sequel to the first game in the series that has been praised by players and critics alike (Barton 2008, 344). The corresponding postmortem article was written by executive producer Ray Muzyka.

*Fallout Tactics: Brotherhood of Steel* was released in 2001 and developed by *Micro Forté*. It is a tactical role-playing game within the *Fallout* universe, but as its name suggests, it emphasizes tactics more so than other games in the series. Its postmortem article was written by producer Tony Oakden.

*Dark Age of Camelot* was released in 2001 and developed by *Mythic Entertainment*. It is a massively multiplayer online role-playing game with three realms of differing cultures warring each other (Barton 2008, 411). The game's postmortem article was written by producer and designer Matt Firor.

*Dungeon Siege* was released in 2002 and developed by *Gas Powered Games*. It is a hack and slash role-playing game with a single-player campaign and lots of multiplayer options. Its postmortem article was written by technical lead Bartosz Kijanka.

*Neverwinter Nights* was released in 2002 and developed by *BioWare*. As the follow-up to their *Baldur's Gate* series, the developers turned to 3D graphics, game mastering options in multiplayer and user-created content with magnificent results that mark a turning point in computer role-playing game history (Barton 2008, 371). The postmortem article was written by core game designer and lead programmer Scott Greig with an unspecified team.

*Asheron's Call 2: Fallen Kings* was released in 2002 and developed by *Turbine Entertainment Software*. The game offered a variety of upgrades over its predecessor, but continued to receive mild reception (Barton 2008, 409). The postmortem article was written by core system engineer Paul Frost.

*Toontown Online* was released in 2003 and developed by *Disney Interactive*. It is a massively multiplayer online role-playing game targeted as a family game. Its postmortem article was written by director Mike Goslin.

*Fable* was released in 2004 and developed by *Big Blue Box* and *Lionhead Studios*. It is an open world role-playing game with a theme of the player's avatar and the game world changing over time to reflect the player's actions. Its postmortem article was written by Daniel Sánchez-Crespo Dalmau based on a public postmortem presentation held at Game Developers Conference 2005 by Peter Molyneux.

*The World Ends with You* was released in 2008 and developed by *Square Enix* and *Jupiter*. It is an action role-playing game with themes of Japanese youth culture. Its postmortem article was written by director Tatsuya Kando, co-director Tomohiro Hasegawa and planning director Takeshi Arakawa.

*Solatorobo: Red the Hunter* was released in 2011 and developed by *CyberConnect2*. It is an action role-playing game where the player controls the protagonist and his mecha robot. The postmortem article was written by director and game designer Takayuki Isobe.

*SpellCraft: School of Magic* was released in 2011 and developed by *Appy Entertainment*. It is a mobile game of wizards, their spells and equipment and of monsters and pets. Its postmortem was written by studio brand director Paul O'Connor.

### **4.3 Analysis**

The coding process was begun with content analysis methodology with no more specific methods in mind. The coding itself can be done in any way the researcher deems best (Tuomi and Sarajärvi 2007, 92), although two or more coders were suggested to establish intercoder reliability (Neuendorf 2002, 142). Having only a single coder should be enough for a master's thesis level of work, but of course it will have to be recognized as a potential reliability issue in the study.

General and widely applicable codes were starting to form, which resulted in difficulty to make an analysis much deeper than counting the codes' occurrences. The affinity diagram method was then incorporated into the study and it provided a more clear structure for all stages of the analysis.

Affinity diagram required that all codes were unique data points, which resulted in recoding the data. Any instances of explicit and implicit expressions of values were coded with a summarizing wording. Value is an unquestionably complex entity and studying on others' implied values is a daunting task. Generally, any occurrences with positive or negative tones were included. For example, stating that something should have been done differently in the production would imply a negative, regretful tone whereas stating that the production team was proud of their collaborative ideating process would imply a positive tone and give the process increased value.

The coding process resulted in 452 unique affinity notes, which was close to a typical amount used in building an affinity diagram (Holtzblatt et al. 2005, 161). The building of the affinity diagram derived from suggested processes in two ways. First, no team was utilized, which made the process take longer and might have reduced the viewpoints available (Holtzblatt et al. 2005, 174). Second, coding and the affinity was built digitally with content analysis software instead of placing paper notes on a physical wall (Holtzblatt et al. 2005, 174). However, the physicality was suggested mostly to ease collaboration with others, which was not the case in this study in the first place.

The affinity ended up with six high-level categories, which is within the typical amount of five to eight (Holtzblatt et al. 2005, 160). In the next chapter, the results of the study are reviewed in detail.

## 5 Findings

The finished affinity diagram identified six value categories that are presented here in a descending order of their relation to both role-playing games and design values. The value categories gradually turn to developmental values towards the end. The acronyms<sup>6</sup> that are used when referencing to the games have been included in Figure 5.1 below.

<i>Asheron's Call 2: Fallen Kings</i>	AC2FK	<i>Fallout Tactics: Brotherhood of Steel</i>	FTBoS
<i>Baldur's Gate II: Shadows of Amn</i>	BG2SoA	<i>Neverwinter Nights</i>	NN
<i>Diablo II</i>	D2	<i>System Shock 2</i>	SS2
<i>Dark Age of Camelot</i>	DAoC	<i>SpellCraft: School of Magic</i>	SSoM
<i>Deus Ex</i>	DE	<i>Solatorobo: Red the Hunter</i>	SRtH
<i>Dungeon Siege</i>	DS	<i>Toontown Online</i>	TO
<i>Dark Sun Online: Crimson Sands</i>	DSOCS	<i>The World Ends with You</i>	TWEwY
<i>Fable</i>	F	<i>Vampire: The Masquerade – Redemption</i>	VTMR

**Figure 5.1.** This table shows the games' acronyms used when referencing to them in the findings.

The findings will be presented one value category at a time, starting with the one most strongly related to the role-playing aspect.

### 5.1 Player expression

One of the most persistent themes was that of player expression through unique characters and how game worlds reflect player actions.

#### 5.1.1 Unique player characters

"It's a role-playing game in that you play a role and make character development choices that ensure that you end up with a unique alter ego."  
(Spector 2000, DE)

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<sup>6</sup> The acronyms have been formed using standard capitalization rules, dropping special characters, converting Roman numerals to single-digit numbers and treating compound words as singular words.

In role-playing games, players can express themselves through their unique characters. Muzyka (2001, BG2SoA) regarded being able to personalize the player character as a way of making players feel that their character is their own. In relation to its predecessor, *Diablo II* added a component system that allowed presenting hundreds of outfit variations on characters (Schaefer 2000, D2). In *Fable*, cosmetic changes in the player character were made gradual and consequential of the player's actions:

"The focus of the game became the morphing of an avatar who wants to become a hero and can choose between the good and evil paths." (Sánchez-Crespo Dalmau 2005, F)

Naming the player character – which is regarded here as a cosmetic feature – was a deeply divided issue for the *Deus Ex* developers. Some developers considered letting players name their character as essential to role-playing games whereas others considered the difficulties arising in dialog writing. (Spector 2000, DE)

In terms of being explicitly mentioned in the postmortems, cosmetic character differentiation came up as secondary in priority. As a game with a focus on player expression, the *Deus Ex* developers wanted to make sure that character differentiation was more than cosmetic (Spector 2000, DE).

While cosmetic character customization may be more common in Western role-playing games, mechanical character differentiation is a widely applied concept. Schaefer (2000, D2) saw the skill tree mechanic in *Diablo II* as an important factor in character differentiation:

"The ability for characters to branch into different areas of the skill tree, and to choose a level of specialization in each skill along the way, provides truly unique characters." (Schaefer 2000, D2)

### **5.1.2 Reflective game world**

Not only is the player characters' uniqueness important in role-playing games, but also how they can act in the game world. As was discussed in the second chapter, this is especially important in digital role-playing games, because they are trying to recreate the feeling of freedom and reactivity as experienced in tabletop role-playing games.

*Baldur's Gate II: Shadows of Amn* had a design guideline about the story revolving around the player character and how it is his or her actions that make a difference in the game world (Muzyka 2001, BG2SoA). When the player is empowered with an ability to make a difference, the game world must evolve according to the player's actions:

"The player must feel as if he is having an effect on the environment. His actions are making a VERY visible difference with how things are running in the game world. His actions have consequences." (Muzyka 2001, BG2SoA)

"The state of the world changes to reflect the impact of player choices."  
(Spector 2000, DE).

Role-playing games often have settings and plots that set up forces of good against forces of evil. Although the majority of players choose to be good and lawful characters (Fine 1983, 210), players must be able to choose between them as a form of player expression (Sánchez-Crespo Dalmau 2005, F; Muzyka 2001, BG2SoA). As with other choices, the game world must reflect the player's actions one way or another or else the choice itself becomes meaningless.

"What good is player control if all choices lead to the same result? Without real, predictable consequences, choice is irrelevant." (Spector 2000, DE)

One of the design rules for *Deus Ex* was to allow all locations to be accessed in several ways and to avoid dead ends in level design (Spector 2000, DE). This avoidance of dead ends indicates a desire to validate players' choices in the game world. Consequently, validating player choices validates player expression.

"Because cameras scan fixed arcs, the player can utilize timing to sneak by cameras, pop out and shoot them at the right moment, or get underneath them and bash them with a melee weapon." (Chey 1999, SS2)

The two previous quotes show the importance of patterns and predictability in the game world. Players have to be able to make educated guesses about cause and effect to be able to get the results they want. Player expression is uncontrollable as long as the game world does not reflect the player's choices.

## 5.2 Player engagement

Player engagement became the broadest category that contains the design values of broad appeal, cooperation, simple controls, discovery, immersion and clear goals. In many ways, player engagement represents a value set commonly emphasized in casual games.

### 5.2.1 *Broad appeal*

While wanting to reach broader audiences was mostly explicitly expressed among console, mobile and online titles, it was expressed with *System Shock 2* as well (Chey 1999, SS2). It was, however, a common implicit theme through game features such as learnability.

According to Goslin (2003, TO), *Toontown Online* was designed akin to theme park attractions in which whole families ride together. Having something for everyone becomes key. Using various types of humor appeals to everyone (Goslin 2003, TO). According to Isobe (2012, SRtH), *Solatorobo: Red the Hunter* had a story too mature for younger audiences until more action and emotional variety was added to the game.

First impressions are extremely important in appealing to players. *Toontown Online* and *SpellCraft: School of Magic* postmortems had mentions of spending a lot of effort on perfecting the early parts of the game (Goslin 2003, TO; O'Connor 2012, SSoM). Schaefer (2000, D2) had similar implications by stating that the first act in *Diablo II* was perfected as it would also function as a demo. Online games require some extra attention so that new players are protected from any kind of harassment by other players (Vrignaud 1997, DSOCS). Additionally, Goslin (2003, TO) reminded that allowing player communication while keeping it age-appropriate brings its own challenges.

A common theme was supporting diverse skill levels and various ways to learn. According to Goslin (2003, TO), a lot of time in developing *Toontown Online* went into the tutorial to teach players how the game works. They also made it possible to learn by observing other players:

"It was important for us to allow passersby to be able to observe battles and even discuss what was happening in them as a way for new players to learn how to play this part of the game." (Goslin 2003, TO)

According to Isobe (2012, SRtH), younger children need guidance in things that are obvious to veteran players. According to Goslin (2003, TO), new and younger gamers also find it a relief not to have to come up with a name for their character themselves. Thus, even with the possibility of naming the player character, there could also be ready-to-use names available. The first set of levels should also be incredibly easy (Sánchez-Crespo Dalmau 2005, F). However, there lies a difference between easy difficulty and easy mechanics; in an effort to keep their mechanics simple, *Solatorobo: Red the Hunter* became too simplistic and unoriginal (Isobe 2012, SRtH).

Game difficulty should be ramped up soon enough to engage the more experienced players (Goslin 2003, TO). In *Toontown Online*, battles become more complex as the player progresses and begin to require more coordination between players (Goslin 2003, TO).

Schaefer (2000, D2) mentioned how in *Diablo II* players cannot get stuck due to difficulty issues, because they can fight the same monsters again and again until their characters are strong enough to proceed. Similarly, *The World Ends with You* allows players to control the amount of battles that occur, which gives players control over their progress. (Arakawa et al. 2009, TWEwY) In addition to the amount of battles, players can either let battles play up by themselves or actively participate in them, which supports more and less engaging playing styles (Arakawa et al. 2009, TWEwY).

### **5.2.2 Cooperation**

Goslin (2003, TO) assessed that their game is more friendly and cooperative than others, which may have contributed to the game's strong appeal to women. Firor (2002, DAoC) stated that their cooperative mechanic of team-based competition was innovative at the time. According to Vrignaud (1997, DSOCS), player interaction and communication was the focus in *Dark Sun Online: Crimson Sands* instead of prescribed content. It is worth noting that all these three games are massively multiplayer online role-playing games.

Cooperation can be supported in game mechanics. According to Vrignaud (1997, DSOCS), nothing in the game design should discourage players from communicating with each other. To beat challenging enemies in *Toontown Online*, players have to cooperate and communicate with each other to coordinate more powerful attacks

(Goslin 2003, TO). Additionally, when all participants are rewarded, all help is welcomed (Goslin 2003, TO). The game also has a feature to teleport to a friend's location, which supports cooperation rather than spending the time looking for friends (Goslin 2003, TO).

Vrignaud (1997, DSOCS) mentioned that they noticed rising interest in player versus player play, whereas Schaefer (2000, D2) stated that they underestimated the interest in online play. With the prominence of online play today, the same mistake would not likely be made.

### 5.2.3 *Simple controls*

The *Diablo II* developers had a design goal of players having to be able to figure out how to play without reading any manuals. They observed new players with the game and whenever a player struggled with the user interface, they made the interface also work the way the player was trying to accomplish the task (Schaefer 2000, D2).

Also Vrignaud (1997, DSOCS) supported this kind of versatility in controls:

"As a designer, I have found that players adopt their own style of play, regardless of how the interface or game environment is designed." (Vrignaud 1997, DSOCS)

In an effort to allow even novices play the more demanding part of the game master, the *Vampire: The Masquerade – Redemption* developers had a design goal of being able to access all game controls with a mouse-only interface:

"Our overall design goal for the user interface was to ensure that important functionality was accessible using only the mouse, and all keyboard functionality represented only "advanced" controls such as hotkeys and shortcuts." (Huebner 2000, VTMR)

*Toontown Online* made it the easiest possible to join other players' activities: by simply bumping into them (Goslin 2003, TO). This kind of transparency in user interfaces was also mentioned by Schaefer (2000, D2):

"We strove to make the interface as transparent as possible. You want to open a door? Left-click on it. Want to move to a target location? Left-click on it.

Want to attack a monster, pick up an item, or talk to a non-player character?

Well, you get the idea. It's amazing how many games have different controls and key combination for all these actions when simpler is always better."

(Schaefer 2000, D2)

According to Chey (1999, SS2), they wanted to simplify their user interface for broader audiences without making it too simple, which ended up making the interface their most iterated design element. O'Connor (2012, SSoM) mentioned of delaying their release date to get more polish for their user interface.

#### 5.2.4 *Exploration*

Exploration was generally seen as a pleasant activity that provides to game longevity. Huebner (2000, VTMR) mentioned wanting to offer a wide variety of characters, items and environments to explore. Spector (2000, DE) stated that variety in content is a feature that makes people want to return to the game. He also mentioned that the developers themselves started asking for more variety besides humans to the roster of their game's enemies (Spector 2000, DE). Firor (2002, DAoC) mentioned *Dark Age of Camelot* spanning three distinct realms with unique content, which gave it a feeling of three games in one. One of *Baldur's Gate II: Shadows of Amn*'s design goals was to include story twists that the player can figure out on his own in advance (Muzyka 2001, BG2SoA).

Grinding<sup>7</sup> can be seen as opposed to exploration as it constitutes of repetition. Arakawa et al. (2009, TWewY) stated that grinding can get monotonous. According to Schaefer (2000, D2), a lot of players disliked the save point system in *Diablo II* that forced players to replay already cleared areas. However, the developers managed to reduce the feeling of repetition in their gameplay by juicing it up with additional animations and sound effects for each monster (Schaefer 2000, D2).

"The player must always feel that he or she is exploring interesting areas.

This means that areas always need to have a unique feel to the art." (Muzyka 2001, BG2SoA)

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7 Grinding is doing repetitive tasks as a part of gameplay either voluntarily to speed up progress or as a core part of gameplay.

Exploration can come in many forms, including game mechanics. According to Schaefer (2000, D2), players like to experiment with their character development choices and be able to revert back. Games that support experimenting with different combinations of character skills can provide nigh endless strategies to discover and share with others, which both contribute positively to game longevity (Schaefer 2000, D2).

*Diablo II* features randomly generated levels, monsters and treasure, which provides lots of possibilities for exploration. The occasional randomly generated item found is of exceptional quality and adds to the feeling of making unique discoveries:

"Players feel an ownership of their own game experience in that they are actively generating a unique story. It's enjoyable to tell friends about what you have just done in the game, knowing for sure that they have not done the same thing." (Schaefer 2000, D2)

### 5.2.5 *Immersion*

Immersion was found in the sample mostly in implicit form. The most explicit mention about immersion came up in the *Deus Ex* postmortem:

"It's an immersive simulation game in that you are made to feel you're actually in the game world with as little as possible getting in the way of the experience of 'being there.' Ideally, nothing reminds you that you're just playing a game -- not interface, not your character's back-story or capabilities, not game systems, nothing." (Spector 2000, DE)

While the loading time between levels were wanted to be eliminated from *Diablo II* and *Dungeon Siege* (Schaefer 2000, D2; Kijanka 2002, DS), *Baldur's Gate II: Shadows of Amn* had a design rule about keeping quests in single areas to avoid unnecessary movement between areas (Muzyka 2001, BG2SoA).

Schaefer (2000, D2) reasoned that their save point system removed the need to constantly think about saving progress, which also contributed to immersion:

"We also wanted to discourage the type of play where players feel they must always save the game right before a difficult section, then constantly die and reload until they get lucky and make it through." (Schaefer 2000, D2)

Digital role-playing games are occasionally text-heavy, as is the case with the *Baldur's Gate* series. As reading is an activity very different from playing, longer text passages may reduce the game's immersiveness. According to Arakawa et al. (2009, TWEwY), *The World Ends with You* was received with confusion due to its text-heavy tutorial. *Baldur's Gate II: Shadows of Amn* had a design rule about non-player character dialog lines being a maximum of two lines at once and the player's responses aimed to be kept at no more than three possible options (Muzyka 2001, BG2SoA).

### 5.2.6 Clear goals

The last theme under player engagement is that of clear goals. They are inherently linked with rewards. As was mentioned by Muzyka (2001, BG2SoA) and Spector (2000, DE), locations should be shown to players before they can access them. This foreshadowing at once transforms the location into a clear goal and a future reward. Also, in *Diablo II*, searching and finding waypoints functions both as a goal and reward at the same time. The game's skills have prerequisite skills (Schaefer 2000, D2), which offers clear pathways to desired outcomes.

According to Spector (2000, DE), players come back to a game when they have a clear idea of their goals in the game. Slightly similarly, Vrignaud (1997, DSOCS) stated that players come back when they are recognized for their deeds. Maintaining this so-called virtual fame can be regarded as a social goal and reward at once.

Muzyka (2001, BG2SoA) stated that the player should be rewarded often and in various ways. Schaefer (2000, D2) described *Diablo II*'s pacing as the player constantly being only a few mouse clicks away from something great. There is a constant pull stemming from simple pleasures:

"Both *Diablo* and *Diablo II* provide a constant source of simple pleasures, many of which are perhaps too basic and obvious to mention in evaluations and reviews, but which are fundamental to their success." (Schaefer 2000, D2)

Muzyka (2001, BG2SoA) stated that the player should always have a general understanding of the game's villain's progress. The villain can be seen as the ultimate goal and getting information on his or her progress reawakens the goal. Even with clear goals, players need choice in how to actually reach them:

"The game world should be divided into chapters. Each chapter should be of equal size and exploration potential. Each of these chapters should have a rather obvious goal, but one that the player can achieve in any fashion that he wants." (Muzyka 2001, BG2SoA)

As was seen above, rewards come in many forms in addition to in-game items such as character equipment. The most clear goals tend to function as rewards upon achieving them.

### **5.3 Gameplay prioritization**

At first it may seem slightly redundant claim that gameplay is the most important element in games. However, in addition to their ludological elements, games are also audiovisual experiences, stories and entertainment, among others. This design value puts emphasis on gameplay and integrating other elements to it seamlessly instead of stacking them on top of the game as separate experiences.

#### **5.3.1 *Gameplay***

"I decided it was more important to get the gameplay under control than to get the game looking good." (Spector 2000, DE)

Vrignaud (1997, DSOCS), Spector (2000, DE) and Chey (1999, SS2) all explicitly stated that gameplay was their focus right from the start. Prioritization statements like these further emphasize the fact that there are games that rely on elements other than the game medium's essence that is gameplay.

According to Spector (2000, DE), even very simple prototypes allow to see gameplay potential and that actually playing designs reveals much more than merely thinking about them. Schaefer (2000, D2) mentioned that they wanted to make the game playable as early as possible to maximize the time available for gameplay iteration.

For another type of example, O'Connor (2012, SSoM) explained how they converted their older games into the free-to-play model even though their gameplay was not designed for that in mind:

"[--] these games were like battleships hastily converted to aircraft carriers in World War II. Players rewarded our changeover with improved reviews and revenue, but neither game had the kind of data-driven, collecting-oriented gameplay that best takes advantage of the freemium format." (O'Connor 2012, SSoM)

Whereas O'Connor stated the conversion being less than ideal, players rated the game higher. This would imply that either players were expecting the new type of gameplay from the game or that the game kept them entertained by means other than gameplay.

### **5.3.2 Narration integration**

The developers behind *Deus Ex* and *Solatorobo: Red the Hunter* spent considerable amount of time in pre-production concepting the game world. Even if a lot of research and created materials did not end up in the actual game, it helped in creating a very living world. (Spector 2000, DE; Isobe 2012, TWEwY)

Schaefer (2000, D2) explained wanting to take *Diablo II*'s story into consideration earlier in order to be able to better integrate it with quests. Several other postmortems had mentions of very similar goals of better tying the game setting to its gameplay (Spector 2000, DE; Arakawa et al. 2009, TWEwY; Isobe 2012, SRtH).

"Thinking back, we should of have considered the gameplay aspect earlier in the project while creating the settings and scenarios, so that the two would fuse more smoothly." (SRtH, Isobe 2012)

According to Arakawa et al. (2009, TWEwY), their development team was determined to avoid plot holes commonly seen in Japanese role-playing games. *Baldur's Gate II: Shadows of Amn* had a design principle of leaving the story open-ended for possible expansions and sequels (Muzyka 2001, BG2SoA). Spector (2000, DE) stated the same. Greig et al. (2002, NN) explained how they should have prototyped less technology and more storylines to see how they play.

They planned on using the *Neverwinter Nights* toolset in prototyping stories for their other games (Greig et al. 2002, NN).

### 5.3.3 *Emotiveness*

Gameplay was occasionally mentioned with emotional contexts. Spector (2000, DE) explained how using skills in *Deus Ex* lacked tension, which led to redesigning the skill system. Isobe (2012, SRtH) stated that making battles exciting in *Solatorobo: Red the Hunter* took a lot of effort. Spector (2000, DE) stated that they consistently chose fun over realism and at least once over immersion.

*Deus Ex* had a design goal of having a clear and consistent mood featuring fear, paranoia, tension and release (Spector 2000, DE).

Spector (2000, DE) mentioned wanting to create believable non-player characters that players would care about. The *Baldur's Gate II: Shadows of Amn* postmortem had similar implications by having improved character interaction and romances with the player character on its feature list (Muzyka 2001, BG2SoA).

## 5.4 Open design

The next value category is open design, which is about being open to design input and new ideas. It features values such as collaborative design, openness to feedback and originality. At this point the values have become more intertwined with developmental values.

### 5.4.1 *Collaborative design*

In this context, collaborative design means involving everyone in a cross-disciplinary setting and being exceptionally open to design input. Schaefer (2000, D2), Isobe (2012, SRtH) and Chey (1999, SS2) described such design processes and all of them gave it major credit for their game's success. Arakawa et al. (2009, TWewY) also had strong notions of designing collaboratively, but it was not linked with either success or failure.

Collaborative design benefits from having the right kind of people. Schaefer (2000, D2) reported of striving to hire people who love and really understand games. Chey (1999, SS2) wrote of emphasizing game design skills even outside design positions in hiring new employees.

"Another gigantic reason for our success is our open development process. We strive to hire people who love games, and we make games that we want to play. Every member of the team has input into all aspects of the game."  
(Schaefer 2000, D2)

"Ultimately, the team's passion for and understanding of games was a major contributor to the design of the final product." (Chey 1999, SS2)

Not only the right kind of people, but also the right kind of working environment can benefit and lead to collaborative design. According to Kijanka (2002, DS), an encouraging environment where everyone from juniors to contractors gets heard was a positive trait contributing to the team's efficacy. Huebner (2000, VTMR) saw an open office space with no walls between developers strongly fostering cross-disciplinary communication within the team.

The development of *Fallout Tactics: Brotherhood of Steel* did not utilize collaborative design, but due to designs not existing at all or being detailed enough, non-designers were making design decisions:

"There were many areas that just were not designed at all. [--] In our case, people outside of the design team ended up making the design decisions in a rather ad hoc manner." (Oakden 2001, FTBoS)

Muzyka (2001, BG2SoA) stated that they learned the importance of integrating different disciplines:

"We learned to make sure all elements of the team are talking to each other and working as a group, rather than as a bunch of individuals!" (Muzyka 2001, BG2SoA)

Chey (1999, SS2) stated collaborative design being their development philosophy, which shows how we are now in a more grey area where values are no longer purely design values. Collaborative design can be framed both as a development model and as a way of designing. Individual designers may have preferences towards or away from collaborative design.

### 5.4.2 *Openness to feedback*

Game development is an iterative process that benefits from playtesting and redesign. The openness at which designers and other developers react to feedback varies, as does the emphasis given to it.

Sequels and licensed games provide a different developmental scenario where large fanbases exist right from the beginning. Fans voice their expectations and opinions loudly and in great numbers and developers have a choice in how much to give it weight. It could also be observed in the sample that postmortems on game sequels had the highest frequency mentions on fan feedback. Schaefer (2000, D2) argued that sequels need to be bigger and better in every way. However, Muzyka (2001, BG2SoA) argued that sequels should not be more of the same, but better in quality. Chey (1999, SS2) stated that sequels should take the good parts without blindly copying them. Muzyka highlighted the importance of learning from mistakes:

"You also need a mechanism to quantify your previous mistakes and learn from them. If you don't make a point of figuring out what you did wrong last time, you're not likely to fix it the second time around." (Muzyka 2001, BG2SoA)

O'Connor (2012, SSoM) regarded personally connecting with players as a powerful asset. Muzyka (2001, BG2SoA) reported of the *Baldur's Gate* series fans compiling feature wish lists for the sequel, which helped them by giving the game direction right from the beginning. Harsh fan feedback set a negative tone during the development of *Fallout Tactics: Brotherhood of Steel*:

"Along the way we got into arguments with the Fallout fans about what the game should be and often felt that we would never be able to produce a decent product." (Oakden 2001, FTBoS)

In addition to receiving feedback from playtesting and the player community, developers have their own preferences regarding their own game that they can let guide development. Schaefer (2000, D2) explained how they were making a game to fit their own tastes, which meant they did not ever have to wonder what their audience wanted. For *Neverwinter Nights*, the team included the elements they found most appealing.

Greig et al. (2002, NN) described letting their own experiences of fun experiences in online games guide them.

Huebner (2000, VTMR) regarded developers as perfectionists who are never completely happy about their games. Greig et al. (2002, NN) shared similar self-critical thoughts:

"Though *BioWare* considers *Neverwinter Nights* a critically and commercially successful product by most generally accepted standards, it is still far from perfect in our eyes." (Greig et al. 2002, NN)

### 5.4.3 Originality

Originality was seen as a desirable feature. It benefits from ideating, innovation, prototyping, feedback and discussions; aspects well supported in an open design model where everyone's contributions are given value.

Developers expressed various reasons for wanting to create original games. Greig et al. (2002, NN) and Huebner (2000, VTMR) wanted to bring digital role-playing closer to its tabletop origins. As Greig et al. (2000, NN) put it, they wanted to create a game with significant impact. O'Connor (2012, SSoM) expressed that they needed a purpose-built social mobile game that was innovative. Firor (2002, DAoC) offered another market-related reason:

"Because of our experience developing RPGs, we knew that we had to have a slightly different slant on our new title in order to distinguish it from the RPGs that were already on the market." (Firor 2002, DAoC)

Bringing in elements from other genres into role-playing games appeared in the sample. Huebner (2000, VTMR) explained how they utilized their past development experience on first and third person games. Spector (2000, DE) stated that *Deus Ex* was conceived as a cross-genre game from the start. Schaefer (2000, D2) explained how the skill tree in *Diablo II* was inspired by the technology trees often seen in strategy games.

According to Kijanka (2002, DS), aiming for originality comes with the negative aspect that it is hard to plan and schedule. Spector (2000, DE) stated that with *Deus Ex* they decided to start with the riskiest ideas. Greig et al. (2002, NN) stated that they lost

resources to innovation for its own sake and that a better approach would be to innovate only in areas their past games have been criticized for.

## 5.5 Restrained design

This value category identified two related but distinct design values that see benefits in restraining design. They are minimalism and technological awareness.

### 5.5.1 *Minimalism*

"Less is more."

–Ludwig Mies van der Rohe

Minimalism is a well-established value and design value outside games. Here it sees value in small and focused designs and on functional content honed to utmost quality. Spector (2000, DE) reported on some developers having minimalistic design ideals whereas others were "maximalists" wanting to special-case everything instead of using a systemic approach. The latter approach received no support in the sample.

It was explicitly and implicitly stated how important it was to find the game's key elements and to preferably do so before anything else (Spector 2000, DE; Chey 1999, SS2; Oakden 2001, FTBoS; O'Connor 2012, SSoM). Oakden (2001, FTBoS) explained how not having a clear design direction made the development situation unbearable. Once the direction was found and the designers were committed to it, the game turned good, but it was already too late to make several design changes due to recorded voice-overs (Oakden 2001, FTBoS).

"Know what your gameplay goals are and what kind of experience you want players to have before you spend ten seconds thinking about anything specific." (Spector 2000, DE)

Spector (2000, DE) saw it as important that the levels in *Deus Ex* serve actual and recognizable functions and that ideally they would be built with an understanding of the functional objects used there. A comparison can be made to uncanny valley<sup>8</sup> in the sense that when a certain level of realism and object functionality has been reached, players expect the same functionality in everything:

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8 Uncanny valley is the eerie point of realism in human representations where full realism is very close, but recognizably not quite there.

"We started hearing things like, "*Hey, why can't I use that telephone to call anyone I want whenever I want?*" and thus had to cut some objects whose real-world functionality we couldn't capture in the game." (Spector 2000, DE)

As seen by Muzyka (2001, BG2SoA), quality is more important than quantity, and developers have a natural tendency of adding new content rather than honing existing content. It was strongly implied that cutting lackluster content and features outside the game's design focus would result in a better game. Spector (2000, DE) was by far the biggest advocate in cutting content and features. However, he was not alone:

"The golden motto should have been: *If it doesn't do something useful or if there is another thing in the game which does nearly the same thing -- take it out!*" (Oakden 2001, FTBoS)

"Perhaps luckily, the Dragon encounter ended up being cut from the game, and since we never could get Barney [Nightmare Beast] looking right, his appearance was cut, too." (Vrignaud 1997, DSOCS)

Spector (2000, DE) seemed to hold high importance in aiming to cut features early during the design stage. Chey (1999, SS2) also reported of wanting to leave out a feature that did not contribute to the design's key elements:

"*Irrational* did not want to introduce multiplayer support into *System Shock 2* because we considered it a tangential feature that did not contribute to our core strengths." (Chey 1999, SS2)

### **5.5.2 Technological awareness**

"The shame is that the technology choices we made eclipsed the recognition of the fantastic job the artists did." (Schaefer 2000, D2)

Choosing the right technologies can be critical in game development. Designers may or may not be involved in making technology choices, but what they can do is design within the limits of chosen technologies. Sometimes it is a design value and at other times it is no more than a simple restriction.

Oakden (2001, FTBoS) reported of intentionally using older technology, because of a feeling that 3D technology was not yet ready to convey the design they had in mind. Chey (1999, SS2) mentioned of a design decision made in the light of technology limitations:

"Notably, as with the original *System Shock*, we opted to omit interactive NPCs in the game. *System Shock* eschewed living NPCs because the technology of the day was simply inadequate to support believable and enjoyable interactions with them." (Chey 1999, SS2)

Muzyka (2001, BG2SoA) reported of deciding on game features by combining fan-made wishlists with an internal list of what was reasonable from a technological standpoint. Chey (1999, SS2) explicitly mentioned their desire to make a technologically feasible design. Several development teams had set clear principles regarding technology:

"Always work within the limits of your technology rather than trying to make your technology do things it wasn't meant to do." (Spector 2000, DE)

"Motivated by the dramatic scripted sequences in *Half-Life*, we attempted to introduce similar elements into *System Shock 2*. In doing so, we broke one of our rules: we tried to step outside the bounds of our technology." (Chey 1999, SS2)

Chey (1999, SS2) stated that deviating from these principles often resulted in problems. As they also reused a game engine, they developed heuristics – design guides – to avoid known engine glitches (Chey 1999, SS2). As was implied above, it is difficult to draw a clear line between technological design values and developmental restrictions. However, as long as technology and design are intertwined, technology is a factor in design.

## 5.6 Development management

The final value category is development management, which is the weakest design value category identified and more strongly relates to developmental values. However, as development and management values came up in the data, it is worth considering their relation to design.

### 5.6.1 Leadership

"No more lame meetings, no more stupid schedules, no more dog-and-pony shows. We were not going to adopt any of the stale, dated, and oppressive habits of game companies past. Four years later, we have a deep appreciation for organization. Chain of command, ownership, discipline, and planning are things that we hold in very high regard and are further developing for the future." Kijanka (2002, DS)

According to Kijanka (2002, DS), their design meetings were like shopping sprees with no inhibition. Similarly, Spector (2000, DE) stated that their team was blinded by their freedom and budget. According to Huebner (2000, VTMR), they should have started to rein in their art and design teams earlier. Muzyka (2001, BG2SoA) speculated that their lack of feature prioritization could have become a problem. Greig et al. (2002, NN) reported of facing unique challenges by having an extremely large development team.

Spector (2000, DE) and Chey (1999, SS2) pointed out how important it is to have clear development goals and to really run a project and make decisions. According to Spector (2000, DE), not taking a clear stance on issues ended up frustrating everyone.

Kijanka (2002, DS) explained how their project lead managed to set the tone and values for the company. During the development of *Deus Ex*, Spector (2000, DE) ended up from design teams to having a design lead:

"It became apparent -- later than it should have -- that I was going to have to merge the two groups and have a single lead designer. When I finally made that change I disappointed some folks, but the game was the better for it, and that's what's important in the end." (Spector 2000, DE)

Muzyka (2001, BG2SoA) and Oakden (2001, FTBoS) mentioned how diverging on an explicit design goal in *Baldur's Gate II: Shadows of Amn* and *Fallout Tactics: Brotherhood of Steel*, respectively, reduced game quality. Muzyka (2001, BG2SoA) also explained how designers and artists did not always follow asset guidelines, which resulted in time resource problems at the end of the project.

"There are some missions where the whole map depends on finding one key in an obscure place, which is a shame because we had a very clear plan early on not do that kind of thing." (Oakden 2001, FTBoS)

Managing level design was a common problem. Chey (1999, SS2) explained how the amount of work in level design was underestimated due to small subtasks. Muzyka (2001, BG2SoA) explained how they occasionally had to adapt design to mistakes such as missing doors in level art, because of lack of sufficient communication between designers and artists. Chey (1999, SS2) explained how they did not leave enough time for making level design changes after getting playtesting feedback. *Fallout Tactics: Brotherhood of Steel* faced a late level redesign caused by lack of game direction, but it was already too late to fix everything the developers wanted to (Oakden 2001, FTBoS).

Positive sentiments regarding the welfare of developers also surfaced. Frost (2003, AC2FK) mentioned that approved feature summaries reduced work and migraines taken home.

"For the *Baldur's Gate II* team specifically we spent a lot of time talking to people throughout the project, especially at the mid-project low-point, in order to make sure we were providing enough support for the people who were slaving away on the game." (Muzyka 2001, BG2SoA)

"But we must remember that we make games. We are toy makers, and we have a responsibility to our own humanity as well as to our trade. We must strive to live balanced and enriched lives so that we may always have inspiration from which to draw." (Kijanka 2002, DS)

Chey (1999) spoke against circulating designers between tasks or projects in a way that does not leave them with a feeling of ownership to their work. Muzyka (2001, BG2SoA) argued that it is good to understand developers' individual differences: while some are better at starting projects, others prefer to finish work already begun. Muzyka (2001, BG2SoA) also suggested that developers might feel a need to switch projects once in a while.

### 5.6.2 *Ambition*

Several game development projects were mentioned as having been hindered by the developers' initial overambition (Kijanka 2002, DS; Spector 2000, DE; Sánchez-Crespo Dalmau 2005, F; Oakden 2001, FTBoS; Huebner 2000, VTMR). Developers were generally too optimistic and aimed to create more quantity and quality than they had the resources and skills for. Ambition-related problems were resolved by adapting design (Spector 2000, DE), drastically cutting features and content (Sánchez-Crespo Dalmau 2005, F) and by postponing game release (Huebner 2000, VTMR). While Kijanka (2002, DS) explained that their passion and ambition was also empowering, ambition appeared mostly in discussions with negative overtones.

"Our ambition translated into a number of painful symptoms such as feature creep, over-optimism, and a project scope that was ultimately larger than our ability." (Kijanka 2002, DS)

Large game scope lead to issues in balancing the game. *Fallout Tactics: Brotherhood of Steel* and *Diablo II* were reported as being extremely laborious to balance due to game scope (Oakden 2001, FTBoS; Schaefer 2000, D2). Additionally, Schaefer (2000, D2) explained how random elements – especially the randomly generated loot in the case of *Diablo II* – combined with a large scope made balancing even more laborious. Arakawa et al. (2009, TWEwY) echoed that balancing takes a lot of time. O'Connor (2012, SSoM) reported of delaying game release to work more on balance, among other things.

Too much content also lead to technical problems such as high computer requirements, large install size and difficulties in porting the game to other platforms (Huebner 2000, VTMR).

Oakden (2001, FTBoS) explained that instead of reducing the too large levels in *Fallout Tactics: Brotherhood of Steel*, they decided to populate the levels with even more stuff, which compromised the game:

"The huge selection of stuff on offer is one of the game's selling points, but it has affected the quality of the finished product. In the end, I don't think we have really kept the original *Fallout* fans happy, and we compromised the game design at the same time." (Oakden 2001, FTBoS)

O'Connor (2012, SSoM) stated that they had too many features even after scope reduction. *Baldur's Gate II: Shadows of Amn* is an extremely large game with Muzyka (2001, BG2SoA) and Greig et al. (2002, NN) both referring to the game by its hours of gameplay.

"Even though *Baldur's Gate II* was bigger than *Baldur's Gate*, the actual content was much better quality - we just didn't realize how much more we had made in BG2 until it was too late!" (Muzyka 2001, BG2SoA)

### 5.6.3 Adaptability

Spector (2000, DE) stated that while having design goals is very good, it is much more important to be vigilant and ready to make changes. Greig et al. (2002, NN) echoed the sentiment by stating that they were critical and prevented problems before they occurred.

According to Schaefer (2000, D2), there was only a rough design for *Diablo II* and they mostly focused on making new content. They constantly reevaluated gameplay and made even late changes (Schaefer 2000, D2). Oakden (2001, FTBoS) expressed that it would be better to design features later rather than sooner, but still in time. These kind of approaches take into account the iterative and reactive nature of game development.

According to Greig et al. (2002, NN), due to their project's scope, the art and design teams had to start making assets without having full specifications until years later.

"While documentation to this level is probably not required (and might even prove to be a hindrance to progress) on many games, on a role-playing project of the size of NWN, it was critical." (Greig et al. 2002, NN)

While with *Fallout Tactics: Brotherhood of Steel* the design documentation was lacking in detail (Oakden 2001, FTBoS), *Deus Ex* had a design documentation too big and could not keep up with the organic nature of design (Spector 2000, DE).

"We could be this flexible as a company only because our teammates were this flexible. Everyone carried multiple responsibilities, and some of us carried so many it was hard to keep track." (Kijanka 2002, DS)

Isobe (2012, SRtH) explained that adapting their development team's size allowed them to take more time to finding direction when required. Schaefer (2000, D2) brought up the rare development situation at *Blizzard* that waits for them to adapt:

"While our goal is to meet the milestones we set, our process, in terms of design and business, is structured to allow us to wait until the game is as good as it can be before we ship it. We recognize that not all developers have this same opportunity, but many of the methods we use along the way are applicable to any development environment." (Schaefer 2000, D2)

#### 5.6.4 *Efficiency*

The subject of design tools and editors came up frequently. Schaefer (2000, D2) regretted not developing their tools enough. Their in-house tools did not allow content creators such as graphic designers to see their work in the game without having programmers implement them first (Schaefer 2000, D2). Similarly, Vrignaud (1997, DSOCS) expressed it as desirable to have scriptors be able to work relatively autonomously from programmers. Schaefer (2000, D2) stated that taking the extra time to develop their tools would have made content creation more efficient and improved its quality.

Frost (2003, AC2FK) stated that they made a choice to be more tools-aware with *Asheron's Call 2: Fallen Kings* and to include others than engineers in the process:

"[Creating tools as needed] left the artists and content designers out in the cold, forcing them to edit many text files by hand. The process of text-file manipulation was error-prone and lengthy; [--] For AC2, Turbine made a conscious effort to be more tools-aware when developing its next-generation engine. The core engineering group developed tools in tandem with the graphics, client/server, animation, and physics systems. [--] Tools-awareness was not limited solely to the core engineering group as it was with AC1." (Frost 2003, AC2FK)

Frost (2003, AC2FK) stated that having an approved feature summary cut their tools development time by 30 percent. Kijanka (2002, DS) stated that when their in-house

design tools settled down to stable features, the productivity of level designers increased manyfold.

Technology was reused in *System Shock 2* and in *Dark Sun Online: Crimson Sands* to make up for small resources (Chey 1999, SS2; Vrignaud 1997, DSOCS). Spector (2000, DE) explained that licensing an engine made it possible to afford larger design and art teams to focus on gameplay and content.

Huebner (2000, VTMR) explained how outsourcing cinematics to a smaller and less established company got them what they wanted with less money. Kijanka (2002, DS) echoed the efficiency of small teams in that they also manage to make decisions much faster than large companies.

Chey (1999, SS2) explained using simple and reusable game systems to provide a lot of gameplay for little implementation cost:

"From this one system and a couple of associated subsystems, we derived a large amount of game play without having designers create and implement complicated scripted sequences and story elements." (Chey 1999, SS2)

### **5.6.5 Team spirit**

Team spirit and unity were indicated as strong contributors to a project's success (Greig et al. 2002, NN; Chey 1999, SS2). Kijanka (2002, DS) explained how their project lead's hard work and values binded the development team into a coherent unit. Chey saw his team's inexperience in a positive light:

"To a certain extent, inexperience also bred enthusiasm and commitment that might not have been present with a more jaded set of developers." (Chey 1999, SS2)

Chey (1999, SS2) explained how their team's lack of enthusiasm for a specific feature contributed to its problems:

"Our lack of enthusiasm for this feature contributed to its developmental problems because we failed to monitor its progress adequately or raise concerns when that progress fell behind schedule." (Chey 1999, SS2)

Several issues were seen leading to bad morale. Muzyka (2001, BG2SoA) argued that game projects have a dangerous middle point at which morale can drop very low until the finish line. Although no specific explanations were given, it can be generally attributed to project fatigue. Along the same lines, Schaefer (2000, D2) thought that developers not getting bored with their own creation is a good sign:

"If we like the game we are making - especially if, after two years of playing it, we are not bored to death - the game is clearly going to be a winner."

(Schaefer 2000, D2)

Spector (2000, DE) reported his experiment with two design teams creating competing designs as a failure. Vriгнаud (1997, DSOCS) stated that the occasional changes made to their game engine broke down in-game scripts, which lead to bad morale.

This concludes the development management value category as well as the whole chapter. Next, the findings will be summarized and discussed in terms of their relation to expectations, existing research, reliability and validity.

## 6 Discussion

Sixteen digital role-playing game postmortems were content analyzed for signs of game design values. The affinity diagram method used in the study identified six distinct value categories that show the values game developers exhibited in a role-playing game postmortem context. The values were organized from most strongly related to role-playing games and design values towards more general developmental values.

**Player expression** contained values that seem most relevant to role-playing games, but applicable to other genres as well to various degrees. It was seen important to offer players ways of expressing themselves through their unique characters. Characters were differentiated by cosmetic and mechanical choices as well through actions in the game world. As part of player expression, it was seen important that the game world validates players' choices by reflecting them through tangible consequences. This value was an expected find in digital role-playing games.

**Player engagement** consisted of values that seemed to apply to games on a more general level, although that does not mean they are any less relevant to role-playing game design. It focused on better engaging players with the game through broad appeal, cooperation between players, simplicity of controls, exploration potential, immersion and clear goals.

These values would seem very casual in nature. As was discussed in the third chapter, Kultima (2009) has abstracted casual game design values to acceptability, accessibility, simplicity and flexibility. Juul (2010, 30) has presented five casual game design principles of pleasant fictions, usability, interruptibility, optimal difficulty and positive feedback. Comparing these casual game design values to the player engagement value of this study, we can see that broad appeal is related to both acceptability and pleasant fictions and that simple controls is related to both simplicity and usability. Other connections could be speculated on as well, but they are not nearly as evident. On the disagreeing end, immersion is negatively related to both flexibility and interruptibility, and it was to be expected with the deeply immersing nature of the role-playing game genre.

According to Fine (1983, 165), tabletop role-playing games are inherently cooperative as players are together facing the challenges set against them. This makes the value of

cooperation an expected find, especially when it comes to multiplayer role-playing games.

**Gameplay prioritization** emphasized the importance of gameplay and its seamless fusioning with other game elements such as the narration and mood. It guided developers to prioritize gameplay and to prototype early and often, because even simple playable elements reveal much more than merely thinking about them. At this point, the value categories began to have more noticeable developmental aspects to them as opposed to being pure design values.

**Open design** contained values of collaborative design where everyone's contribution to design in a cross-disciplinary team is valued, openness to feedback and originality, which can be best cultivated in a collaborative and open-minded environment. A hybrid value between design and development, this approach to design and development might work better for some individuals and teams than others. It was, however, widely celebrated in the sample. Lawson (2006, 168) wrote about designers letting others in on their design process:

"Perhaps only the best designers have the confidence to allow their clients into what is a delicate and easily disturbed creative process." (Lawson 2005, 168)

*Valve Corporation's*<sup>9</sup> allegedly flat organizational hierarchy could be seen as the epitome of an open design process. According to the company's official booklet for new employees, all aspects under this value category are heavily present in their development principles. (Valve Corporation, 2012)

Out of the sixteen sampled games, four were sequels and two were semi-sequels using a pre-existing fictional universe. This may have put a larger focus on player's expectations and feedback. With a rising trend in early access<sup>10</sup> games on the market, developers are able to receive more player feedback earlier in the project, which also makes the development process more open and transparent. The same openness holds true for

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9 Valve Corporation is a company in video game development and digital distribution.

10 Early access involves selling a game still in development for a notably lower price. In addition to the lower price, players benefit from it by accessing the game earlier. Developers benefit from it by getting playtesters and extra funds for the rest of the development.

crowdfunded game projects that aim to keep their investors updated with a more open development process.

**Restrained design** was also a hybrid value that contained minimalism and technology awareness. It guided developers and designers to strictly working within the limits imposed by technology and to focus on quality over everything else. By clearly defining the game's key elements and removing everything else, both design and development benefited greatly. As minimalism is a recognized movement in art, music, design and lifestyle, this value category merely implies on similar design aesthetics without making claims on the designs' minimalistic purity.

Design-wise, this value relates to role-playing games in that by creating simple and predictable – even transparent – game systems, players gain increased control to use them as tools of self-expression. Development-wise it relates to role-playing games in that with their simulative nature, role-playing games tend to have the largest scope of all genres and as such they are often too ambitious projects that need to find their focus and make large cuts.

**Development management** contained the issues of leadership, ambition, adaptability, efficiency and team spirit. As the last category presented, development management contains mostly developmental values that have only indirect effect to conducting design. Issues such as failing schedules and cumbersome development tools may force changes in design direction or reduce its quality, but they are not pure design values per se.

As a whole, the results indicate the identified digital role-playing game design values within the sample. The value categories of player expression and player engagement may provide the best value for readers seeking information strictly on role-playing game design. However, even indirect influences are very much worth considering, because design is never conducted as a blank canvas unaffected by surrounding values and practices.

Petrillo et al. (2009) have researched problems in game development. As one of their data sources, a selection of postmortem articles from *Gamasutra* were sampled. Instead of being interested in design values as is the case with this thesis, they studied

developmental problems. As the results of this study ended up containing some developmental values, it is worth comparing the two.

The most common problems found were unrealistic scope, feature creep and cutting features (Petrillo et al. 2009). The same problem areas were repeated in their other data sets as well. These problems were extremely common in this thesis's sample as well and the problems most strongly relate to the value categories of restrained design and development management.

Neuendorf (2002, 142) suggested using two or more coders to establish intercoder reliability. The coding was done by one researcher, which is a reliability issue, but it was essentially done three times over with different techniques and time passing between each run. It presumably improved the study's reliability, because the process allowed for several additions and corrections to be made.

An affinity diagram is normally built in collaboration with others, which both eases the workload involved and allows to bounce off ideas with others (Beyer and Holtzblatt 1998, 156). As the affinity was built alone for this thesis, it is a possibility that the affinity building would have taken different turns had there been a collaborator. In the end, however, the data was successfully organized into a hierarchy that managed to tell a coherent story of the underlying issues. That being the goal of affinity diagram, it can be regarded as a success on that front.

A small selection of notes were not used in the final affinity, which might have left some potential values uncovered. However, it is natural that not all affinity notes tell about the research issue and can be put into a junk category after several considerations (Holtzblatt et al. 2005, 160).

According to Holm (2006, 26), values research is especially challenging and most scholars are not equipped with the knowledge and expertise on values it requires. This became very apparent during the study as the very subject of design values required time and maturation.

There is also the question of relevancy regarding design values and developmental values. While valid, postmortem articles may not have been the absolute best available

source for getting insight on design values. For example, the design articles on *Gamasutra* might have been richer in design data.

It is worth noting, however, that according to Lawson (2005, 45), designers may in retrospect convince themselves that their processes were different than they truly were. The same holds true for postmortems as their writers – whether designers themselves or not – may have justified their game design processes and game development practices as an afterthought. Another factor is that of altered facts: it is worth realizing that published postmortem articles may have marketing considerations involved. Also, Lawson (2005, 287) writes on designers:

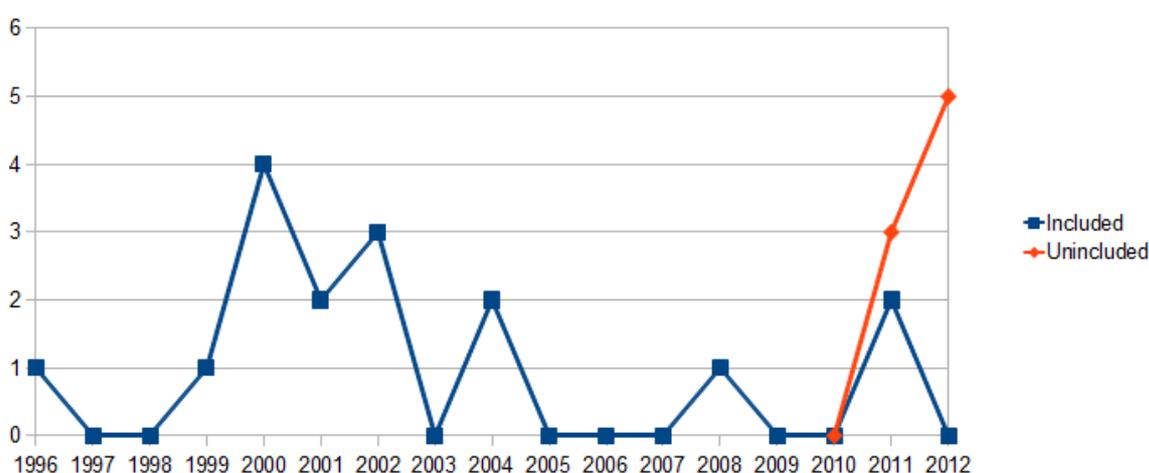
"Second, they may be writing in order to impress rather than explain and are unlikely to reveal their doubts and weaknesses." (Lawson 2005, 287)

Although no analysis of design value changes over time was planned within the scope of this thesis, the sample used would not have been valid in answering that question either. For one, there was a lot of variance in the sample. While a couple of postmortems yielded next to no data, several other postmortems were abundant in their richness of data. Towards the end, the sample also started to skew from computer games towards console, social and mobile games as well as towards a younger audience. Additionally, if a certain design value would have seemed to disappear from the postmortems over the years, it could have also meant the game industry's maturation in the sense that at some point specific issues normalize and become too obvious to be explicitly mentioned. It is also worth noting that any design values in the postmortems are admittedly lagging behind as postmortems are often published an arbitrary amount of time after the completion of the game's production. Additionally, a design may be outdated already on its completion (Holm 2006, 112). This is especially evident in the game industry as it is still a young industry finding its foothold and because it so strongly relies on technological advancements. As interesting as it would have been, all of these points made researching design value changes over time an unsuitable approach for this thesis.

With values such as player engagement and open design, the findings seem very much applicable to other genres than role-playing games as well, but to various degrees.

However, as my sample consisted solely of role-playing games, that speculation provides no valid data.

Over the year after the sample was collected, more role-playing game postmortems have been published on *Gamasutra*. Using the same genre verification method as with the sample described in the fourth chapter, it was found that there were six new applicable postmortems. The figure below (see Figure 6.1) shows the amount of role-playing games in the sample from each year:

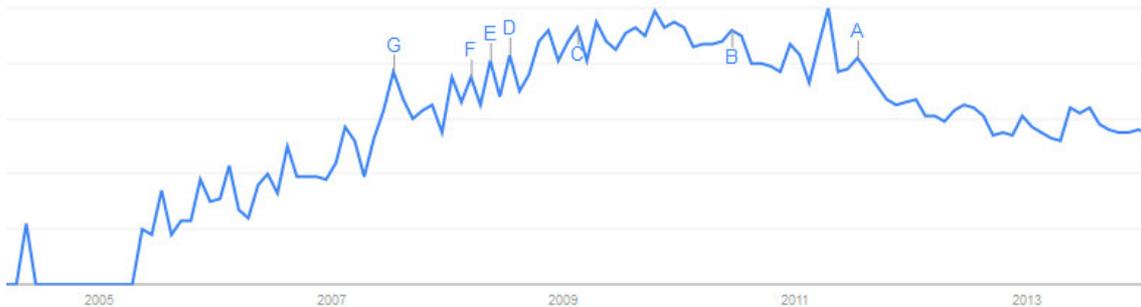


**Figure 6.1.** The blue line shows the amount of role-playing games in the sample by release year. The red line shows the total amount of applicable postmortems a year after the sample was taken.

Although this sample size is not up for quantitative analysis and the data is about postmortem publications instead of game publications, the data would support the following three observations: First, there was a role-playing boom around the year 2000. This was also rejoiced and speculated in publications of the time, such as in *Swords & Circuitry: A Designer's Guide to Computer Role-Playing Games* (André LaMothe 2001, in Hallford 2001, xxii).

Second, with role-playing games having been more aligned for the hardcore audience at the time, publishers' interest in role-playing games seems to have waned at the same rate as casual values started to become more prominent. A search of "casual games" in *Google Trends* shows that people's interest in casual games slowly increased from 2004 onwards, peaked in 2010 and then started to normalize (see Figure 6.2). This coincides

with the observation that role-playing games, with their more hardcore values, faced a more quiet period during the resurfacing of casual values.



**Figure 6.2.** The graph above shows the history of the Google search "casual games" and indicates on a starting point at around 2004, peaking in 2010 and on the normalization that followed.

Third, along with the rise of independent game development, crowdfunding<sup>11</sup>, remakes<sup>12</sup>, demakes<sup>13</sup> and the new market for selling old games<sup>14</sup>, it appears that also role-playing games are making a comeback. It is further emphasized by the fact that role-playing games were the highest selling computer game genre in 2012 (Entertainment Software Association 2013).

Considering its wide implications, design values – game design values even more so – seems to be an underresearched topic. Holm (2006, 219) and Schön (1983, 78) wrote of a lot of architectural design values stemming from the field's own history. Symes et al. (1995, 20) wrote on architects:

"Finally architects believe passionately in the importance of good design but disagree constantly as to its definition." (Symes et al. 1995, 20)

Compared to architecture or most other industries, the game industry is still a very young industry that simply hasn't had the time to fork into many competing schools of

11 Crowdfunding lets consumers fund projects directly, which generally eliminates the need for a publisher from the equation.

12 A remake is a modernized overhaul of an older game, often done to reinvigorate intellectual property.

13 A demake is a version of a modern game deliberately remade to old technology to achieve a look and feel from decades past. This may appeal to people who like the games of old and retro aesthetics.

14 Old games are being ported to modern operating systems and sold by services such as gog.com.

thought. The casual game revolution could be thought of as a school of thought laden with its own distinct game design values. Role-playing games, on the other hand, have a history in non-digital mediums, which has built the value base for the digital genre. Although strictly defining role-playing games has been problematic, from the perspective of games at large there may be relatively little disagreement as to what is considered good design in role-playing games. More so than in other genres, the value of player expression is at the core of the role-playing game experience.

## 7 Conclusion

After casual games have profoundly shaken gaming cultures, there are signs indicating that role-playing games are once again becoming a more prominent genre in digital gaming. As was previously discussed, role-playing games have risen to be the highest selling computer game genre of 2012 (Entertainment Software Association 2013).

The goal of this study was to discover design values from digital role-playing game postmortems to see what values drove their design decisions. Using content analysis and affinity diagram, the study identified six value categories of player expression, player engagement, gameplay prioritization, open design, restrained design and development management. The value categories were presented in a descending order of their relation to role-playing game design values.

As a whole, the results identified values in role-playing game design and development. The design values of player expression and player engagement may provide the most value to readers solely interested in role-playing game design values. However, as role-playing games tend to have a large scope, the rest of the value categories may offer insight into good role-playing game development practices. The value category of player expression is the most relevant to role-playing games as it underlines their core nature: personalized characters taking action in a world that responds to their individual choices. From a genre perspective, it carries with it the implication that this is the experience that digital role-playing games should aspire to emphasize.

Research on this topic could be expanded in several directions. For one, it would be interesting to see what values would be emphasized using other types of data such as design articles or designer interviews. By increasing sample size, it would be possible to research how game design values have changed over time.

Expanding to other genres and comparing results between them would also be an option. Another approach would be to link design values to success and find out if, for example, role-playing games with high player expression value sell more or get reviewed better than other role-playing games.

The subject of this thesis was very challenging and it did not help that there was very little research on design values framed the same way they are framed here. My handling of the subjects of design and design values benefited from dividing the work over a

longer period. Ultimately, this thesis proved to be an interesting journey into role-playing games, design values and postmortems. As a designer working in the game industry, reading postmortems was entertaining on its own right as I recognized most issues from personal experience. It was, however, the systematic analysis of the postmortems that was able to provide more direct and encompassing insight into the design and development of digital role-playing games.

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### ***Postmortems***

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