Mediating the Immediate

Endogenous meanings and simulated narratives in ludic spaces

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The thesis discusses games and the gaming experience. It is divided into two main sections; the first examines games in general, while the second concentrates exclusively on electronic games. The text approaches games from two distinct directions by looking at both their spatiality and their narrativity at the same time. These two points of view are combined right from the beginning of the text as they are used in conceptualising the nature of the gaming experience.

The purpose of the thesis is to investigate two closely related issues concerning both the field of game studies and the nature of games. In regard to studying games, the focus is placed on the juxtaposition of ludology and narratology, which acts as a framework for looking at gaming. In addition to aiming to find out whether or not it is possible to undermine the said state of affairs through the spatiality of games, the text looks at the interrelationships of games and their spaces as well as the role of narratives in those spaces.

The thesis is characterised by discussing alternative points of view and its hypothetical nature. During the text, it becomes apparent that the relationship between games and narratives is strongly twofold: on one hand, the player continuously narrativizes the states the game is in while playing, while the narratives residing within the game space form their own partially separate narrative spaces, on the other. These spaces affect the conception the player has of the game states and the events taking place in the game space itself.

Keywords: games, gaming, ludology, narrative, narrativity, simulation, space

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Tutkielma käsittelee pelejä ja pelikokemusta. Se on jaettu kahteen pääosioon, joista ensimmäisessä tutkitaan kaikenlaisia pelejä ja toisessa ainoastaan elektronisia pelejä. Teksti lähestyy kaikkia pelejä yhtä aikaa sekä tilallisuuden että kerronnallisuuden suunnista. Näkökulmat yhdistetään heti tutkielman alussa niiden toimiessa apuna pelikokemusta käsitteellistettäessä.

Tutkielman tarkoitus on käsitellä kahta toisiinsa läheisesti liittyvää kysymystä, joista toinen kytkeytyy pelitutkimukseen ja toinen itse peleihin. Pelitutkimuksellisesti tutkimuksen keskiössä on ludologian ja narratologian välisen vastakkaisasettelun mielekkyys, joka toimii viitekehyksenä pelien luonteeseen pureutuvassa ongelmassa. Sen lisäksi, että tavoitteena on ottaa selville, onko edellä mainittua asetelmaa mahdollista purkaa pelien tilallisuuden kautta, tekstissä keskitytään myös pelien ja niiden luomien tilojen suhteisiin sekä narratiivien rooleihin kyseisissä tiloissa.

Tutkimukselle ominaista on uusien näkökantojen kehitteleminen ja tietty hypoteettinen luonne. Tutkimuksen myötä käy selväksi, että pelien ja narratiivien suhde on vahvasti kaksitahoinen: toisaalta pelaaja kerronnallistaa pelitilanteita jatkuvasti pelikokemuksen aikana, kun taas toisaalta pelien sisältämät narratiivit luovat pelitilaan omia osittain pelitilasta irrallisia kerronnallisia tilojaan. Nämä tilat vaikuttavat osaltaan pelaajan käsitykseen pelitilanteista ja pelitilan sisältämistä tapahtumista.

Asiasanat: ludologia, narratiivisuus, narratologia, pelit, pelaaminen, simulaatio, tila

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All things move toward their end
On that you can be sure

*

Nick Cave, *Song of Joy*

Contents

1. Introduction

This text discusses games in all shapes and sizes. Since it would be very unfruitful to examine games without looking at gaming as an activity as well, the player-subject's experience is explored in parallel with its objects. As will become clear in the course of the study, the act of gaming cannot take place without a game it is in reference to and vice versa. This fact is essential to the whole thesis; both the activity and its object exist only in connection to each other.

The text also discusses narratives and the relationship they have with games. The aim is not simply to state their equality to a certain degree and proceed from there, but to see how the different elements inherent to each of them mix with each other. This is achieved by examining concepts like space, sign and representation, all of which are fundamental to both. When examined in the light of recent developments in game studies, the approach can be viewed as a potentially explosive one; thus its justification is given a lot of attention in this introductory chapter.

With these two huge and notably distinct areas of study appearing in a single body of work, the approach itself must naturally be dramatically narrowed down. Consequently, the thesis will not attempt to provide anything like a comprehensive history of gaming, a summary of any branch of narratology nor any other kind of overview of the subject matter under scrutiny. Although some theoretical critique is provided in places, the main focus of the thesis is in the search for possibilities rather than problems. This results in a study quite hypothetical and structurally unorthodox by nature. The method, together with the relevant issues following from its choice, is discussed toward the end of this chapter after first examining how the approach positions itself in relation to the two most commanding forces of game studies today, namely ludology and narratology. At this point, however, let us first briefly survey the field in general before moving on to the juxtaposition that has dominated it in recent years.

Games have come into the scope of cultural studies to stay. This has been a result of popularisation of electronic games, which have usually been seen as a continuation of the filmic tradition, the connection being their audiovisual form as entertainment and art. The relation electronic games have with other games has been perhaps given less attention, however, and undeservedly so. Without electronic games there would be little point in looking at games in general in media studies; on the other hand, without games in general there would not be electronic ones at all.

Electronic games are getting closer to other cultural forms both technically and thematically.[1] These progressions have been giving birth to the alleged illusion that electronic games are just another link in the chain of audiovisual art and nothing more. It seems sometimes not too difficult, while concentrating purely on their audiovisual aspects, to overlook the fact that there have been games practically since the beginning of time and there probably always will be. Electronic games are thus also a continuation of that tradition[2] and ought to be looked at as such, not just as audiovisual representations. As will be argued on several occasions in the text, games are not artefacts or products at heart, even though the rise of electronic games may have indicated that. Some new pervasive forms of gaming[3] have in fact moved the focus of playing back to less virtual environments. It is also intriguing to see the social aspects of gaming coming back to focus with, for instance, MMORPGs.[4] Actually, one of the reasons electronic games have been regarded as something close to film is that one used to experience them mainly by oneself, especially in the case of PC-games.[5] This thesis, however, will only concentrate on the social aspects of games on their basic structural level without touching upon the communal dimensions outside the scope of the immediate experience of gaming inherent in every gaming situation.

[1] Huhtamo, Erkki & Kangas, Sonja (2000, 11).
[2] Julian Kücklich calls this tradition the "ludic context". Kücklich (2002, 105).
[3] Also called location-based gaming, pervasive gaming, reality gaming. Eskelinen (2005, 76).
[4] MMORPG stands for Massive Multiplayer Online Role-Playing Game, e.g. *Ultima Online*, *World of Warcraft* and *EverQuest*.
[5] Eskelinen, Markku (2005, 76-7).

According to some calculations, the game industry is bigger than movie industry.[6] As objects of academic study, though, games do not perhaps fare so well. The field is still quite young and fragmented, even the gaming experience itself having received relatively little attention thus far.[7] As a result, there seems to exist relatively few influential theories that are generally agreed upon. This may also be because of the defensive attitude that is obvious in some texts by game scholars regardless of the obscurity of their opinions or points of view,[8] the possible reasons for which will be discussed in the next section. Be that as it may, there is relatively little on the field of game studies that is written in stone and its discussions are constantly disrupted by linguistic inaccuracies and confusion in regard to terminology.[9] This is reflected in the large amount of attention that will be paid to the terms used in the text in question. Some insights into the juxtaposition between ludology and narratology will be offered in the following before moving the limelight on the actual approach adopted in this thesis.

1.1. Ludology | Narratology

As suggested above, two rather distinct approaches have dominated the field of electronic game studies in recent years: the ludologist and the narratologist. The main source for the alleged controversy is the debate about whether games can be considered and studied as narratives.[10] Even though there is no real reason to underline the seemingly obvious juxtaposition of these two schools of thought, its existence is extremely useful to note as it shows us where we should look for answers in regard to the nature of gaming: somewhere in between.

Narratology concentrates on the study of narrative, which is certainly one of the most multidimensional concepts in cultural studies. The majority of its uses can usually co-

[6] See e.g. Aarseth, Espen (2001, 153) and Eskelinen, Markku (2005, 24).
[7] Järvinen, Aki (2008, 33).
[8] Which is always relative, of course.
[9] Sihvonen, Tanja (2004, 46), see e.g. Frasca, Gonzalo (2003a).
[10] Eskelinen, Markku (2005, 58).

exist peacefully as long as no attempt is made to define it or to outline its constitutive elements.[11] However, it is not useful for our purposes to do either at this point of the thesis; thus at the moment, the main focus falls on ludology.[12]

The term 'ludology' comes from the Latin word 'ludus', which translates roughly as 'game'. It was introduced to the masses by ludologist Gonzalo Frasca,[13] who has fought hard for the academic credibility of game studies; in his quest, he has been joined by other renowned game scholars like Espen Aarseth, Markku Eskelinen and Jesper Juul, the goal of all of them being to stabilise ludology's position as an independent branch of cultural studies. According to these scholars, the only way to reach this goal is to develop a wholly new theory base, with the help of which it is possible to transform game studies not just into a continuation of literature or film studies, but into its own respected field of scientific scholarship. This is admittedly a noble goal in itself, especially in the light of game history, which is not restricted to novels and movies, but in fact mainly includes other non-electronic games.

The basic principle behind ludology is that games and gaming should be studied as, and **only** as, games and gaming. Therefore its most pertinent questions revolve around interfaces and the gaming situation. Ludologists often downplay (pardon the expression) the effects other mediums have on the origin, history and development of electronic games and the semiotic processes involved with them. Media scholar Janet H. Murray calls this attitude "game essentialism",[14] since it strives to ideologically exclude game studies from other fields of cultural study. Traditionally, ludologists have emphasised the experience and the narratologists the narratological elements of games. What is notable about the two approaches is that some of the studies concentrating purely on one or the other can be seen as having suffered from the situation, as there has long seemed to exist unstated pressure to take part in the debate by positioning oneself in it. Even though this

[11] Ryan, Marie-Laure (2005, 34).
[12] Narratives will naturally be examined in detail later in the text (section 'Narrative | Narrativity').
[13] Frasca, Gonzalo (1999).
[14] Murray, Janet H. (2005).

has not often resulted in one-dimensional or obstinate opinions per se, it has nevertheless been a definite factor eliciting such readings.

One of the problems extreme ludologists face is that a large number of game scholars have started their academic careers as narratologists and have only later turned to games, maybe even becoming narrativists, who look at interactive narratives while still holding an "anti-game" position.[15] According to some ludologists, this has had an imperialistic effect on game studies. Partly because of this some representatives of game essentialism, headed by the likes of Eskelinen and Aarseth, have been forced to tighten their territoriality, which has as its worst resulted in downright contempt for narratology and its exemplars.[16] The allegation of narratologists' scientific imperialism can be seen as a typical instance of this behaviour as well.[17] On the other hand, there have also been accusations for ludologists' arguments being "ideologically motivated rather than theoretically grounded".[18] Be that as it may, the scholarly climate where an already powerful theoretical approach encloses new research subjects within its area of influence is similar to the events of 1950s, when the *auteur*-theory saw the light of day. *Auteurism* can after all be seen as an attempt to increase the credibility of film studies during that period in time; the outcomes of the context at hand today remain to be seen.

As stated, new mediums (or people studying new mediums to be precise) are often for a lookout for justification for their presence by consciously emphasising the special features that separate their own are of interest from others. This happened with the *auteur*-theory in the context of film and it has been happening amongst ludologists as well.[19] If one cannot detect similarities between certain objects of inquiry, it is naturally quite difficult to contemplate possible connections between the theoretical approaches they might warrant. For Aarseth, games represent a new form of aesthetics, which is an opposite paradigm to narrative.[20] For our purposes, this black-and-white distinction is

[15] Mateas, Michael (2002, 34).
[16] See e.g. Eskelinen, Markku (2005, 58) on Marie-Laure Ryan.
[17] See e.g. Aarseth, Espen (2004a, 45).
[18] Simons, Jan (2006).
[19] For an early example, see Aarseth, Espen (1997, 1-23).
[20] Aarseth, Espen (2001, 154).

overly harsh, since it is not too difficult to find narrational elements in games; actually, games can easily (it must be admitted, maybe a little too easily) be seen as a form of storytelling.

Unfortunately, Aarseth's arguments suffer from a quite narrow-minded outlook on the intertextuality between games and other media. The issue is relevant for this thesis in the sense that as the scope of intertextuality extends to games, it serves as a rather plausible proof of the fact that games can and should be studied **also** with methods that are not included in the theoretical toolbox of extreme ludology. Aarseth argues that

> games are not intertextual [but] self-contained. You don't need to have played poker or ludo to understand chess, and knowledge of roulette will not help you to understand Russian roulette. [...] Knowing *Star Wars: The Phantom Menace* will not make you better at playing *Pod Racer*. Unlike in music, where a national anthem played on electric guitar takes on a whole new meaning, the value system of a game is strictly internal, determined unambivalently by the rules.[21]

In effect, Aarseth basically claims that catching the ball with a glove in *Baseball*[22] has no relation to the same act in *Finnish Baseball*.[23] It is very hard to believe that spinning the cylinder in *Russian Roulette* and in normal *Roulette* are in a similar non-existent relationship with each other. Furthermore, being familiar with *Episode I* undoubtedly makes one better in *Pod Racer*: after all, the racetrack from the film is directly transferred to the game and prior knowledge of its twists and turns helps in playing the game. Consequently, Aarseth's claim acts as a perfect example of territorial argumentation, which is neither constructive nor particularly persuasive.

[21] Aarseth, Espen (2004a, 48). The example concerning *Pod Racer* originally from Juul, Jesper (2001).
[22] I use capital letters and italics to emphasise the gameness of *Baseball* as opposed to a kind of sport or other such activity, just like with e.g. *Poker* and *Football* later in the text.
[23] '*Pesäpallo*' in Finnish.

1.2. Orientation | Foci

As evident from the discussion above, extreme ludology cannot be considered as the only fruitful starting point for a game study. It is more useful for this thesis to regard narrative and gameness as parallel phenomena, in other words as "parallel operational logics of the digital culture".[24] The transparency of partly equating electronic games with narrative media forms apparent in the text is thus a conscious choice, since little is to be gained by stressing the juxtaposition between ludology and narratology. On the other hand, emphasising only one aspect of a given object under scrutiny is also a certain way to hinder theoretical developments, as can be seen in the case of film and film sound, where the aural constantly plays the second fiddle to the visual.[25]

To put it in blunt terms, games do not represent an opposite paradigm to narrative. Although narratives do not usually include explicit gaming elements, games do often contain obvious narrative elements. The similarity of games and narratives lies in the fact that they are both interpreted in a certain context and in a somehow demarcated space. For games, that element is perhaps even more typical, as narratives are usually more freely interpreted by their nature with their emphasised extradiegetic aspects. Games **are** self-contained by nature as stated by Aarseth in the discussion above, but not absolutely so.

To avoid similar one-sided arguments, it is profitable to consciously seek the middle ground between the two main approaches in game studies. To do that, we must be able to see games not as an opposite paradigm to narratives, but as a certain kind of perspective to an activity[26] with immersive[27] qualities resulting in an experience unbound by medium or narrative theories. At the centre of all this, there is a struggle for methodological

[24] Sihvonen, Tanja (2004, 47), my translation from Finnish: "rinnakkain olemassa oleviksi digitaalisen kulttuurin toimintalogiikoiksi".
[25] Lehto, Anttoni (2006).
[26] Huizinga, Johan (1970, 22).
[27] Murray, Janet H. (1997, 97).

monism that will hopefully combine the best ideas from many different schools of thought.

In regard to games, the most essential aspect is the gaming experience, which has always been emphasised by ludologists.[28] However, the nature of the ludic experience is still quite close to those semiotic processes that are within narratology's grasp. In addition to the obvious narrative elements found in **some** games, the player-subject must always be able to narrativize endless numbers of game states to triumph in any game. Additionally, the freedom of choice allegedly arising from the interactivity of a game is often really only illusory, as the possible interpretations of a given situation are always limited by the rules, goals and interface of the game, all of which are in some form authorial by nature, especially with electronic games. These restrictions meet the player-subject in **ludic space**.[29]

In reference to the full title of this study, it is perhaps in order to already at this point clarify two other concepts that will be taken up only later in the text, in other words those of 'endogenous' and 'simulated'. Both terms are essential in sketching out the inner semiotic relationships of any given game space. Something endogenous always refers to what lies within the said space, while simulations function as the mode through which the endogenous ludic matter is represented.[30] As mentioned, both concepts are applicable to all kinds of games.

In relation to electronic games in specific, the focus of the thesis can be illustrated using the bottom-up approach suggested by game scholar Lars Konzack, which lists different layers of game elements of which an electronic game is formed. The seven layers are 'hardware', 'program code', 'functionality', 'gameplay', 'meaning', 'referentiality' and 'socio-culture'.[31] This text focuses on the middle ones, 'gameplay' and 'meaning'. To put

[28] See e.g. Juul, Jesper (2001) & Whalen, Zach (2003).
[29] 'Ludic space' and 'game space' are treated as synonyms in this text. In fact, the word 'ludic' often occurs in the text to replace the word 'game' in compounds like 'game/ludic context' or 'game/ludic environment'. They are thus practically synonymous in the context of this thesis.
[30] Both terms will be further explored in much more detail in the third chapter of the thesis.
[31] Konzack, Lars (2002, 89-98).

it in different terms, the thesis follows Julian Kücklich's trail of thought in that while acknowledging his two-level model for electronic games as texts, namely the separation of the 'code' and the 'interface', [32] it will concentrate almost exclusively on the latter.

In addition to electronic games, the text will discuss all kinds of games, privileging the position of electronic games principally as a **type** of game. The approach has some interesting implications in reference to media and the definition of art. However, it suffices here to point out that because of the definition of 'game space' and its centrality to the thesis, it is essential for the thesis to form theoretical connections not only with non-electronic games but with other audiovisual forms of art as well. This is likely to blur the lines of both art and media much like the rise of pop culture or environmental art in their respective times. Games can easily be considered as art and/or a medium or alternatively, neither. Questioning whether, for instance, *World of Warcraft* (the online game) is closer to *The Lord of the Rings* (the film trilogy) or *Monopoly* (the board game) as a frame of reference, experience or narrative is a fascinating, relevant issue. As previously stated, this thesis seeks to probe the problem at hand specifically through the concept of 'space'.

The thesis has two parallel foci that connect the nature of game to the nature of game studies:

1) What is the nature of the relationship between the game and its space?
2) How can the role of narrative be located in relation to the game space?

Discussing these two questions, in addition to other relevant issues, will hopefully result in an alternative understanding of how the relation between game and narrative can be reconciled in the field of game studies. The idea is to find a route through the jungle of game studies in a negotiating way; to do that, one must start from the beginning and define the object of inquiry.

[32] Kücklich, Julian (2002, 101-2).

Ludwig Wittgenstein describes games as a group as having ”family resemblances”,[33] but being indefinable because of having nothing in common with each other.[34] However, this text aims to disprove the statement to as large a degree as possible. In the thesis, all games, regardless of whether they are electronic or not, are considered vehicles for gaming experience. This is achieved by focusing on the point of perception of the player-subject, not on **why** one plays, but on **what happens** while playing a game; the point of view is phenomenological in that it examines “how something is manifested”.[35] In the ludic context, the approach is thus necessarily concentrated on whoever is engaged with the act of gaming, since there does not even have to be an audience present.[36] Furthermore, the player-subject and the possible audience experience the game in completely different terms in the first place.

The thesis gets off the ground via the basic presupposition that playing games can be considered to be a form of semiosis just like, for instance, reading a novel.[37] This point of view will lead to a multidimensional treatment of narrative, since the special nature of gaming calls for examining multiple modes of signification. In other words, in relation to the player-subject, narrative is a “transcendent sort of medium”,[38] which can be applied on multiple levels. As it will become obvious later, this is also one of the reasons why gaming must be looked at generally before focusing on electronic games in specific.

On a basic level, “[n]arrative is a way of comprehending space, time, and causality.”[39] Inherent to narrative is also “a certain progression from an initial to a final state.”[40] If a game’s progression is divided into segments and those segments are looked at as narrative elements, narrative emerges as a factor guiding the interpretation of the game. When we think of how games could be narrativized, we naturally have to look at the

[33] Wittgenstein, Ludwig (1968, 32), ”Familienähnlichkeiten”, translation from German by G.E.M. Anscombe.
[34] Wittgenstein, Ludwig (1968, 31-2).
[35] Raatikainen, Panu (2004, 100), my translation from Finnish: ”miten asiat ilmenevät”.
[36] Eskelinen, Markku (2005, 64).
[37] Kücklich, Julian (2001).
[38] Branigan, Edward (1992, 121).
[39] Branigan, Edward (1992, 36), italics removed.
[40] Branigan, Edward (1984, 175).

experience of gaming. Thus, if we assert that gaming is based on the gaming experience, examining games as having narrative qualities does not mean sacrificing games on narratology's altar. In other words, we agree with the following ludological statement:

> Narratives may be fundamental to human thought, but this does not mean that everything *should* be described in narrative terms. And that something can be presented in narrative form does not mean that it *is* narrative.[41]

Games are not narratives, but keeping in mind certain ludological principles makes it possible to discuss games in relation to narratives. The text will first examine all games with or without explicit narrative elements at same time, then turning the whole approach upside down by examining games in general as something that must be narrativized; the overtly generic nature of this method will hopefully be overshadowed by the discoveries that are made about the nature of the relationship between games and narratives. At no point, however, can it be forgotten that gaming is the more fundamental phenomenon in relation to narrative. Thus in this thesis, "we shall try to take play as the player himself takes it: in its primary significance".[42]

[41] Juul, Jesper (2001).
[42] Huizinga, Johan (1970, 22).

2. Nature of Game – From Playing to Narrativity

> Play is older than culture, for culture, however inadequately defined, always presupposes human society, and animals have not waited for man to teach them their playing. We can safely assert, even, that human civilization has added no essential feature to the general idea of play.[43]

Thus begins the first chapter of Johan Huizinga's *Homo Ludens*, originally published in 1938,[44] one of the earliest and most influential works on play to date. As touched upon in the introduction, the origins of play go back to prehistory. While the same is true for narratives, Aarseth claims that play has an older tradition than telling stories and thus their cultural value is close to equal even though narrative has been the more powerful a paradigm for centuries.[45] However, the question whether the prehistoric man first represented past events with gestures or played with stones is irrelevant; here, Huizinga points to the fact that the idea of play is an extremely natural and encompassing one. The present chapter is dedicated to all kinds of games.

In the context of outlining playing games in particular, which can be (and in this thesis is) seen as a subcategory of all play,[46] certain formality is needed. Pinpointing that formality is the aim of this chapter. The chapter does not, however, aim to offer a comprehensive account of the theoretical framework of the whole thesis, as some elements of gaming will be taken up especially in connection to electronic games during the second part of the text. We begin looking at games in general by making the all-important distinction between playing and gaming. The arguments running through the text are constructed via concept pairings central to the thesis, discussed in the appropriate order.

[43] Huizinga, Johan (1970, 19).
[44] Encyclopædia Britannica: www.britannica.com/eb/article-9041447
[45] Aarseth, Espen (2004a, 46).
[46] Salen, Katie & Zimmerman, Eric (2004, 72).

2.1 Playing – Gameness

Playing | Gaming

As previously stated, the present chapter and thus the whole first half of the thesis is devoted to playing games in general. Electronic games will not be specifically touched upon yet as the text will mainly stay on a broader level. To get to the heart of gaming, it is of utmost importance that the term 'game' is defined as precisely as possible. This also includes making a distinction between playing and gaming.

Play is manifested in many different ways. One can play instruments, characters, roles, tricks or games, to name but a few. Distinguishing between these modes of play is usually relatively effortless. Even in the case of *Guitar Hero*, in which one plays an instrument (a toy guitar), a role (a rock star) and a game all at once, it is quite clear, for reasons later discussed, that the gaming, and thus the gameness, of *Guitar Hero* presents itself as the dominant mode of activity. The act comes close to playing an actual guitar, but not differently from the way playing *Gran Turismo* with a wheel and pedals comes close to driving an actual car or *Duck Hunt* actually hunting. 'Definite' problems do not arise until we look at pure 'play', as an intransitive verb in linguistic terms.

To put the argument differently, 'games' are something one 'plays', although 'to play' does not always mean 'to play games' in the sense of referring to the alleged medium. 'Games' themselves come in two major groups closely intertwined with each other: the games that are the result of playing[47] and the games that are the result of gaming.[48] The distinction is a fickle one at best and in many cases outsiders (the so-called audience) or even the subjects taking part in the activity cannot observe the difference. Let us take an example, in which three children play store on the edge of a forest. They use pine cones for money, two of them making trips to the woods to find things the self-appointed storekeeper might find interesting enough to buy. For some time, cones are traded for

[47] 'Leikki' in Finnish.
[48] 'Peli' in Finnish.

beautiful rocks, feathers and the like. At some point, one of the customers begins to pay closer attention to the amounts of pine cones changing hands. He decides that he wants to have more than his friend by the time his mother picks him up in half an hour. Running around the forest looking for rabbit's feet and bear skulls he makes a 'virtual' commitment to try to have as many pine cones as possible. By this time the act of playing had slipped into the realm of gaming, phased in by the desire for a ludic experience.

Umberto Eco distinguishes "using" a text from "interpreting" a text, even though "[e]very empirical reading is always an unpredictable mixture of both."[49] Using and interpreting a given text are "abstract theoretical possibilities",[50] in other words different perspectives on the same thing. Similarly in connection to games, playing and gaming are largely different perspectives on the same thing; the choice is often for the subject to make. What is more, both playing and gaming are typically present in any process of playful activity, fading in and out in the subject's experience of that activity. This can be seen, for example, in the gimmickry of an overconfident defenseman, who does not simply get rid of the puck even though heavily pressured by two opponents near his team's own goal during the last seconds of a tight NHL-match. [51]

Slipping between these two realms is well depicted by an analogy borrowed from Murray, who uses water as a metaphor for immersion.[52] For our purposes, water is gameness and swimming stands for all play. Moving in the water is typically done by swimming, but the potential for a different perspective is omnipresent. To dive once in a while is a refreshing and usually voluntary experience, which is completely different from one above the water; below, different rules apply. The fickle nature of gaming is underlined by the fact that it is also possible to just push your face underwater and otherwise stay afloat. On the other hand, when equipped with the right gear, one can stay under for long periods at a time, always resurfacing at a slightly different location, ready to go on

[49] Eco, Umberto (1990, 62).
[50] Ibid.
[51] NHL stands for National Hockey League.
[52] Murray, Janet H. (1997, 98).

swimming. Gaming is, in its broadest sense, a point of view, which is pleasurable because of its comprehensiveness.

Before attempting to map different characteristics of games, however, an essential practical aspect must be stressed. When the term ‘play’ is used in this text from this onward, it is **only** used in connection to ‘games’ unless otherwise indicated. The same applies also to the term ‘game’ itself, which always refers to ‘a game that are the result of gaming’ from this point onward. As already mentioned, the approach this thesis takes requires as clear-cut definitions of ‘game’ and ‘gaming’ as possible; thus a lot of effort is put into sketching both concepts. Please also note that everything expressed in the first half of the text in relation to games and gaming in general is also meant to cohere fully with the more specified discussion on electronic games in the second part of the thesis.

Rules | Goals

Children play silly games; I am speaking from personal experience. As a youngster, I used to ask people to pick a number, any number. After getting an answer, for example: ‘Thirty-four’, I would immediately shout out: ‘Thirty-five! I just barely won!’ The so-called catch was that the addressed person probably thought he was going to be shown a magic trick or proven some kind of a mathematical formula and therefore was completely oblivious of the fact that I was playing a game with him.

Many would undoubtedly remark that the activity the anecdote describes is more closely affiliated with rolling in a mud pond in a relatively cool environment than playing *Doom* or even *Trouble*,[53] but it is the aim of the thesis to show that this is not the case. Games have been defined in many different ways over their history and the definitions have been quite different from each other both in their approach and in their emphases. Here, four

[53] The Finnish version of *Trouble* is called *Kimble*.

more useful and recent definitions have been chosen,[54] two from game designers and two from game scholars. The designers' definitions are discussed before those of the scholars', first by going through the potential problems in all of them and then turning to their helpful aspects. Finally, a brand new definition of games and gaming will be offered.

For game designer Greg Costikyan, a game is "an interactive structure of endogenous meaning that requires players to struggle toward a goal."[55] The dilemma of interactivity is returned to later on in the chapter; at this point, it suffices to say that it is the only problematic element here. The definition is simple and includes the idea of goal-oriented play, which is a common factor in all games, in one form or another.

The Finnish game designer Ville Vuorela defines playing games as "an activity which is, from the player's point of view, unproductive and recreational by nature and has an initial state, rules and a goal."[56] This definition is clearly not meant to be academic, but it does not make it any less useful for our purposes. However, Vuorela sees playing games as being "unproductive" and "recreational", which is highly suspect: *Poker* is a game almost by any standards and it can sometimes be extremely productive and to some, clearly more than a hobby. Vuorela does add to Costikyan's commentary by mentioning "an initial state" and "rules", which, again, are both common factors in all games and to which we come back later.

Game scholar James Newman offers the following definition, which is quite close to that of Vuorela: "[t]he game is a voluntary activity, engagement with which represents an end in itself rather than operating as a means to an end; game play is its own reward and is clearly distinguished from ordinary life."[57] "Voluntary" is admittedly a step up from "unproductive and recreational", but the real downside of this definition is that games can be (and actually often are) means to an end: again, *Poker* can be used as a way to make a

[54] All of the definitions attempt to outline games in general, but are still recent enough for the existence of electronic ones to be included. I will, however, refer to other definitions later in the text as well.
[55] Costikyan, Greg (2002, 24).
[56] Vuorela, Ville (2007, 16), my translation from Finnish: "Pelaaminen on pelaajan näkökulmasta ajanvietteeksi tarkoitettua tuottamatonta toimintaa, jolla on alkutilanne, säännöt ja päämäärä."
[57] Newman, James (2005, 18).

living. Newman does also bring forward an important additional point, which is the natural separation of games from "ordinary life"; Newman's choice of words only makes sense, if they are taken to mean 'the real world' as opposed to something 'virtual'.

Finally, for Espen Aarseth any game consists of "(1) rules, (2) a material/semiotic system (a gameworld), and (3) gameplay (the events resulting from application of the rules to the gameworld)."[58] Two extremely interesting things can be noticed here. The first is the combination of the material and the semiotic, which together constitute "a gameworld"; the second in the supposed event structure that results from "gameplay".

To summarise and to follow the lead of these four game designers and scholars, the most salient aspects of gaming seem to condense into the following statement: **playing games is an activity bound by rules and goals, somehow separated from the non-game and thus creating a limited space for gaming, which in turn results in a chain of events within that space, starting with a certain initial state**. Note that in the four definitions above, little attention is given to the actual experience of play or narrativizing the game, which are after all supposed to be the cornerstones of ludologist and narratologist thinking, respectively. This seems to indicate that there might exist some incongruity between the way games are treated as cultural artefacts and the way they are studied in academic contexts.

As mentioned earlier, the purpose of the anecdote about winning narrowly is to bring forward aspects of games that are important for determining what gaming is all about. The laughable simplicity and in-built unfairness of the game in question aside,[59] the story illustrates in an illuminating way the nature of gaming from two distinct perspectives: first, the player's experience of gaming and second, the non-player's experience of non-gaming.

[58] Aarseth, Espen (2004a, 47-8).
[59] I will return to the question of 'agreement' later in the thesis.

As a player, I was familiar with the **rules of the game**: all players pick a number and the highest one wins. The **goal of the game (**defined by the rules) was thus to pick the highest number. I began playing by asking for my opponent for his choice. The act of asking was the first event in the game, breaking **its initial state**. After getting an answer, I 'read' the state of the game in that particular situation in such a way that I was able to pick a higher number than my opponent. In other words, the linkage between the rules and the players formed different kinds of **game states**[60] within a certain **game space**.[61] I was always aware of the fact that I was playing a game and that I was a part of its ludic space, which in turn directed my interpretation of both the game space and its different game states. Above, I have narrativized the events of the game, thus creating a **narrative**, but it is no longer directly connected with the ludic space itself; these 're-narrated' events create their own, this time narrative, space.

On the other hand, my green opponent in the story was not at any point aware that he was playing this (in any case) really unfair game. He did not know its rules or its goals, nor did he know he was a part of a game space, although for me he was. Only after I had informed him of his defeat he was able to see the irony (created by the artificial closeness of the result) in the sequence of events, which he was able to narrativize after the game was over. In his experience, no ludic space was ever formed. I played a game, because I experienced doing so; my opponent's case was just the opposite.

To provide another brief summary, rules, goals and the acts of player-subjects constitute game spaces and game states, which in turn can form narratives. Admittedly, the space itself is not too explicit in the example. On the other hand, it seldom is: being extremely slippery and hard to pin down is a characteristic quality for a ludic space, since it can be formed by a single decision.[62] Space has a central part to play in any gaming experience, its role still being mainly unifying by nature. Now that we have mapped the most basic

[60] 'The state in which the game is within a certain space'. 'Pelitilanne' (from Finnish) is tricky term to translate, especially when Eskelinen uses the term 'gaming situation' for the experience of play, not for something within the ludic space as such. See Eskelinen (2001).
[61] 'Pelitila' in Finnish.
[62] Salen, Katie & Zimmerman, Eric (2004, 95)

aspects of all games, it is time to briefly discuss non-games before constructing a redefinition.

Games | Non-Games

Perhaps the most basic level that games can be thought of is as a sign cluster, which comprises of signs that can somehow be influenced by the player-subject. A definition so cursory is by itself practically useless, but for its own part important in discussing games in general. It can even be seen as being surprisingly close to the ultimate definition emerging from the following discussion.

What constitutes a game then, if it is not just a sign cluster waiting to be semiotically poked? The answer is hardly simple. Many applications of the computer age have obscured the boundaries between games and non-games; these include, for instance, *Second Life* and countless machinima projects, in practice starting with *Quake* back in 1996.[63] This is one of the reasons games need to be redefined in a way that underlines the act of playing itself, not necessarily based on their content or them being real-world objects of some kind. [64] The game space with its rules and especially the goals of the player-subject acting in that space emerge as the most crucial elements of gameness, since target-orientation is always a part of any game; something is not a game, if it does not have goals determined by its rules,[65] and a subject is not gaming, if she is not trying to reach those goals. The more complex the game, the more it can be seen having different goals. The goals can also be explicit or implicit by nature, but they still all originate from the rules. Naturally, there are always those who seek to undermine the author(ity) and just play along to sabotage others' experience, as sometimes is the case in MMORPGs;[66] in any case, sabotage is a good example of the fact that even within the

[63] Bonza: bonza.rmit.edu.au/essays/2006/Charlie%20Drying/machinim.html
[64] The other being the role of electronic games as a new kind of game and not a completely new medium, as discussed before.
[65] See e.g. Järvinen, Aki (2008, 34).
[66] Eskelinen, Markku (2005, 77).

same ludic space all player-subjects do not have to have exactly the same set of goals. The ways the game allows to act accordingly, so to speak, can be collectively called the **interface**, which is typically associated only with computers and will be discussed primarily in connection to electronic games in this text. It is, however, an extremely helpful concept in regard to all games.

To rephrase the previous argument, it can be asserted that 'playing a game' requires a "lusory attitude"[67] just like 'eating food' requires a determination to swallow. Stuffing food in your mouth without swallowing does not qualify as eating, nor does stuffing food in through your nose. Admittedly, this is in part just a question of semantics, but it is also a question of understanding the ludic space that is created in relation to the player-subject. The semantic aspect can be partly sidestepped by adopting the term "ludic motivation", which refers to "an interest in the skills, rules, competition and dynamic engagement invited by the game."[68] Playing a game is fundamentally about trying[69] to reach goals that are primarily virtual by nature.

In other words, to play a game, the player-subject must have goals that principally have to do with the game space in question; ludic motivation **must** be aimed at the virtual. Winning at *Poker* undeniably makes one rich in the real world, but before that one must excel in the game itself. Hence, for instance, *Second Life* is a game only as long as the player-subject experiences the virtual world and the goals within it as just that, virtual. If and when the player-subject channels his efforts to succeed in the real world, the ludic aspect and space of *Second Life* evaporates, transforming the environment into an application not much unlike *eBay* or a flea market. Games are used to train, to educate, to make money and so on, but the real question is not whether an army training simulation is a game or not, or even whether its ultimate goal is to produce better soldiers or not, but whether or not the subject experiences the simulation foremost as a game and thus its goals as virtual. In effect, gaming generally embraces more explicit goals, despite their

[67] Salen, Katie & Zimmerman, Eric (2004, 97).
[68] Carr, Diane et al. (2003, 151), as opposed to "representational motivation" (to which I will come back later) and "communal motivation" (which is outside the scope of this thesis).
[69] The purpose here is to underline the principle, not offer clear-cut definition of 'trying'.

virtuality, than real life.[70] This is exactly the case with the number of points gained in an army simulator (explicit, virtual goal) as opposed to becoming a more proficient in warfare (implicit, real-world goal). Like with *Poker*, the idea of playing a training simulator is not at odds with possible benefits in the real world achieved by the act of gaming. Thus the experience of in-game goals is an essential factor in transforming **a** space into a **game** space, because they also turn **any** game space into a more or less **virtual** space.[71]

Another apt example on the differences between games and non-games can be found outside computers. Some time ago in Finland, a couple of stories with six alternate endings were published in *Aku Ankan taskukirja*.[72] The ultimate ending was determined by the choices the subject was allowed to make at regular intervals over the course of the story; the subject was then clearly a factor in the formation of the narrative. These adventures were not games, however, because the structure did not impose a goal to be achieved: there was no specific ending to be attained. If the subject had been given a goal to reach at the beginning of the story, she would have read the narrative as a target-oriented gaming experience and thus experienced it as a game.

The above example sheds some light on the real focus of this thesis, as it brings forth how rules and goals have an effect on the manifestation of narrative potential within a certain ludic space. These issues will be dealt with in more detail toward the end of the chapter. However, let us now take one final instance of a kind of goal-oriented play that might be considered by many to be a borderline case: the notorious *MacGyver the Drinking Game*.[73] Typically, any drinking game is used to get as many people as possible as drunk as possible in the shortest amount of time possible, but the player-subjects themselves often just try to get drunk enough to have a good time during and after the game. This does not create a paradox in the game space in itself, because the rules do not impose a

[70] Järvinen, Aki (2008, 34).
[71] This aspect of game space will be further looked at later in the thesis (section 'Virtuality | Space').
[72] *Donald Duck's Pocket Book*. The stories were called 'Vanhan linnan salaisuus' ('Topolino e il segreto del Castello', *Aku Ankan taskukirja* 117 / 1989) and 'Keltaisen ruukun arvoitus' ('Zio Paperone e l'anfora enigmatica', *Aku Ankan taskukirja* 128 / 1990). Perunamaa: www.perunamaa.net/taskarit/
[73] Source for rules: www.voimahali.fi/vh/showthread.php?t=50507

goal “get drunk”, but “drink when this or that happens”. The situation is partly similar to that with *Poker* and earning money by playing: a game can be a means to an end.

However, the problem with *MacGyver the Drinking Game* is that the rules are practically impossible to follow to the letter because in that case every player-subject would be drinking practically all the time while watching an episode. The impossibility of the rules thus results in player-subjects drinking as much as they see fit to reach their individual goals, not as much as is required by the rules. Consequently, *MacGyver the Drinking Game* is right on the borderline between playing a game and just plain playing, although even typical gaming does often allow multiple goals depending on the complexity of the game space, some of the goals being more explicit than others. For instance, the goals determined by the rules of *Tetris* are much more explicit than those in the case of *SimCity*, which allows a goal like ‘building a city as close to real-world Tokyo as possible’ without compromising its status as a game: even this goal is within the scope of the game’s rules.[74] Juul describes *SimCity* as a borderline case because of its open-endedness,[75] but that can be considered to be a highly questionable view as many games, for instance MMORPGs, do not offer definite closure and they can thus be seen as extending *ad infinitum*.[76] Be that as it may, let us now take a fresh new look at defining ‘game’ in regard to the above discussion on non-gameness.

Formality | Gameness

Here the four previously examined definitions are combined with a few additions on the basis of the discussion that followed. To summarise, meanings produced by games always remain at least partly separate from a non-ludic space. To achieve that, a game has to have a degree of formality, which is a result of rules in a limited space. The goals

[74] Frasca, Gonzalo (2003b, 231).
[75] Juul, Jesper (2003, 31).
[76] In the light of this element, it is no wonder MMORPGs have been compared to soap operas.

and "subgoals"[77] the player-subject tries to reach do not have to explicit, but if she does not struggle to achieve the in-game goals, she is not 'playing a game' or 'gaming', but just 'using / experiencing an object'. The complexity of the game does not matter in itself: *Civilization 4* and *Paper/rock/scissors* are both games as much as the other. Both of them have their own game rules and goals, which combined with the acts of the player-subject(s), constitute a ludic space.

As it has hopefully become very clear, games should not be primarily considered to be traditional narratives. However, games do become multi-sensory (sight, hearing, smell, touch and even taste in rarer occasions) narratives when you experience an act of playing by someone else. Regardless of the amount of in-game narrative content available for the player-subject, there are some elements that always apply when studying the multidimensionality of games and the experience of play. These principles form the core of gameness and gaming.

1) to play a game is to experience doing so (at least at its initial state)[78]
2) games consist of rules, which separate it spatially from other non-game spaces
3) the interface of the game and all its goals are also demarcated by its rules
4) player-subjects must have ludic motivation to reach goals within game space
5) player-subjects' acts and their relation to rules form game states within game space
6) the initial state of the game is the starting point for subsequent events and states
7) events produced in game space can be narrativized to form a distinct narrative space

The definition above does not mention electronic games for a good reason; what is ultimately more interesting than the shared elements of all electronic games is the connection between electronic games and all other games, not in the least because electronic games are "embedded in a deep and long tradition of play, and they borrow

[77] Järvinen, Aki (2008, 34). E.g. in *Football*, scoring can be seen as a subgoal of winning the match, passing the ball successfully as a subgoal of scoring, etc.
[78] This thesis acknowledges the existence of Mihály Csíkszentmihályi's term 'flow', but does not have the space to discuss it thoroughly.

formally from many other games."[79] Game scholar Stephen Poole calls this phenomenon "the technological prostheticization of play in general."[80] Typically when the spotlight is on electronic games, discussion usually turns either to whether they are narratives and which methods, from for instance film studies, one could possibly adopt (the narratologist view) or whether one should come up with new theories about them (the ludologist view). However, it is quite safe to say that what is important about games is playing them. Thus it should not be considered far-fetched to point out that what is important about studying games is studying the experience of play. Playing *Chess* in electronic format is, as an experience, after all, clearly more affiliated with playing *Chess* on a traditional chessboard than watching someone else play *Chess*, not to mention watching a movie about playing *Chess*.

Consequently, gameness does not manifest itself in a box to be bought or even in a line drawn in the gravel. As Huizinga puts it, "we find play present everywhere as a well-defined quality of action which is different from 'ordinary life'."[81] While it is sometimes hard for a media scholar to see the fruitfulness of Huizinga's point of view, it does not make it any less valid. The gameness of a thing is in its potential for a different perspective.

2.2. Interactivity – State

In this section, some additional elements of games are underlined. These elements elaborate on the definition of 'game' offered thus far, some (like 'virtuality') by being extremely useful, some (like 'interaction' and 'medium') by being less so. The role of simulation, which has traditionally been a very important concept for game scholars, in addition to its relation to game space, however, will be more fully discussed only in connection to electronic games.

[79] Poole, Stephen (2007, 291).
[80] Poole, Stephen (2007, 279).
[81] Huizinga, Johan (1970, 22).

Interactivity | Meaning

Perhaps surprisingly, the defining aspect of games and the most salient difference between games and other forms of art, entertainment and/or narrative is not interactivity, but the existence of rules.[82] When 'interaction' is under scrutiny in game studies, discussion often turns to light switches and the like.[83] The term is notoriously hard to define, but this section aims to show that it is also a fairly useless one in the context in question. This is the case especially in relation to computers and thus to electronic games, since it offers no additional value to their description.[84] 'Interactivity' might even be harshly described as a pure marketing term much like 'multimedia', whose meaning has long become obsolete in any sensible discourse due to further technological advancement. Additionally, talking about interaction often positions the player-subject (or any kind of 'user') primarily as a consumer.[85] One has to keep in mind that as a buzz word for causality, 'interactive' has still been rather a trendy word in the recent years. This is a fact can be discerned in media registers across the world. In media studies, additionally, there has been a constant struggle between formal accounts of interactivity and its functional definitions, which are mutually contrasting at best.[86] To make the term even less helpful for this thesis, the definition for 'game state' does not equal 'things that can be interacted with in game space'.[87]

If we look at electronic games specifically, their interactivity is always a question of interface, because the interface of a game is the only element that enables the user to influence the media object – that is in fact the defining characteristic of an interface. Interface in the broad sense, on the other hand, is not a thing whose nature is determined purely by technology or medium: a film is not interactive at the local theatre, but can be seen as such at home. Electronic games can have completely different interfaces both

[82] Eskelinen, Markku (2005, 78).
[83] See e.g. Costikyan, Greg (2002, 11).
[84] Manovich, Lev (2001,55).
[85] Parikka, Jussi (2004, 93).
[86] Myers, David (2003b, 75-6).
[87] This matter is returned to on several occasions later in the thesis.

from each other[88] and basically the same game necessarily has a different kind of interface in electronic and non-electronic form. Thus even with games in general, the situation is quite similar to computers: according to Costikyan, calling a game an 'interactive game' (just like calling a computer an 'interactive computer') is redundant, because the state of the game in any case changes in response to a meaningful act by the player-subject.[89]

Despite his willingness to see interactivity also outside the domain of electronic games, Costikyan chooses to leave objects like crossword puzzles outside the scope of games, because puzzles are allegedly static as opposed to being interactive.[90] The division seems an artificial one, since if puzzles were inherently static, there would not be any way to solve them, or at least there would not be anything to show for the solution.[91] In connection to this, game researcher Lisbeth Klastrup offers a highly useful and simplistic insight, which describes interaction as an **event**, which "establishes a relation between two autonomous agents and results in an altered state of either one or both agents."[92] When a particular interactive or any other kind of event takes place in ludic space, it in fact results in what Costikyan calls "changes in the game-state".[93] Thus he fails to see that if a letter is added into the grid of a puzzle, it does indeed change things in that space: if the right letter was added, the solution is that much closer; if it was not, the solution is actually farther away than before adding the letter. Admittedly, the idea of playing a crossword puzzle instead of filling in one is more obvious when the puzzle is in an electronic form, for instance on a computer screen. Be that as it may, because of the emptiness of 'interaction' as a term, this thesis will avoid using it from now on, replacing it later with the relationship between 'interface' and 'agency', the 'how' and 'what' of performing in an environment.[94]

[88] Nintendo Wii's controllers and Sony Playstation's EyeToy cameras are good examples of this.
[89] Costikyan, Greg (2002, 11).
[90] Costikyan, Greg (2002, 10).
[91] Temporal aspects of gaming are more closely looked at later in the thesis (section 'Event | State').
[92] Klastrup, Lisbeth (2002, 334).
[93] Costikyan, Greg (2002, 10).
[94] Wilhelmsson, Ulf (2001, 143).

To partly redeem Costikyan, however, he does bring forward another interesting point by defining "decision making" as "interaction with a purpose".[95] This connects the idea of interaction with the struggle to reach in-game goals and with the meanings the game structure creates, which he calls "endogenous meanings" since they are "caused by factors inside the […] system."[96] This is close to what one would call, if desired, diegetic meaning. For example, the huge majority of meanings created in *Chess* could be called endogenous or diegetic, since the game mechanics are so predominant for the game. Still, the king is the most valuable pawn of all; this relation to the real world can be considered extradiegetic, even though it is the rules of the game that make the king so irreplaceable. Additionally, one's opponent can be somebody one knows, which adds to the semiotic processes involved in a game of *Chess*. Thus deeming a meaning as diegetic is often a dangerous point of view, as meanings always mix with other texts and contexts as well.[97] That is why we would like to, in addition to using Costikyan's term "endogenous meaning", offer a related one of 'endogenous goal' to refer to in-game goals.

As mentioned many times by now, all games have goals. Those goals are intrinsic to the experience of play, which means that the meanings produced by games have to be interpreted first and foremost within the game space in question. Endogenous meanings in any separated space are **of** the real world,[98] but not **for** it; making decisions during gaming forces the player-subject to primarily utilise the meanings that refer to the ludic space in question,[99] in other words 'functional meanings' of things within the ludic space.[100] For instance, let us imagine an obstacle in a given game space. Let us also say that the obstacle is a baroque door to the other side of which the player-subject or her avatar must get. Identifying the obstacle as a door as well as the need to step through it are both processes brought about by functional endogenous meanings, which are part of the structure of the ludic space. The key to the door is held by a person or a character nearby, who wears extravagant 17th century clothing. The connection between the door

[95] Costikyan, Greg (2002, 11).
[96] Costikyan, Greg (2002, 22), quoting a dictionary himself.
[97] This aspect will be further discussed later in relation to game space.
[98] Aarseth, Espen (2001, 162).
[99] Primary does not have to mean 'more interesting' or 'more probable'.
[100] Rodriguez, Hector (2006).

and the character exists on a real world level as a part of European history, but the player-subject does not have to notice or even know about it, because looking everywhere and asking everybody in that particular limited space results in obtaining the key just as well. If the player-subject noticed the hint, however, the gaming experience does become that much richer.

This idea can naturally be applied to any kind of semiotic process, for example experiencing a film. The foremost meanings are those that enable the viewer to make sense of the movie, because otherwise the production of other additional meanings is compromised. In *Titanic*, understanding that Bruce Ismay's[101] insistence to make record time across the Atlantic was one of the main reasons for the accident adds both to its tragic elements as well as to the fact that the ship itself has later in history been seen as a symbol for man's hubris in the face of nature's might. These meanings are, while basic, still secondary. The difference with games is that identifying certain endogenous aspects of a given virtual space is a condition for the emergence of subsequent events and states in that space. One cannot play ball if one thinks a ball is just a metaphor for 'anything can happen'. As mentioned above, this is the element that is typically considered to make games as a unique medium.

Mediality | Immediacy

The line of thought we have been following about gameness leads to the aforementioned discovery that the most fundamental difference between electronic games and other audiovisual media is not that the subject can affect the narrative created, but the primacy of rules in games. Defining game in this way naturally raises the question of electronic games as a medium. While it is sometimes problematic from the player-subject's point of

[101] Managing Director of the *White Star Line*, played by Jonathan Hyde. The Titanic Historical Society, Inc.: www.titanichistoricalsociety.org/articles/ismay.asp & The Internet Movie Database: http://www.imdb.com/title/tt0120338/fullcredits#cast

view to see games as a medium, as something that mediates, it is more useful to see games as a form of experience, as a perspective, as has been also discussed above.[102]

When comparing gaming with narrative, Aarseth emphasises the point that there really is no "medium of the computer game", because even electronic games do not fall under one kind of technology "with one fixed set of capabilities".[103] Aarseth points out, and correctly so, that electronic games have multiple forms and are thus likely to be seen as a fragmented field aesthetically, which according to him leads to games not being considered as an art form, but "at best, a somewhat definable cultural genre."[104] This can be said of most spaces and environments created via computers, making them a multidimensional media domain reigned by audiovisual forms of expression and the relevant institutions.[105] However, most art forms can be seen as a combination of different media anyway,[106] which even further undermines the need to posit any media-essentialist outlook on games in the first place.

Thus the essential gameness of a thing (even an electronic one) does not come to light in relation to aspects like medium or aesthetics, but in relation to the player-subject's experience of play. Media scholar Jukka Sihvonen touches upon this matter in connection to technology's ability and goal to make the mediating factor in a communicative act to diminish or even to disappear completely. "Välitön", the 'immediate' (something without a mediating factor, if you will) refers to the experience, not to the possible involvement or intrusion of a medium.[107] If we did not look at electronic games as a medium, we could surely get closer to the ludologist ideal of games purely as play. The essence of a gaming experience is, after all, in its pervasiveness, its **immediacy**.

[102] Actually, seeing electronic games as a medium presupposes their narrativity to a greater degree. Even if narrative is not considered as a structuring method applicable for everything, something mediated, a representation, lends itself more generously to the approach in question.
[103] Aarseth, Espen (2004a, 46).
[104] Ibid.
[105] Sihvonen, Jukka (1995, 91).
[106] Carroll, Noël (1996, 51).
[107] Sihvonen, Jukka (1995, 83-4).

Keeping the ultimate goal of the thesis in mind, this opens interesting new points of view to narrativizing play. Consider this quote from Murray, which emphasises narrativity over mediality.

> Eventually all successful storytelling technologies become "transparent": we lose consciousness of the medium and see neither print nor film but only the power of the story itself. If digital art reaches the same level of expressiveness as these older media, we will no longer concern ourselves with how we are receiving the information.[108]

It seems that narrative might be following on games' footsteps by becoming not just more and more medium-free, but also more and more medium-less to a larger degree. "Digital media that strive for transparency and immediacy" create "the desire to get past the limits of representation and to achieve the real", which "is defined in terms of […] experience".[109] This will be an important point later when electronic games are looked at in relation to the narratives they create, especially when it is rather paradoxically noted that 'the real past the representation' is actually only real in the virtual space in question **and** that the more transparent and natural the interface in that virtual space has been constructed, the more pervasive the gaming experience actually becomes for the player-subject.

However, since narratives characteristically unfold merely on authorial juice with little input from the subject in terms of advancement, all meanings produced by games are always more heavily endogenous by nature in the first place. This is one of the main reasons that games themselves are less like a unified group of objects and more like unique vehicles for gaming experiences and for meanings created in these individual ludic spaces. As previously referred to on several occasions, there are no conditions outside the scope of the gaming experience itself which can be used to group all games under the same heading.

[108] Murray, Janet H. (1997, 26).
[109] Bolter, Jay David & Grusin, Richard (1999, 53).

Virtuality | Space

Virtuality can be considered to be inherently connected to the relation between what is and what is made of it.[110] In the context of this thesis, 'virtual' is used to refer to the good-hearted juxtaposition of reality (what is) and gaming (what is made of it). The core of any game includes the game space, which is always (without exception) **partly** virtual and thus always (without exception) distinguishable from reality. The events of a game always take place in a game space, whose real nature is determined by the virtual elements of the gaming experience in question. In other words, the player-subject acts in a game space as a physical body (e.g. *Football*), through an avatar (*Super Mario Bros*) or without any clearly definable figure or form (*Tetris*, *Chess*). When we later take the plunge to electronic games, however, the inherent virtuality of a ludic experience becomes more apparent as the significance of both the screen and the interface is more heavily emphasised.

To put it in very crude terms, traditionally space has been seen either as a something one can move through or something one can think through. These points of view naturally complement each other and together illuminate some of the properties of game space. Generally speaking, a space offers a context for interpretation, but 'moving' in a given space always emphasises the placeness of space. In the context of this thesis, 'place' refers both to real world locations and game worlds like *EverQuest*'s Norrath or *Ultima*-series' Britannia in electronic games.[111] Space, however, is a more encompassing concept.

> Space is a necessary *a priori* representation, which underlies all outer intuitions. We can never represent to ourselves the absence of space, though we can quite well think it as empty of objects.[112]

[110] Ryan, Marie-Laure (2001a, 45).
[111] Like 'ludic space' and 'game space', 'place' and 'world' basically refer to the same thing in the text, although 'world' is only used in relation to electronic games for clarity's sake. 'Environment', with a slightly different denotation from 'world', is also primarily used in connection to electronic games.
[112] Kant, Immanuel (2003, 68), emphasis in the original.

This Kant's theorem, in which space serves as a part of the framework that enables all experience, applies also to game spaces. The only difference is explained by the spatial hierarchy created by different kinds of experiences. A game space is a virtual coating that is always imposed on other space, making an insular game space an impossibility.[113] Even the most virtual of spaces originates from a dominating space and thus exists as dependent of it. Consequently, the relationship between Kant's space and experience is basically congruent with that of game space and gaming experience with one major difference, which is that game space is a result of gaming, not vice versa.

A ludic space can also be seen in two different ways, either as the relationship between the author (in the form of rules) and the players (typically in a certain place) or as the sum of sequences of events and states. The perspective is free for the choosing, since both points of view refer essentially to the same thing: **the magic circle**. After Huizinga, the magic circle has been taken to mean all spaces that are "forbidden spots, isolated, hedged round, hallowed, within which special rules obtain", "temporary worlds within the ordinary world, dedicated to the performance of an act apart."[114] The magic circle is admittedly a problematic concept.

In some cases (like an official *Football* match), the effect of the magic circle is very real, in others (like playing with a football in the park), it is much more illusory.[115] Even with a clearly limited place, like a *Football* pitch, the game space leaks in rain from the sky, sounds and streakers from the spectator stands and sometimes even eagle-owls from the rafters. The same applies for spaces that are more explicitly virtual as well, as it is clear for anyone who has tried to play a new PC-game like *Crysis* on a computer with an old processor and/or an old display adapter. The circle's leaking can be experienced as significant in the opposite way as well. Player-subjects have been known to imitate their in-game actions in reality, like was allegedly the case, for instance, in the so-called

[113] Unlike with places, the virtuality degree of a space is a complex question: which is 'more virtual' as a space, a rich fantasy world with a clearly limited place depicted on a screen or a really simple game played without any limitation in regard to the place in the real world?
[114] Huizinga, Johan (1970, 28-9)
[115] Literally 'in-game', from *inlusio, illudere, inludere*. Huizinga, Johan (1970, 30).

Doom-killings in Kentucky in 1998.[116] Where the overconfident hockey-defenseman let his gaming experience get mixed up with elements of general play, the real-life shooter in question mixed gaming with non-gaming with tragic results.

More theoretical problems arise when discussion turns to pervasive games, in relation to which the game space is even less like an actual container, but more like a sieve. [117] In this respect, defining a game space relating to its rules and as sequences of events and states is highly necessary. The endogenous nature of the meaning-making process is always compromised in a ludic context because of the intertwining of "the lived, discursive and contextual aspects of space and reality" with the said space. [118] For instance, in UEFA's[119] *Champions League* the knockout stages are organized with two legged head-to-head matches, where the final result is determined by the combined score of those two matches. The ludic space, created here not in relation to the rules of *Football* per se but in regard to UEFA's competition regulations, expands two stadiums, because the result of the former match directly affects the meanings created in the latter. Thus the goal of a single match might not be to win at all.

In any case, this idea of stretching the game space is not as strange as it might seem at first, if it is paralleled with sequels and their expansion of narrative space for example in film. Be that as it may, a space should always be kept conceptually separated from the place it contains.

> Space is an abstraction – nevertheless, it provides a context for the reality to actualise. These actualizations of space, "places", can be understood intuitively and experienced bodily, through sensory perception. The relationship between space and place is constantly negotiated and dynamically processed.[120]

[116] Bignell, Jonathan (2002, 218).
[117] For a discussion of 'container space' in electronic games, see: Günzel, Stephan. 2005. Through the Eyes of an Ego-Shooter: Pictorial presentation and construction of space in "first-person perspective"-computer games. Online: www.stephan-guenzel.de/Texte/Guenzel_Egoshooter.pdf
[118] Saukko, Paula (2003, 166).
[119] UEFA stands for The Union of European Football Associations.
[120] Sihvonen, Tanja (2003, 268).

In other words, place can be seen as "the concretisation of space".[121] However, it is possible that the rules of a game define the place only in a very cursory way, in which case the place might be wholly embedded in reality, as with pervasive games. It is also possible that the same game exists in different contexts; one can play *Chess* both electronically and on a traditional board. Regardless of the size or the nature of the ludic space, it is bound by rules that offer the context for the meanings created by the game. In other words, rules are on a higher level than space in the hierarchy controlling the semiotic processes in ludic situations. Objects are thus made meaningful primarily through the rules of the game, which also include the game's endogenous goals, as previously discussed on many occasions.[122]

Game spaces that are embedded in reality without an explicit virtual place are naturally more susceptible to conditions and rules of the real world. In an electronic game like *Hitman*, it is possible that the only goal is to murder people; in the board game *Hungry Hungry Hippos* this sort of behaviour would certainly be frowned upon, even though it is not mentioned in the rules. In a *Football* match, rain is a potential whose manifestation is determined by the weather; in *Pro Evolution Soccer 5*, the possible representation of rain depends on the rules of the game itself.

The meanings emerging from the virtual are not primarily connected to the real, but to other virtual meanings. Games are always virtual to a certain degree, as their rules and goals separate them from the everyday experience of life. Eskelinen, for whom a game as its simplest is "a system of means and goals, in which there exists procedural rules to manipulate its resources",[123] does not mention the origin of these elements. The reason for this is the virtuality of any game, since the system Eskelinen mentions in his definition can originate from anywhere: from a 1000-page rule book or the imagination of the sole player-subject.

[121] Ibid.
[122] This issue will still be further looked later in connection to narrativization.
[123] Eskelinen (2005, 78), my translation from Finnish: "keinojen ja päämäärien systeemi [...], jossa on proseduraaliset säännöt pelivälineen manipuloinnille".

Thus, the formality of the game is naturally a matter of degree as well. In case of shooting hoops on a backyard, the virtuality (and at the same time, the gameness) can originate, for instance, from an agreement between two people to take five attempts each from a given free throw line to see who scores more. After nine consecutive successes by the player-subjects, the last throw does not hit the target. Why? Not because there might have perhaps been some meagre prize for the winner, but because it was clear that missing the last shot would result in defeat. Admittedly, it is a question of how to deal with pressure more than literal meanings, but the pressure itself is born of meanings created by the game. If the two had been just shooting hoops without playing the game described above, it would have been much less likely for the player-subject in question to miss his fifth shot. After all, he did make the first four.

Gaming also has a tendency to transform meanings of objects in the real world. Let us take playing *Hide and Seek* as another example. The game takes place within a limited area, usually indoors, and there are different goals for different players-subjects. What happens after the game's initial state is that pieces of furniture transform into visual obstructions, parents and pets turn into potential whistle-blowers and so on. The sitting capacity of a sofa is secondary in the necessarily virtual game space, because the number of people that fit to sit on it is not directly connected with the sofa's functional aspects in the context in question; signification renders perception.[124] What is especially noteworthy is that that these transformations take place regardless of the goal a given player-subject has in the game.

These processes are dissimilar from just imagining things as different and thus result in interpretations completely different from non-ludic ones. After the game of *Hide and Seek* is over, the ludic place and everything in it turns back into being 'just' a house in the real world. As discussed before, this kind of privileging of functional meaning is unique for games. The virtual clearly adds to the real it exists in relation to, thus creating a desire towards it.[125] The desire for gaming is connected with the separation games enjoy from

[124] Metz, Christian (1974, 17).
[125] Sihvonen, Jukka (1995, 93).

the real world.[126] Together they give rise to ludic motivation, which usually results in much more than merely saying 'thirty-four' in a situation in which the highest number wins.

Finally, it must be emphasised that the player-subject does not have complete access to the game space he is a part of. In cases like *Backgammon*, it is entirely possible to perceive all the meanings in regard to a given game state provided that one just is attentive enough, but on many occasions the human inability to comprehensibly perceive the occurrences 'taking place' necessarily results in an only partial understanding of the game space and the events within it. To summarise the difference, game spaces are always partly virtual because of their relationship and dependency on real space. Game places are virtual only in case of electronic games and their derivatives. Game places are, however, always parts of a game space; in other words, a virtual space can and often does hold within itself an actual place.

Event | State

Now, at last, it is time to discuss the reasons why looking at spatiality (as opposed to temporality) has been the main focus thus far in the thesis.[127] Although dealing with space and time separately despite their interdependency might seem risky at best, an explanation for this point of view can be found in the nature of ludic states. Gaming experiences always involve a special context, a space, but they do not necessarily create a distinct meaningful temporal dimension to go with it. An example might be in order here. A game of *Chess*, played by a middle-aged couple, Adam and Eve, has lasted for three years. For all this time, the elaborately ornamented pawns have just been standing on the wooden board in the middle of a glass table in their living room. One day, walking by the board, Eve realises it is her turn to move and enters the game space, the pawns

[126] Costikyan, Greg (2002, 17).
[127] For a discussion of temporality in games, see: Juul, Jesper. 2004. Introduction to Game Time. In Wardrip-Fruin, Noah & Harrigan, Pat (eds.). *First Person: New media as story, performance and game*. Cambridge & London: The MIT Press, 131-42.

consequently transitioning from the decorative to the functional. Adam having just left for a work-related trip, she takes her time; it makes no difference in regard to the game space how long she ponders for her next move (especially if we take into account the extensive time that has passed in the real world after the game's initial state). After a long consideration, she moves the queen forward on the board to finish off Adam's remaining bishop.

The point of the story is not that you can play any game for years or that *Chess* in its tournament format is not a valid variation of the game in question, but that while the existence of time is a condition for any experience, temporality in itself is not as intrinsic to gaming in general as spatiality. Admittedly, time passes in ludic spaces too, but it does not necessarily **mean** anything; as in the example above, time operates more firmly in the dominant space of the non-virtual, in other words the real world. There are, of course, countless numbers of games that have artificial time limits or those that have an emphasis on acting quickly for other reasons, but gaming, as an experience, does not necessarily **alter** time as it does space, although the sense for both might be blurred by it all the same.[128]

In regard to this discussion, it is essential to take a closer look at the relationship between an event and a state. Basically, playing results in events in a game space, which in turn result in changes in the state. After the game's initial state has been broken by events, both a sequence of events and a sequence of states are created. These sequences exist in parallel to each other, events representing change and states stability, a given state consisting of events in progress at that particular moment in time. As discussed before, there does not necessarily have to be an event in progress in a ludic space: in that case, the state is eternal until broken by an act of gaming or destroyed by a real world happening. In a way, events in space do charge a state with potential for change, but it is never reached in that particular state.

[128] Again, this idea is connected with Csíkszentmihályi's concept of flow, which is not under discussion in this thesis.

Considering an event as some relatively minimal occurrence, like tightening one's grip of the bat before hitting the ball in *Baseball*, illuminates the necessarily unchanging nature of a state. There is an infinite number of states paralleling the event chain of tightening the grip on the bat, every one of which having the **potential** for certain consequent states. The tighter the grip, for instance, the more likely it usually is for the batter to hit the ball. Unlike states, events in ludic spaces can be and often are simultaneous: while the batter tightens his grip of the bat, the pitcher might be gripping the ball in a similar fashion at the same time. The typical simultaneity of events makes game states **collages** of events and their interrelationships.

To put the previous argument differently, because of their nature, ludic states do not exist primarily **in** time; they actually exist **in spite of** it. In a similar way, a ludic space that overlaps with real space while still holding onto its virtuality, a given game state remains unscathed by the change brought on by events; an event, defined by change happening within a space, does not change a state in that space, but gives birth to a brand new one. Thus game states have a temporal dimension only through the events they exist in parallel with, all of them still residing within the ludic space in question. This makes space a more essential component of gaming than time. In the realm of stagnation Eve entered when sitting by the *Chess* board, there was no temporal dimension to experience, but only a spatial one. Inside it, a single state carrying all the already materialised moves and all the potential for consequent ones could be found within, including the move where Eve's queen takes Adam's bishop.

There is one more important aspect of ludic states that is useful to keep in mind. Their nature as something absolute and unchanging presupposes a degree of formality that can only be achieved via a close connection with the most formal element of any game, namely the rules; states are **only** manifested in relation to rules. This means that some of the events inside a ludic space exist beyond the scope of the sequence of states, for example scratching one's head during a time out in a *Basketball* match. The acting player-subject is within the game space, but the event is not meaningful in relation to the rules of the game and therefore, it does not produce a new ludic state – it is thus only

meaningful as an event in relation to space. Another player-subject perceiving the event can still give it significance in the ludic context in question, if she so desires. Determining which actions actually are significant to a given game state naturally involves interpretation. This is also one of the reasons why individual experience is so essential for defining 'gaming': what ever the game, the complexity of the game space results in only a subjective view on events, and consequently states.

As discussed above, a sequence of ludic states forms an absolute chain of event collages that positions objects in relation to the rules of the game. In other words, having complete access to a given state is to have the ultimate answer to the question: what is the going on in the game at a particular moment? Game states usually come in infinite numbers and their sequence is thus never truly fully perceived, of course the degree in which it can happen largely depending on the dynamics of the space. To clarify the argument, we can compare *Tic-Tac-Toe*'s space with a one created by a live action role-playing game, in which the player-subject does not usually have even remotely complete access to any of the game states beyond the initial state, not to mention the space as a whole. This also puts an emphasis on the flickering nature of ludic experience, which can be ended at any given moment as a consequence of events in reality, for instance a fight in the audience, a fire, a power failure, the player-subject losing interest and so on.

As a side note, it is also quite useful to notice a characteristic of the relationship between space and place. Typically, the more explicit the virtuality of a game place is, the less there are events that do **not** result in a change in the game state, as is the case with electronic games. This is because of the aforementioned fact, according to which games with spaces more fully embedded in real space are usually more susceptible to real life rules and occurrences. Consequently, a place more heavily virtual by nature is more affected by the rules of the game itself, which results in more significance being put on any event in the **place** in question. For instance, the event of physically moving a pawn on an actual board in *Chess* is an event that 'takes place' for the most part in space, not the place itself, in other words the board.

To briefly summarise, time acts **only** as a condition for a sequence of events, which in turn creates a parallel sequence of game states. This is true for any game. The ludic space that is created by a gaming experience is made of the **combination** of events and states, both of which relate to rules and goals to a degree: events less so than states. While an individual game state is absolute, completely void of flux and all-compassing in relation to the rules of the game, an event can be something that does not have any relationship to the game rules, but can still be signified in the game space. But why go through all this trouble in distinguishing events from states? One of the reasons is the previously mentioned fact that game spaces do not necessarily have to be in a constant state of flux, like it is the case with *Sudoku* or the game of *Chess* used as an example.[129] Thus it is inherent for gaming to pay more attention to states than events, as the new altered location of a pawn always takes precedence over the event of moving it. In other words, the emphasis is in the changes in states brought on by the paralleling events, not events in themselves.

Because the relationship between game states equals the relationship between what came before and what comes after in that game space, they create an arc, a sequence, in which only some of the parts are perceived, signified and ultimately narrativized. Being a good *Chess* player thus takes the meaning of being able to predict the development of future events by looking at the past better than average players, which necessarily requires narrativizing the state sequence in question.

Be that as it may, looking at a sequence of states as opposed to a sequence of events gives us an opportunity to discuss the gaming experience in a whole new way, since one of the most interesting parts of the above discussion in regard of this thesis is that while the members of an audience tend to narrativize a game as a sequence of events because of their inability to really access the ludic space, the player-subjects do it using the sequence of states. The result is two completely different narrative sequences. Before we finally make the transition to narrativizing, however, we must first take a brief look at the narrative's building materials.

[129] Many games in which player-subjects take turns to act can also be included in this category.

2.3. Sign – Narrativity

Sign | Interpretation

There are no objects that do not produce some kind of meaning. Even the functionality of objects becomes meaningful in an inevitable process of semantization,[130] since "[t]o rediscover a non-signifying object, one would have to imagine a utensil absolutely improvised and with no similarity to an existing model."[131] Thus every object and act imaginable, mediated or not, is a sign in the perpetual processes of signification and representation.[132] However, the ambivalence of 'representation' as a term even when applied to more traditional modes of communication, wavering both between surrogacy and likeness as well as between different modes of **again**-presenting something, makes it a problematic concept in the context of game studies, where the term would have to be reshaped yet again. This is true especially for the first half of the thesis, in which subjective experience has been the focus, not any object that does the representing. Thus we choose to disregard the term for the time being, advancing from signs to narratives through the concept of interpretation. Representation will, in any case, be examined in connection to electronic games, where the treatment of the concept will bring about more tangible results.

In Barthesian terms, signs can be crudely divided into linguistic and semiological signs.[133] Game spaces contain both kinds of signs much like any other space, even though they are not exactly made of signs themselves, but of experiencing them. When we get to electronic games in specific, the code, and consequently the vast majority of signs in those spaces, are authorial by nature; [134] in terms of gaming in general, however, this is not usually the case. Because of the multidimensional nature of both signs and

[130] Barthes, Roland (1990, 41).
[131] Barthes, Roland (1990, 41-2).
[132] Taylor, Lisa & Willis, Andrew (2006, 39).
[133] Barthes, Roland (1990, 41). This division will also be briefly touched upon in relation to electronic games.
[134] Originating from an author, a designer, etc. This topic is elaborated on again in short in the next chapter.

ludic spaces, an individual sign interpreted by the player-subject can be positioned either within, without or somewhere in-between in relation to space. The question of semiotic primacy and functionality, which has already been touched upon repeatedly during the course of this thesis, rears its head again.

Salen and Zimmerman bring forward four basic Peircean ideas that constitute a sign in connection to their discussion of meaning in games. They are listed here and fully adopted in the discussion to follow.

1. A sign represents something other than itself.
2. Signs are interpreted.
3. Meaning results when a sign is interpreted.
4. Context shapes interpretation.[135]

Umberto Eco points out that "the meaning of a sign-vehicle"[136] is a semantic unit which is posited within a semantic system in a precise way.[137] In other words, the sign-vehicle is automatically posited in a certain location in its semantic context, which makes it unique in its own right and provides the context for signification. This fact parallels the idea of game states, where every sign-vehicle can be posited only once in a given state because of its absolute stagnancy. A state presents itself to the player-subject as a kind of umbrella-sign, outside of which there is no need for interpretation in that ludic space in regard to its rules.

Let us once more emphasise the idea of primacy of certain meanings in games. "The mark of a circle (O) in the game of *Tic-Tac-Toe*, for instance, represents not only an action by player "O" (as opposed to player "X") but also the capture of a certain square within the game's nine-square grid."[138] The primary, functional meaning of "O" is that it is different from "X" and it is located somewhere in game space; the sign's meaning, the location on the board in relation to other signs in other locations, is strictly demarcated by

[135] Salen, Katie & Zimmerman, Eric (2004, 42).
[136] Word, image, etc.
[137] Eco, Umberto (1979, 84).
[138] Salen, Katie & Zimmerman, Eric (2004, 43), italics added.

the semantic context including the goal of the game, which originates from rules and manifests itself in the ludic space and its states.

Even without the fluctuation brought on by events in ludic spaces, meaning is always procedural by nature[139] and should be looked at accordingly. In the ludic context, the process in question manifests itself in the sequence of game states for the player-subject. Algirdas Julien Greimas felicitously calls the viewing of things as signs beyond just their 'being' looking at their "semiotic status".[140] This happens in a similar way while perceiving a game state or, for instance, watching a film or looking at a painting, since in all of these cases, the sign-vehicles themselves are unaffected and unaltered by the perception they are submitted to. There is no reason for game states not to be seen as a kind of language as easily as, to give a Barthesian example, fashion.

Media semiotician Jonathan Bignell, for one, applies the Saussurian terms of 'langue' and 'parole' to games by pointing out that the langue of the game is all the possible acts allowed by the rules (the system) and the parole one of those acts (a particular manifestation).[141] Following that trail of thought, any sign system, langue, can be investigated through its parole.[142] This is reflected in the langue of games, rules, whose primacy is apparent in game studies in general. Rules are the code key for signification in gaming, since "the roles of signs as members of code groupings means that many signs are heavily loaded with a significance which comes from the code in which they are used."[143] In other words, the signifying elements found within a particular game should not be decontextualised under any circumstances, not while gaming nor when studying gaming.

To follow Bignell's lead in applying linguistic theories to games, let us discuss gaming in connection to semiotician Jon Barwise. According to him, a linguistic sign cluster carries meanings on three different levels: the meaning within language, the utterance's meaning

[139] Lehtonen, Mikko (1998, 114).
[140] Greimas, Algirdas Julien (1987, 20), italics removed.
[141] Bignell, Jonathan (2002, 8).
[142] Bignell, Jonathan (2002, 9).
[143] Bignell, Jonathan (2002, 10).

as an action, and the meaning that is attempted to be conveyed.[144] Thus the sentence "*I am a philosopher*" means something in the system of English language, conveys a meaning as an event and tries to say something for the subject of the utterance.[145] What follows is an application of this division to a *Football* match.

The right forward moves down the field to approach a mid-fielder who is dribbling the ball on the same side of the field, a dozen or so metres closer to their team's own goal. At the same time, the right winger starts running up the side of the field, passing the forward, who is going into the opposite direction, on his way. Let us now look at the forward's actions as semiological signs, by equating "*I am a philosopher*" with the couple of running steps towards the object of the 'utterance', the mid-fielder. Firstly, we might conclude that **within the system** that is *Football*, he is trying to free himself from his nearby opponent to have enough room to receive a pass from the mid-fielder. Secondly, **the event** of the forward's action means that there is more room in the area he moved from, which in turn created room for the right winger to advance more freely. Thirdly, the forward knew that one of the opponents was going to follow him to try and intercept the ball if it were passed to him, which the forward counted on would **not** happen; thus the **meaning that is attempted to be conveyed** by the forward is not "pass me the ball since I am now freer to receive it", but "pass the ball to the right winger to whom I have now created a better chance to advance". Thus

> the generation of meaning does not first take the form of the production of utterances and their combination in discourse; it is relayed, in the course of its trajectory, by narrative structures and it is these that produce meaningful discourse articulated in utterances.[146]

In other words, the forward does not only utter something by taking the running steps, but also structures the utterance in the way that it would be a meaningful one to the mid-fielder. The more nuanced aspects of this communication strategy, of course, had already

[144] Barwise, Jon (1998, 25).
[145] Ibid. Italics in the original.
[146] Greimas, Algirdas Julien (1987, 64-5), italics removed.

been structured by the coach on the training field long before the actual act of gaming on the pitch.

Thus we see how the idea of a sign can easily be applied to a gaming situation, as all events and actions of other player-subjects are parts of the signification process during a gaming experience. 'A couple of running steps' is not just moving in the ludic space, but both an event that changes the game state and an act that submits itself to signification. In addition to being always a demand that has to be reacted to, meaning must also be available for access immediately, in the present.[147] The cumulation of individual states in space creates within it a microcosmic "*discourse on meaning*, […] a great paraphrase that in its own way develops all earlier articulations of meaning."[148] Previous meanings not only affect subsequent meanings in ludic spaces just like in any other space, but they are also often intentional in some way; in the words of philosopher Gregory Currie, "to interpret is to hypothesize about the intentional causes of whatever it is that is being interpreted."[149] Whether intentions are authorial by nature or originated from another player-subject, does not matter in itself in regard to the principles according to which a player-subject picks some signs as more meaningful than others in the two parallel ludic sequences of events and states.

With multiple player-subjects in the same space, like in the *Football* example above or in any complex game space, there exists a cacophony of utterances, of which the player-subject is only able to choose some at a given point in time.

> When we experience a "story" we must make sense of all the elements in it, so we can make conscious selections from among story elements. We make our selections on the basis of how central to the story certain elements are and how distinctive certain portrayals and action are.[150]

[147] Sihvonen, Jukka (1996, 31).
[148] Greimas, Algirdas Julien (1987, 64), italics in the original.
[149] Currie, Gregory (1995, 226).
[150] Potter, W. James. (1988, 53).

These choices partly constitute the process of narrativizing, in which the present acts as a vantage point which gives access to the past and the future.[151] Actually, this is not far from the process of reading, where sentences are seen as "component parts" whose combination from different perspectives results in "indications of something that is to come".[152]

> Thus, the reader, in establishing […] inter-relations between past, present, and future, actually causes the text to reveal its potential multiplicity of connections. These connections are the product of the reader's mind working on the raw material of the text […]. [153]
>
> The cognitive function of narrative form, then, is not just to relate a succession of events but body forth an ensemble of interrelationships of many different kinds as a single whole.[154]

As we will see next, this process equals narrativizing the sequence of game states in the ludic context, in which, as previously repeatedly emphasised, any action is always, to a certain degree, teleological by nature. Ironically enough, Aarseth parallels gaming experience with real life in order to separate games from stories,[155] consequently facilitating for his own part the application of narrativization in general to game studies in particular.

Narrative | Narrativity

Thus we arrive at our destination, the other side of the coin. We began our discussion with the juxtaposition of game and narrative in game studies and went on to look at gaming in particular. After traversing through the space between, it is finally time to look at narratives. Narratives can help us analyze the interrelationship between the gamer and

[151] Carr, David (2001, 149).
[152] Iser, Wolfgang (1980, 52-3).
[153] Iser, Wolfgang (1980, 54).
[154] Mink, Louis O. (2001, 218).
[155] Aarseth, Espen (2004b, 365).

the game,[156] the aim of this section being to indicate how basic narratological principles can be applied to ludological contexts. During the discussion, it is useful to keep in mind that "[n]arrative is both a mode of reasoning and a mode of representation",[157] while also being the "primary scheme by means of which hermeneutical meaningfulness is manifested."[158]

'Narrative' and 'narrativity' are perhaps equally hard terms to define as 'game' and 'gaming'. As done earlier with games, the terms are more fruitful to outline with a group of features that remain applicable for all occurrences rather than to seek to define them in a concise and waterproof way with a single sentence. Instead of constructing the definition to the same degree as in regard to games, some helpful features are borrowed below directly from media scholar Marie-Laure Ryan, who points out that "[t]he most widely accepted claim about the nature of narrative is that it represents a chronologically ordered sequence of states and events".[159]

> 1. Narrativity is **independent of the question of fictionality**. […]
> 2. Narrativity is **independent of tellability**.
> 3. A narrative is **a sign** with a signifier (discourse) and a signified (story, mental image, semantic representation). The signifier can have **many different semiotic manifestations**. […]
> 4. The narrativity of a text is located on the level of the signified. **Narrativity should therefore be defined in semantic terms**. **The definition should be medium-free**.
> 5. Narrativity is **a matter of degree**. […]
> 6. Narrative representations […] cannot be freely permuted, because they are held together in **a sequence by relations of cause and effect**, and because **temporal order is meaningful**.[160]

In other words, the most crucial aspect of narratives is to see them as semiotic processes extending beyond mediality and fictionality, whose manifestations are subject to subjective interpretation. Traditionally, in regard to audience, narratives are also the sum

[156] Sihvonen, Tanja (2004, 47).
[157] Richardson, Laurel (1990, 21).
[158] Polkinghorne, Donald E. (1988, 125).
[159] Ryan, Marie-Laure (1991, 124).
[160] Ryan, Marie-Laure (2001b), numbering and emphases added.

of their events.[161] The same statement applies equally to games with the exception that player-subjects, as mentioned above, experience games as sequences of states as opposed to sequences of events.

Despite Ryan's useful insights, we would like to elaborate a little on the basic elements of narrative with the help of narratologist Seymour Chatman while immediately contextualising his thoughts to render them more appropriate for gaming. Chatman argues that the "transposability" of narratives over any medium reveals the real narrative structures to be hidden behind the clusters of sign-vehicles.[162] In ludic contexts, these structures refer to the rules of games, which include all narrative potentials of the game spaces involved via controlling the possible sequences of the game states. Chatman also brings forward the fact that transformations in the structure never break their own context, but only stretch its boundaries.[163] As a result, the narrative structure itself has no privileged representation,[164] as we can see from games that are created for multiple platforms, like, for instance, most of the console games today. It also makes it possible for essentially the same game to manifest itself in completely different forms, for instance as a board game and an electronic game. Be that as it may, the representation of the structure itself is always incomplete, which is another reason for forcing the subject to make decisions not just about the parts of the structure that are perceived, but also about the parts not even being represented.[165] These 'holes' result in an infinite amount of narrative potential to be taken into account in connection to interpretation, which is subjective by nature to begin with.

For neo-formalist David Bordwell, there are three ways of looking at narrative: representation, structure and process.[166] This thesis concentrates on the latter, "the activity of selecting, arranging, and rendering story material",[167] which represents the most active mode of those available and at the same time draws a parallel between

[161] Metz, Christian (1974, 24).
[162] Chatman, Seymour (1993, 20).
[163] Chatman, Seymour (1993, 21).
[164] Chatman, Seymour (1993, 37).
[165] Chatman, Seymour (1993, 29).
[166] Bordwell, David (1990, xi).
[167] Ibid.

narrative and meaning in general. Like games, also narratives create their own context. Media scholar Marsha Kinder describes the function of narrative both "to create a simulacrum of the world" and "to contextualise the meanings of perceptions".[168] The subjects inflect "the text with their own personal associations or appropriating it for their own pleasures."[169] In the ludic context, the player-subjects interpret the states according to their goals which are always in some way imposed on them, but are still naturally subject to their own interpretations.

Narrativity, forming narratives, is fundamentally concerned with "the problem of fashioning human experience into a form assimilable to structures of meaning that are generally human rather than culture-specific."[170] This process has been typically seen as something that recreates rather than creates, since a narrative without some kind of a manifestation, a cluster of signs that represents its inherent structures, is allegedly a narrative that does not exist. That means that even though the concept of narrativity can be applied to gaming, it needs a bit of tinkering.

According to media scholar Veijo Hietala, narrativity can be understood as a concept through which reality and its events are made sensible.[171] This makes narrative "a discursive mode of patterning and interpreting the meaning of perceptions".[172] The signification strategy in question structures the perceived both on a temporal continuum and as a chain causes and effects.[173] In other words, narrativity is equally concerned with sequences like 'the king dies, then the queen dies' and 'the king dies, then the queen dies of grief'.[174] This is also what a sequence of game states achieves: both the temporal succession of events and the causes for its transformations.

[168] Kinder, Marsha (2002, 121).
[169] Kinder, Marsha (2002, 123).
[170] White, Hayden (1980, 5).
[171] Hietala, Veijo (2006, 92 & 93).
[172] Kinder, Marsha (2002, 121).
[173] Hietala, Veijo (2006, 92 & 106).
[174] See also Ryan (1997, 683). The 'king & queen' example is from E.M. Forster's lectures in Cambridge in 1927, which were later published in *Aspects of the Novel*. He used the example to illustrate the difference between 'story' and 'plot'. TheFreeDictionary: encyclopedia.farlex.com/Forster,+E(dward)+M(organ)

In the previous section on the production of meaning, we looked at some non-linguistic applications for linguistic theorems. According to Greimas, finding narrative structures outside natural language

> amounts to recognizing and accepting the need for a fundamental distinction between two levels of representations and analysis: a *apparent level* of narration, at which the diverse manifestations of narrative are subject to the specific requirements of the linguistic substances through which it is expressed, and an *immanent level*, which is a kind of common structural trunk where narrativity is located and organized at the stage preceding its manifestation.[175]

In the ludic context, the "immanent level" is located on the level of rules and spaces, where the principles laid down in this chapter hold true, regardless of the game. On the more apparent level, the material open for narrativization manifests itself in places, events and, consequently, in states. The states, emerging from events and structuring the space in connection to its rules, are the glue between what is "apparent" and "immanent" in a gaming experience.

But how to appreciate the different modes of existence in regard to narrativity, the real and the virtual? While the answer is still partly deluding us, it is maybe more fruitful to take a second look at the question. Does it matter in terms of making narrative connections in a given context whether it is virtual or not? The principles remain the same, even if the interpretations vary. In Eco's words, "the notion of interpretation holds for worlds seen as texts as well as texts seen as worlds."[176] Ryan, in turn, describes the experience of acting in a virtual world in the following passage:

> In an interactive system, a sequential narrative will be automatically created by the presence of a user spending a variable amount of time in the virtual world. The narrative events will be produced by the actions of the user, and the identity of the participant, a continuity experienced by the user as a bond between the self and the acting body.[177]

[175] Greimas, Algirdas Julien (1987, 64), italics in the original.
[176] Eco, Umberto (1990, 41).
[177] Ryan, Marie-Laure (1997, 683-4).

As previously discussed in relation to interactivity, "an interactive system" can easily refer to any game space (or even any space, for that matter). The temporal continuum, "a sequential narrative" in Ryan's terms, is "automatically created", but so it is in non-virtual spaces as well. "The narrative events" being results of acts by the subject applies wholly in any game space. While the temporal sequence is a given in any space, the causal mode of a narrative is highly dependent on "the goal of the agent."[178] To apply the statement to the ludic context, we see how the stagnation of game states is not at odds with the causal nature of the emerging events; temporality and causality can be conceptually separated without losing track of often dynamic occurrences of a game space.

Let us next take a closer look at narrativizing a gaming experience. Narrative is the "discursive mode" [179] that is used in interpreting semiotic objects in ludic spaces. To narrativize is to look at the past and project the future, which is a process that a player-subject is constantly involved in when playing a game. As discussed earlier, narrativization presupposes interpretation of signs. Every sign cannot be perceived and even from those that are, the player-subject chooses some to be **significant** enough to be included in the interpretation. The game's goals thus become "the tools that shape narrative experience".[180] The player-subject practically always operates with imperfect information, although having a clear understanding of the state of a simple game like *Tic-Tac-Toe* might be considered as an exception. Because of the nature of the environment they are created in, all narratives formed by a player-subject in a ludic context, in other words narratives formed in-game, could be called endogenous by nature. However, it is more fruitful for future discussions to reserve the term 'endogenous narrative' for the specific narrative constructions that are formed by the explicit narrative content found within a given game space.[181]

[178] Ryan, Marie-Laure (1997, 684).
[179] Bal, Mieke (2002, 14).
[180] Wolf, Mark J. P. (2001, 109).
[181] This topic will be returned to in the next chapter.

When a game space is seen as a series of game states and thus as a narrative entirety, both explicit and implicit narrative elements are underlined. Most would probably agree on the fact that there is no explicit narrative dimension to *Chess*, but it must still be narrativized in order to conform to the needs of gaming. The following example brings forward the inherent narrative elements of the beginning of Adam and Eve's *Chess* match we talked about earlier. The match began as a 'closed game', both Eve and Adam moving the soldier in front of their queen. After both players moved their knights, they arrived at the game state pictured in *Figure 1*.

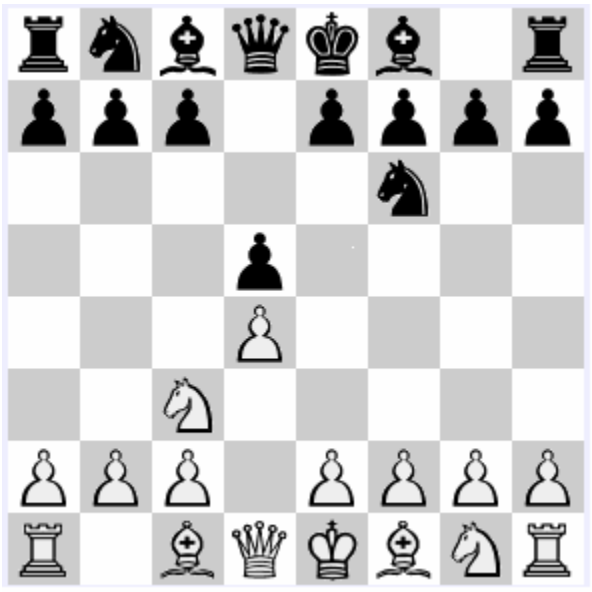

Figure 1[182]

Playing with white pawns, Eve now has a chance to take the black soldier with her knight, which solely in the context of this particular game state would seem to be the most beneficial move she could make. Eve decides against it, however, since the move would probably mean losing her knight to Adam's knight and Eve does not see a way to take advantage of the sacrifice. The decision is motivated, in addition to the rules and goals of the game, also by the game states before the previous move (the black knight coming to protect the soldier) as well as the states following the next move (the black knight having

[182] Lehti 2.0: lehti.samizdat.info/2005/08/01/1242/

a chance to take the white knight). Eve has to project both the past and the future to fulfil the needs of her ludic motivation.

Of course, the decision can be seen to be possibly affected by elements originating from outside this particular game space, for instance considering Adam as a weak enough player to overlook the chance to take Eve's knight. That does not change the fact that in terms of the rules and the space, the game state is absolute and when looked at in the light of the goal of the game, it does not really allow Eve to take the black soldier, providing that she has interpreted the state well enough to realise that.

In this respect, narrativizing has little to do with explicit narrative elements themselves; the emphasis is in making the signs in-game and in the given 'present' situation meaningful as well as trying to reach endogenous goals as effectively as possible. In other words, the ludic narrative is much more a vehicle than a goal in itself. Even in games with extremely complex plots, the primary goal of gaming is to excel in the game, not to enjoy it as a story. This might seem a generalisation, but it is clear that the narrative cannot be enjoyed at all unless in-game advancement is made by the player-subject.

As we can see from the example above, the narrativizing takes place just **before** the actual gaming act. Also, for instance, a film can be narrativized at any given moment; one does not have to wait for the credits to make sense of the experience. Similarly, a player-subject generally creates a narrative of her own before acting in game space. To summarise, the concept of narrativizing includes both the sequential and the causal dimensions of narrative in addition to the act of interpreting sign-vehicles at hand.

2.4. Instant Replay

Now that we are finally ready to make the transition to electronic games, the fact that all that has been discussed thus far applies also in the second part of the thesis must be

emphasised again. Electronic games are admittedly typically designed and thus more authored to be played than a random non-electronic one, but they still need the player-subject to experience them in order to create a real gaming situation. This means that even if the screen separates the player-subject from the game world, the ludic space extends to include the one acting on the other side. After our discussion on narratives, however, the list of common elements of games presented in section 'Formality | Gameness' can now be updated:

1) to play a game is to experience doing so (and usually also being aware of it)
2) the experience of play typically takes precedence over endogenous narratives
3) games consist of rules, which separate the experience spatially from non-game spaces
4) the interface of the game and its endogenous goals are also demarcated by its rules
5) player-subjects must have ludic motivation to reach goals within game space
6) games' initial state is the starting point for subsequent events and states
7) the acts of player-subjects and other events in both game space and game place form game states in relation to the rules
8) players narrativize the sequence of game states to reach the aforementioned goals
9) events in game space can be narrativized by audiences to form distinct narrative spaces

The latter part of the thesis will include discussion on topics like interface, theme and simulation with multiple examples concentrating on electronic games. We will also take a closer look at the explicit narrative properties of game spaces, in other words, we will see how endogenous narratives are created in electronic environments. To end the first part of the thesis, a lengthy quote from Ryan will be provided. Her thoughts bring forward many elements that will be looked into later in the thesis. Ryan's proposal is very exciting in itself, as the new "phenomenological category" would in a way mean accepting narrative potential as part of the narrative itself. This will be an essential feature of the discussion deciding whether the juxtaposition of game and narrative can be reconciled in a fruitful manner.

> Are we then entitled to say that a computer game is, or can be a narrative? […] The inability of literary narratology to account for the experience of games does not mean that we should throw away the concept of narrative in ludology; it rather means that we need to expand the catalog of narrative modalities beyond the diegetic and the dramatic, by adding a phenomenological category tailor-made for games. In elaborating this category, we can take a clue from the relation between the diegetic and the mimetic mode. What justifies us in calling movies and drama narrative is the shape of the mental representation formed in the mind of the spectator; if this spectator were to translate his mental image into language, he would produce an act of narration – a diegetically presented narrative. A dramatic narrative is thus a virtual, or potential diegetic one. With games we can extend virtuality one step further. The player perform[s] actions which, were he to reflect upon them, would form a dramatic plot – though this plot is not normally his focus of attention during the heat of the action. Games thus embody a virtualized, or potential dramatic narrativity, which itself hinges on the virtual diegetic narrativity of a retelling that may never take place.[183]

[183] Ryan, Marie-Laure (2001b).

3. Nature of Electronic Games – From Screen to Simulated Narrative

The previous chapter having discussed games in general, we are now finally ready to make the transition to electronic games. With the change in focus the common realisation of the role of a game as an object, a product, something that is often more clearly defined, becomes inevitably stronger. Now, the box is on the table, the disc is in the drive and the image is on the screen. Naturally, all the aspects of gaming previously discussed still apply. The ludic space is created between the screen and the player-subject, the screen containing the game place exclusively. The gaming experience concentrates wholly onto the screen; its contents having been put there by the author. Consequently, the source and the mode of representation typically give the ludic space more formality than is the case with many other kinds of games. The features touched upon in the next section provide a common framework for all electronic games without compromising the theorems presented in the previous chapter.

3.1. Reverse Angle

The chapter opens with a quick recapitulation applying the notions formed thus far to an electronic environment while some of the most important concepts of gaming that have been discovered are rounded up at the same time. As in all other games, rules are the most quintessential feature of electronic games. With electronic games in particular, rules can easily be divided into two categories: those that concern the interface and those that concern the game place. It comes as no surprise that the rules of an electronic game cannot extend beyond the screen and the appropriate means of operating the interface. Thus, the behaviour of the player-subject in the game space itself is freer from restrictions imposed by the rule set, but she is still more bound to the interface in regard to acting in the ludic place.

As stated, the game space is constructed through the experience of the rules of the game, still encompassing the player-subject and the virtual place, connected with each other through the interface.[184] Ludic space manifests itself to the player-subject via semiotic processes that combine the characteristics of both textual and semiological sign systems. The space contains the game place, as a clear representation of an actual location or a more abstract site. The interface decides the level of agency the player-subject has within the game world. The ludic space formed by an electronic game also requires ludic motivation like any other game. Thus if an event sequence in *Half-Life* is happening on the screen, but the subject is merely looking for a good screenshot for a school art project, a game space is not being, at least consistently, constituted.

In regard to electronic games, events, like rules, can be easily divided into those that occur in game place and those that have to do with operating the interface. Other player-subjects are rarely factors in events outside the game world, but exceptions like LAN-parties[185] exist, where meaningful events not relating to the player-subject herself can occur in the game space itself. Narrativization of events by the audience can be divided into two categories in relation to electronic games: the audience may be in the same actual space as the player-subject (all events in game space are narrativized) or the audience may not in the same actual space as the player-subject (only the events in game place are narrativized).

However, the sequence of states in an electronic game is a feature solely connected with the game place and the interface. In the sections to follow, we will examine the ways in which the state sequence is mixed with the narrative structures within the game space. In any case, the narrativization of states is typically more explicit in electronic games, because the game world is always limited exclusively to the screen.

[184] With games designed for Nintendo Wii, for instance, the border between the game space and the game place within it becomes de-emphasised, since some events outside the ludic place, e.g. swinging the controller like a tennis racquet, are transferred there in a more transparent way.
[185] LAN stands for Local Area Network.

3.2. Screen – Theme

Screen | Immersion

For our purposes, an electronic game is defined as **a game whose ludic place is manifested through a screen**. This characteristic is also one of the many reasons why they are sometimes regarded as a distinct medium on their own. As previously discussed, however, the transition from a non-electronic game to an electronic one is not a major one. The most important difference is that in electronic games, rules are automatically upheld,[186] which naturally applies also to causal relations that are beyond the scope of player-subject's observational capabilities.[187] This results in a more important role for the interface, which both enables and demarcates the gaming experience in an electronic environment.[188] While rules are always embodied by different elements in each game,[189] with electronic games, this representation is much more explicit. The ludic place of an electronic game is a more prominent element of the space it is a part of, since the place always falls wholly under the dominion of the system of rules. Because of their highly virtual game worlds, their rules have to be mediated through themes, which are looked into later in this chapter. Mediation also becomes essential in another way, as the interface of an electronic game always acts as a mediating factor in a ludic experience.

With the highly virtual place only accessible via a flat surface comes the realisation that the player-subject is no longer wholly surrounded by the game space, as often is the case with less virtual ludic places with fellow players participating in the same ludic space staying physically close by. Although this "plastic"[190] screen is not perceived by the player-subject as a spatially limiting factor in itself, it still adds to the fickleness of the gaming experience, since it makes it more difficult to stay in game space without being constantly reminded of the artificial nature of the experience, or even distracted by real

[186] Eskelinen, Markku (2005, 78).
[187] Ibid.
[188] Hacking and other similar methods of rule-manipulation are left outside the scope of this thesis.
[189] Järvinen, Aki (2008, 31).
[190] Aumont, Jacques (1997, 99).

world events. As a consequence in the case of electronic games, there exists a constant requirement for projecting an "active […] consciousness into the semantic realm"[191] in question. Poole describes this process as something contributing to "the dissolution of self-consciousness".[192] The already mentioned quote from Murray involving water describes this dissolution in the following way:

> The experience of being transported to an elaborately simulated place is pleasurable in itself, regardless of the fantasy content. We refer to this experience as immersion. *Immersion* is a metaphorical term derived from the physical experience of being submerged in water. We seek the same feeling from a psychological immersive experience that we do from a plunge in the ocean or swimming pool: the sensation of being surrounded by a completely other reality, as different as water is from air, that takes over all of our attention, our whole perceptual apparatus.[193]

By grasping the attention of the player-subject, immersive qualities strengthen the ludic motivation, simultaneously adding to the pleasure of gaming.[194] "The sense of immersion […] creates in the gamer an acute awareness of space",[195] which also contributes to the immediacy of the experience. The relationship the feeling of immersion has to the game space is that immersion consummates the virtuality of the said space by underpinning the ludic perspective in reference to which it is produced in the first place. However, because of the fragility of "the liminal trance"[196] typical for a gaming experience, additional modes of its support are used in electronic games, not the least of which is the common introduction of explicit narrative content, which plays an important part in the theoretical framework of the chapter. These endogenous narratives are specifically looked at in connection to role-playing games later in the chapter, but meanwhile, let us now look at two other important elements of an immersive ludic experience, namely interface and agency.

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[191] Poole, Stephen (2007, 320).
[192] Ibid.
[193] Murray, Janet H. (1997, 98), italics in the original.
[194] The effects are not always positive: immersion in a game world has also been known to cause addictions that have resulted in deaths due to dehydration and insomnia.
[195] Tong, Wee Liang & Tan, Marcus Cheng Chye (2002, 100).
[196] Murray, Janet H. (1997, 100).

Interface | Agency

Although both are producers of immersion, interface and agency are not mutually comparable. While the interface is clearly a part of the rule set of a game space, agency can be paralleled with immersion as a constituent of the gaming experience. While immersion, in a way, crowns the virtual aspects of gaming as opposed to reality, agency "is the satisfying power to take meaningful action"[197] within that virtual. In other words, it can be seen as "an experience to be savored for its own sake"[198] as well as the perspective utilised when acting via the interface of the game.

On the other hand, interface is the "medium"[199] through which the game place is accessible from the point of perception of the player-subject in the game space. In other words, the interface gives the player-subject the tools to act in the game world, and thus also to affect the event and state sequences. The system created by the combination of the world and the interface can be called the **ludic environment**, which is usually game-specific.[200] A well-designed interface enables practically immediate acts in the game world, which makes the border between the ludic space and the ludic place within it less explicit, thus strengthening the feeling of agency, which is, in the case of electronic games, wholly dependent on the screen.

In game journalism the phenomenon described above is referred to with the term 'playability', which can be, and often is, held to be the most important aspect of a good game.[201] Good playability, combined with explicit narrative content emphasises the narrative aspect of gaming, because qualities improving playability result in the acts of gaming itself losing some of their meaning in favour of meaningful acts within the game world. To put it differently, the actions of a player-subject feel, relatively speaking, more significant in regard to the game world, if there exists a strong narrative content to

[197] Murray, Janet H. (1997, 126).
[198] Murray, Janet H. (1997, 128).
[199] Järvinen, Aki (2008. 81).
[200] Järvinen, Aki (2008, 67).
[201] Sihvonen, Jukka (2000, 121).

contextualise the said world. The paradoxical thing about all this in terms of ludology is the previously mentioned fact that being less aware of the act of gaming itself, in other words operating the interface, typically enhances the ludic experience, which often puts the limelight on the narrative aspects of the game.[202]

Hence, if the interface is well-designed and thus relatively invisible, the experience of being immersed in the game world becomes stronger. According to Murray, agency and immersion can both be considered as sources of pleasure in a ludic experience,[203] which naturally strengthens ludic motivation. Murray also brings forward the difference between "agency" and "activity" using *Chess* as an example: despite the major effect the player-subjects have on the events of a match, physically they hardly do anything.[204] In *Baldur's Gate*, the division is as easy to see; the player-subject, if so willing, can programme the characters in the party she is controlling to act on their own according to pre-prepared scripts, thus drastically reducing her activity while still preserving her agency to a much greater degree.

As we can see, activity is clearly located on the level of the game space, while agency has only to do with the game world in question. In other words, agency is concerned with how, through the interface, the state sequence of a game is being affected by the player-subject. Both the audience narrativizing the game space with its events, as well as the player-subject primarily narrativizing the game place with its states, become more explicit phenomena through Murray's division between activity and agency.

With electronic games, the virtuality of the ludic place resembles something that Jukka Sihvonen calls the "hyper-real", where the space is increasingly controlled by its interfacial dimension; this results in both the potentiality and the congruence of the spatial on screen losing its temporal dimensionality.[205] This also makes the game state a much more tangible concept, a point which is clearly illustrated by the pause button

[202] In addition to its audio-visual aspects, among other things.
[203] Murray, Janet H. (1997, 98 & 128).
[204] Murray, Janet H. (1997, 128).
[205] Sihvonen, Jukka (1996, 64).

found in many electronic games. The pause button, of course, is always a part of the interface of a game, which, in turn, is a part of its rules. Consequently, the elements of interface constitute some of the formality of how the rules are manifested in game space; the rest is provided by the theme.

Representation | Theme

Even the most abstract of electronic games can be seen as representations and/or simulations of something.[206] Typically in the context of game studies, representation and/or simulation is taken to mean something very real, like war (*Medal of Honor*) or car racing (*Gran Turismo*), but there is absolutely no reason why *Tetris* could not be seen featuring a silo filling up with blocks. In other words, what seems to be fundamentally represented in every case is the place, or the "space" in Aarseth's terms, which he argues to be "[t]he defining element in computer games",[207] since "the difference between the spatial representation and real space is what makes gameplay by automatic rules possible."[208] As was discussed in the previous chapter, this is the connection between not just rules and place but also rules and space: in game space the rules, and the goals made possible by the rules, are an intrinsic part of the space, a part of how the space functions, a part of what the space **is**.

According to Aarseth, spatial practice in electronic games has a double-sided nature in that its modes can be looked at both as "representations of space" as well as "representational spaces".[209] The former posits 'space', or in this text, 'place', as "a formal system of relations" and the latter as "symbolic imagery with a primarily aesthetic purpose".[210] The division is useful to note but quite impossible to uphold in absolute

[206] Herz, J. C. (1997, 29).
[207] Aarseth, Espen (2001, 154). Aarseth's application of the term 'space' is closer to my definition of 'place' in the theoretical framework of this thesis.
[208] Aarseth, Espen (2001, 163).
[209] Ibid. Aarseth borrows the concepts from Henri Lefevre's *The Production of Space*.
[210] Ibid.

terms, as the formal and the aesthetic are not completely separable from each other for reasons discussed in the following.

In regard to the Aarseth's division, however, we would like to borrow a highly useful concept of theme from game scholar Aki Järvinen. Järvinen defines 'theme' as "the subject matter or the narrative framing of the game […] used in contextualizing the ruleset into other meanings than the rules' literal, i.e. systemic meaning."[211] In other words, theme refers to the endogenous narrative (and other)[212] constructions that sugarcoat the system of rules into a more appropriate, or even better, a more **meaningful** form; themes bring forward and add to the functional, primary meanings residing within the rule set, which have been the focus of the thesis from the beginning. Thus we see how the concept of theme extends both to the systemic and the representational aspects of game place outlined by Aarseth, while still maintaining its role as part of the rule system of the game.

Also discussed above is the *de rigueur* paralleling of rules and space. As with the child suddenly starting to play a game of "*Squirrel about to be picked up by mum*" (a game of his own invention, by the way) without even telling his friends about it, the existence of the ludic space and its rules is absolutely co-dependent by nature. What makes it a particularly interesting phenomenon is how Murray equates story with place by describing playing *Zork*.

> The computer screen is displaying **a story that is also a place**. The slamming of a dungeon door behind you (whether the dungeon is described by words or images) is a moment of **experiential** drama that is only possible in a digital environment.[213]

In the context of this thesis, Murray's argument is intriguing for multiple reasons. Firstly, she makes a connection between ludic experience and the narrative constructions originating from sequences of events and states. Secondly, she draws an obvious parallel

[211] Järvinen, Aki (2008, 41).
[212] The interface itself can be thematised. E.g. in *Populous*, the mouse pointer is represented by 'the hand of god'.
[213] Murray, Janet H. (1997, 82), emphasis added.

between narrative and place, which, as previously mentioned, plays a more significant role as a component of space in the case of electronic games.

Consequently, combining all the previous approaches presented in this section results in a situation in which both rules and space have been more or less mushed into equality with narrative. To demonstrate the fruitfulness in this slightly forced state of affairs, let us take an example from the beginning of *Baldur's Gate*. The role-playing game in question begins in Candlekeep, a small scholarly town where the avatar of the player-subject has been allegedly raised to fulfil a great destiny. Before leaving town, the **avatar** is met by a character named Jondalar, who teaches the **player-subject** how to fight. By doing so, Jondalar partly exits the realm of the game world by referring to the game space in general and specifically to the interface.[214]

> **Jondalar**: Hey there [avatar's name]! I see you're up early this day. Well your father, Gorion, has asked me a strange favor. Seems like he wants you to learn some fighting and asked me to be the teacher. So I hope you brought your staff with you.
>
> **Jondalar**: Hostile creatures have red circles around their feet. Left-clicking within the circle will direct you to attack me. You can switch weapons by using the Quick Weapons icons. The weapon outlined in green is the current weapon. Attack with fists only (empty quick slot) if you only wish to knock your opponent unconscious. You don't have to worry about that with me, so use your staff. If you have magical abilities, try casting a spell at me by left clicking on the spell icon at the bottom of the screen. Left-click on one of the spells that come up and cast it on whichever target you want. I just hope you have an offensive spell memorized.
>
> **Jondalar**: During our fight I'm going to spring a little surprise on you. Remember, you can press the SPACE BAR at any time and pause the game. This will give you time to think, especially once my little surprise comes up. Are you ready now? Good![215]

[214] Some of the quotes taken from the exemplary games used in the thesis are quite lengthy for two important reasons. Firstly, complete quotes underline the emphasised nature of endogenous narrative in the games in question. Secondly, any narrative segment presented in its entirety reflects its relationship to other aspects found within the game space more clearly.
[215] BioWare (1998).

Note how Jondalar first acts like any character in the game world, but quickly starts to address the player-subject instead. Nearing the end of the dialogue (during which the player-subject has nothing to say) Jondalar's lines transform back to being wholly appropriate for a representation of a purely endogenous character.

What is really going on here is that the player-subject receives instructions about the rules of the game space via the endogenous narrative, which in turn is a part of the theme of the game. A similar phenomenon can be seen in the beginning of *Neverwinter Nights* as in many other games as well, especially role-playing games. This intertwining does destroy immersion to a certain degree, but on the other hand, it strengthens the feeling of agency in a situation still not far from the game's initial state, when the player-subject is usually in need of a little help to get immersed in the game world in the first place.

Generally speaking, the interrelationships of rules, theme and narrative are at their most explicit in the participatory dialogue taking place in a given game world. This is because participatory dialogue always occurs during the gaming itself and not, for instance, in a cut-scene. The dialogue is always part of the endogenous narrative, while still being controlled by the rules through the game's theme, in which the narrative content is included. Jondalar is an extreme example of this.

Let us summarise the argument at this point. What is really represented by the theme of a game is its rules; exactly how specifically the rules of a given game are forged to parallel something 'real' is a different matter. As Järvinen points out, "rules are 'disguised' into thematic meaning",[216] which is fundamentally less significant than the primary meaning relating to the rule set. Examples for the secondary nature of thematic meaning are extremely easy to find in any game. In the first chapter of *Betrayal at Krondor*, the avatars are in a hurry to get to the city of Krondor; however, the player-subject is completely free to roam the world as long as she wants without any ill effects. In *Baldur's Gate*, the avatar and her party can 'jump' in an instant from an area of the game world to another without having to be walked around manually the whole way, but they

[216] Järvinen, Aki (2008, 283).

can still be ambushed en route: if an encounter with enemies is brought on by the rules, no act in the thematised ludic place can prevent it. These examples also emphasise the significance of spatiality of a ludic experience compared to its temporal dimension.

As we have seen with electronic games, the game place itself has qualities distinctive for narrative, because the theme represents them both. Consequently, the relationship between the rules of the game and its endogenous narrative is revealed: the theme is the representing part of the rules of the game and the endogenous narrative within the theme is thus an integral part of the rules as well. Also exposed is how the complexity of the rules in regard to game places and endogenous narratives affects the level of thematisation needed. For example, in *Chess*, the theme can easily be changed from *Star Wars* to *The Lord of the Rings* without hardly any interference to the game mechanics. On the other hand, relocating a combat-oriented role-playing game from mediaeval Europe to faraway future on Mars would probably mean favouring, for instance, long-distance weapons over hand-to-hand combat, which would likely result in changes in the rule set of the game itself. To see how theme's representation of rules relates to the non-ludic outside the game space, however, we have to take up the concept of simulation.

3.3. Simulation – Simulated Narrative

Simulation | Automaticity

"[A] simulation imitates one process by another process."[217] This makes a simulation a dynamic mode of representation; in other words, to simulate is to dynamically represent a system through another system. Much like stated above in regard to representations in general, simulation can be considered a process that is applicable to any electronic game.[218] On the other hand even *SimCity*, which is seen by some almost as a non-game because of its strong simulation-like qualities combined with its relative lack of clear

[217] Hartmann, Stephan (2005, 5), italics removed.
[218] Salen & Zimmerman (2004, 424).

goals, is still widely criticised for its elements that have no real base outside the game, for instance its economic model.[219] As with any representation, the relationship between the simulation and what is being simulated is clearly subject to interpretation.

Salen and Zimmerman bring forward the procedural nature of simulation by dividing the layers of simulation into two categories, which are "procedural representation" and "the relationship of those representations to the world outside the game."[220] Procedural representation refers exclusively to how the game system, in other words the rule set, is manifested by its theme; these processes are strictly limited to a given game space. On the other hand, it is in the nature of simulation that it can **always** be traced back to a process outside the game space,[221] even if it can never "depict every aspect of something".[222] In the ludic context, a simulation equals a simultaneous representation of both the rules and a given process or processes outside the game space, both of which are also made possible by the game's theme. In addition to this double-layered structure, the dynamic nature of simulation stems from the automaticity of rules inherent to all electronic games.

Another point of view is brought to the discussion by Frasca, who states that simulating refers to "the modelling of a dynamic system through another system"[223] while also maintaining something of the original system for "somebody".[224] Here, the subject of a simulation is also taken into account in a larger degree, which emphasises the dynamic nature of the meaning-making processes in this context.[225] As stated above, a simulation is experienced by the player-subject in two simultaneous ways: as an internal rule system in the game space and as an external process represented dynamically as such, but referring to something outside it.

[219] Friedman, Ted (1995).
[220] Salen & Zimmerman (2004, 422).
[221] Ryan, Marie-Laure (2006, 188).
[222] Salen & Zimmerman (2004, 423).
[223] Frasca, Gonzalo (2004, 86).
[224] Frasca, Gonzalo (2003b, 223).
[225] Sihvonen, Tanja (2006, 129-30).

In the context of this thesis, theme, being a part of the rule system as its manifestation, represents rules which are formed to simulate something outside the game space, the 'reality', if you will. The primacy of rules in game space applies to the twofold nature of the theme and the simulation it enables as well. The representation of rules becomes more explicit in relation to Frasca's noteworthy way of presenting his thoughts on simulation specifically as an alternative approach to games as opposed to narrative.[226] However, the primacy of rules covers also the endogenous narrative.

Endogenicity | Synthesis

The significance of explicit narrative elements varies according to genre, of which role-playing games[227] constitute the most important genre in this respect.[228] That is why they are examined in connection with deepening our understanding of endogenous narratives and their relationships to simulations. The genre is notoriously hard to define even in regard to electronic games as "[r]ole-playing elements are creeping crabwise into any number of other genres, as a way of bolting on a framework of narrative drive to the old repetitive game style."[229] This is one of the reasons why electronic game genres should be considered more inclusive than exclusive by nature[230] and also why a clear-cut definition of an RPG is not only hard but rather pointless to attempt.

"Typically [electronic role-playing] games include an emphasis on character generation and evolution, storytelling, exploration, team play and turn based combat systems."[231] For our purposes, RPGs are interesting for a number of reasons: they usually have substantial endogenous narratives, a lot of dialogue and a ludic place that can often really be called a 'world'. While signs in ludic spaces can be both linguistic and semiological by nature, RPGs typically contain a relatively large number of purely linguistic signs,

[226] Frasca, Gonzalo (2003b, 223).
[227] Sometimes shortened with the acronym 'RPG'.
[228] Ryan, Marie-Laure (2004, 350).
[229] Poole, Stephen (2007, 79).
[230] Järvinen, Aki (2008, 43).
[231] Carr, Diane et al. (2003, 145).

which makes them quite textual as games. This means that they provide **good examples when discussing narratives and their connection to the rule systems in ludic spaces**. It is also useful to keep in mind that the explicitness the genre in question features does not mean that endogenous narratives are relatively rare phenomena; on the contrary, it is sometimes difficult to even find electronic games with absolutely no endogenous narrative of any kind outside the simplest games like *Tetris*.

Betrayal at Krondor is a classic role-playing game, whose endogenous narrative is presented in a book-like form; it is not based on a book, but its story is a new component in a series of novels by Raymond E. Feist. Feist also co-wrote the narrative for the game.[232] The game takes place in the fantasy world of Midkemia and is divided into nine chapters. Its narrative begins with a young man tending another man's wounds at a campsite after a skirmish with an unknown enemy. In what follows are the first lines of *Chapter 1: Into a Dark Night* and consequently the first lines of the endogenous narrative,[233] which in this case, like in many others, begins before the initial state[234] of the game space.[235] This is a noteworthy element as it emphasises the blending of narrative and game space, to which we will return later in this section. The three main characters in the following quote, Locklear, Owyn and Gorath, act as the player-subject's avatars in the first chapter of the game.

> Blood soaked rags collected at the boy's feet.
>
> One by one he tended the wincing soldier's purple wounds, stitched, salved, bandaged, did what little he could in the leaping golden halo of firelight. Fortunately for his roadside patient, he could do more than most.
>
> Fingers slick with alum ointment, he worked fervently to tie off a catgut cord, then brushed the injury with a light touch that to the untrained eye would seem

[232] The game's endogenous narrative was written by Neal Hallford and Feist himself. Actually, Feist later wrote a novel based on the game *Betrayal at Krondor* called *Krondor the Betrayal*.
[233] After starting a new game from the main menu, that is. Here, it is important to remember the fact that because of the nature of the game place, narrative elements found in, for instance, the back of the box the game came in do not count as endogenous narrative.
[234] Character creation in RPGs is a part of the game state sequence, since the player-subject is already affecting the game space with her acts.
[235] See also Wolf, Mark J. P. (2001, 101).

only a friendly pat – others would recognize the telltale hand gesture as a magical ward against infection.

"Done," Owyn sighed, wiping his hand in a rust colored cloth. "No guarantees, though. The stitches may hold all the way to LaMut and then again, push too hard and you could be bleeding like a stuck pig on Midsummers…"

"You did – fine," Seigneur Locklear replied, smiling approval before rolling down his sleeve. "It'll scar but it's good for a noble's reputation. Lets the kingdom folk know he isn't resting on his laurels and it impresses the ladies. I'll be sure to look you up in Tiburn if ever I need stitching up again."

The boy accepted the compliment with a humble nod while he packaged away the rest of his medical supplies, his thoughts focused instead on a third man who slumped in the shadows across from them. Despite the manacles that bound the stranger's hands and the distance that separated them, the boy felt dreadfully exposed, his avenues of escape limited should Locklear's elven-looking prisoner decide to liberate himself.

"What did he do?" Owyn whispered, jerking his head towards the man.

"Gorath? Let's just say that he had the disadvantage of being at the wrong place at the wrong time," Locklear said cautiously. He snatched a greenish apple out of his knapsack, offering one to Owyn. "I have to take him to Krondor."

"Did he kill someone?" Owyn asked.

"No."

"He attacked you."

The Seigneur wiped apple juice from his mouth, shook his head. "No, no, not exactly."

"Well, who cut you up then?"

Before Locklear could reply...

[---][236]

...Gorath leapt forward, his chains writhing between his wrists like metallic vipers.

GORATH: Get out from underfoot, Owyn! Assassin in the camp!

[---]

[236] Transition to accompanied graphics.

> GORATH: Do not struggle so, Haseth. I wish to keep you alive.
>
> GORATH: But be glad I do *not*. The goddess of death will show you greater mercy. [237]

Most of the text is presented by itself, but the struggle between Gorath and Haseth is accompanied with an animation. The following screen after that is already an in-game one and also the initial state of the actual game space. Thus we see how the narrative begins as a text with its own narrative space, transitioning first into a film and finally into the game itself. As noted above, the transition results in the synthesis of the narrative and the ludic spaces.

In accordance with what we see from the example above, endogenous narratives contain events that take place in the game world, like the conversation between Locklear and Owyn. These events originating from its endogenous narrative should be considered to be affiliated with the sequence of events occurring in the ludic space, even though they do occur in the same immediate way as the actual event sequence structuring the game space. To put it differently, they affect the narrativization process of the player-subject without affecting the state sequence. Consequently, events in an endogenous narrative create a partly separate narrative space within the game space.

However, the definition of the endogenous narrative enables it to escape the fate of a "backstory", which typically gets badly trampled on by the gaming experience.[238] In the example below, the player-subject has just clicked on a certain hot spot on the landscape painting representing the city of Highcastle and its surroundings. The clicking results in the party of avatars supposedly entering a pass in the mountains near the city.

> Rain slanted out of the sky.
>
> Squiffing through the muddy pass, Locklear stared miserably at the broken remnants of a bridge which had once spanned Highcastle Gorge. Blinking rain out

[237] Dynamix (1993).
[238] Myers, David (2003a).

> of his eyes, he looked to Gorath. "The bridge has been sabotaged," he spat. "Three days of this back to Highcastle unless you have any other ideas."
>
> Gorath scowled and shook his head. "I don't know what would be gained by turning back into the Northlands. I think it just as well the way is blocked."
>
> "I have my reasons," Locklear shot back, angry that the trip had been a waste of time. "Let's head back to Highcastle."[239]

Locklear's comment about his "reasons" is a good example of the way endogenous narrative works outside the state structure of the ludic space. The tension the sharp remark brings to the gaming experience is purely narrative by nature: did Locklear in fact have a reason to go that way or is he just disappointed in the pointlessness of the journey? The question is never answered in any form, but clicking the hot spot actually still removes the appropriate amount of rations from the avatars' inventories. However, leaving the comment out altogether from the narrative would not have mattered in regard to the primary ludic meaning of losing resources.

Thus we see how endogenous narrative brings a whole new layer to the gaming experience and adds to its immersive qualities. *Betrayal at Krondor* features the elements in abundance: when an avatar gets poisoned during a battle, the information concerning the event is conveyed to the player-subject via a narrative construction.

> Owyn was on fire.
>
> His insides burned like hot coals in a farrier's pot, this in sharp contrast to the numbness he felt in his mouth and lips. The poison that had spread through his system was slowly sapping his strength, draining him of everything but his will to survive.[240]

As far primary meanings go, the description is redundant; it could have easily been displaced, for instance, by changing the colour of one of Owyn's health statistics from black to green. In regard to the simulating aspect of electronic gaming, neither way can

[239] Dynamix (1993). Actual source used in the text: The *Betrayal at Krondor* Help Web, www.hi.is/~eybjorn/krondor/thcastle.html
[240] Ibid. Actual source used in the text: The *Betrayal at Krondor* Help Web, www.hi.is/~eybjorn/krondor/misc.html#conditions

really be seen as more appropriate one, since neither expands their representative elements to involve the ludic place itself; Owyn, weakened by the poison, does not visibly stagger or delay the journey. In both cases, as per the general principles of a ludic space, the primary referent of the theme's simulation is rules, not representing something outside the game space. The synthesis of the narrative space, in the form of the endogenous narrative, and the ludic space is evident.

At this point in the text, at least as far as the scope of this thesis is concerned, the case in regard to **the nature of games** themselves is, in essence, closed. In the theoretical framework in question, the rule set forms goals which the player-subjects struggles to achieve through the process of narrativization, which involves the player-subject interpreting the sequence of states in any game space. The space itself is held together with the help of its immersive qualities combined with the player-subject's ludic motivation arising from her feeling of agency. But in relation to narratives, one fundamental question still remains: what is **the nature of narrative** in the ludic environment?

| Simulated Narrative |

As previously stated, while endogenous narratives contain events that take place in its ludic place, they do not affect the state sequence. On the other hand, the agency of a player-subject creates events through an interface, which result in events in a ludic place; these events do change the state of the game. In a non-ludic context, these two phenomena can be paralleled with the sense-making process involving narrativizing both a subjective experience on the one hand (sequence of states) and appreciating stories on the other (endogenous narrative).[241] These two processes are also both mediated by the theme of the game, a fact that that ties them both to the rules and goals that guide interpretation. Additionally, the synthesis of the two different kinds of spaces gives birth to what we like to call a 'simulated narrative'.

[241] Anderson, Joseph D. (1996, 144-5).

In a game space, narratives are never free for interpretation for two interconnected reasons discussed above. The narrative constructions are always bound by the rules, which tie them up with the narrativization process of the state sequence inherent in every ludic experience. On the other hand, the endogenous narrative is a part of the theme representing the rules. Because the player-subject narrativizes only the sequence of states, the endogenous narrative is not narrativized as a part of the game space, since it never changes the state of the game in itself. However, when the state sequence is narrativized by the player-subject, a simulated narrative is created in reference to the endogenous narrative structure. This process can be opposed to the event sequence being narrativized by the members of an audience, when narrative remains non-simulated because of their lack of agency in the ludic space in question.

Player-subjects, however, do possess agency in ludic space. The exception to that rule is the situation when the event sequence in the game world progresses automatically without any input from the player-subject. These situations interrupt the state sequence, but they do not interrupt the feeling of immersion; the ludic motivation of the player-subject remains intact and so does the awareness of the rules and goals. The game space is phased out only partially, the narrative being represented through the game. Combined with the player-subject's agency, the endogenous becomes a part of the simulated, thus combining the state sequence with the event sequence of the game world.

Although constantly interrupted by gaming, the narrative space still remains consistent both in relation to its parts as well as in regard to what occurs between them. In the first chapter of *Betrayal at Krondor*, the party of three avatars controlled by the player-subject (Locklear, Owyn and Gorath) make their way from the campsite, described in the above example, to the city of Krondor. When they reach the royal palace within the city through the sewers, the player-subject is greeted with another piece of endogenous narrative. The following acts as the narrative that ends the first chapter of the game.

> The gate swung open.

Revolted by the thick scent of excrement in the chamber, Locklear hastened to the ladder affixed on the far wall and ascended its filth slick rungs. Behind him, Gorath and Owyn reluctantly did likewise, gaffing on the noxious vapors in the shaft.

"This is nothing," Locklear grunted, shoving upwards against a grating. "All the windows in the palace are open right now. You ought to smell it in the *winter*."

Darkness surrounded them as they slithered out of the privy, their only impressions of the chamber provided by the faint flicker of distant firelight. Ten yards before them the hall joined with an elaborate colonnade stretching in either direction.

"Somehow I hadn't pictured my first visit to Krondor like this," Owyn sighed, falling blindly into step behind Gorath and the Seigneur.

"What, you didn't like the *romantic* tour?" Locklear chuckled. "Not many people get to see that way into the palace."

Drawing up short, Locklear's features brightened as he observed a pair of approaching figures lost in conversation. Self-conscious of his bedraggled condition he straightened his uniform and cleared his throat with a stentorian air:

"*Greetings Prince Arutha and Master Magician Pug!*"

[…][242]

ARUTHA: As glad as I am at the sight of you safely home again, Locklear, I can't say that my nose is as well pleased. I thought we had broken you and Seigneur James of clambering round in the sewers.

[…]

LOCKLEAR: You know the way of old habits, highness. We encountered a bit of trouble with the gates and so I chose a more expedient though somewhat more disagreeable path. It came to a happy end, however. James told us to send word that he is well and would see you in the morning.

[…]

ARUTHA: Incurable sewer rats, the both of you. I shall have to order that each of you be accompanied by a score of washing maidens to keep you presentable enough for court. Welcome home, Locky.

[…]

[242] Transition to accompanied graphics.

> LOCKLEAR: Thank you. As happy as I am to be here, I'm afraid I come with bad news from the Northlands.
>
> […]
>
> ARUTHA: I expected as much. With the false Nighthawks prowling my streets above and below it can only mean the moredhel are up to their old mischief. What do you know?
>
> […]
>
> Motioning to Gorath, Locklear introduced the former moredhel chieftain with a wave. Slowly, Gorath lowered his hood. The gasps and startled reactions of those crowding the hall helped mask the stealthy entrance of a second moredhel in the chamber; this one armed with a longbow!
>
> […]
>
> PUG: *Assassin! Get Down!*[243]

The real nature of narrative in the ludic space is the relationship that this and the former quote taking place at the campsite have with the gaming that happened in between. The party travels the distance between the two pieces of endogenous narrative through the player-subject's agency. In the game world, the event sequence is formed starting with the ambush at the campsite and ending with the second ambush at the royal palace. The state sequence, on the other hand, is formed beginning only **after** the ambush and ending **before** the party opens the gate to the palace. Without the narrative space around them, the events and states between the two ambushes would be narrativized in a different manner; the narrative space within the game space, a narrative construction represented in terms of the game system, affects the way the game is interpreted.

From a strictly ludological point of view, it may seem an overstatement to maintain that the narrative space guides interpretation in the game space itself. However, the endogenous narrative acts as a priming factor in structuring the context, which takes place in connection to "sequencing a string of phenomena".[244] In other words, the player-subject, while narrativizing the game space, focuses more on something that has been

[243] Dynamix (1993).
[244] Grodal, Torben Kragh (1994, 66).

framed as significant by the narrative space within it. We also have to keep in mind the Eisensteinian idea that the story forms in the subject's mind, not on the screen.[245] From square one onwards, the game space is fundamentally a subjective creation, even if the endogenous narrative is created flexible enough to make it impossible for subjective agency to render it inappropriate: an example of this can be seen in the way Jondalar's first line starts with the name of the player-subject's avatar, what ever it is. Again, we see how the rules of the game control the endogenicity within the space.

To illustrate the nature of simulated narrative as opposed to a non-simulated one, let us take an example from Chatman. He makes a distinction between kernels, "narrative moments that give rise to cruxes in the direction taken by events" and satellites, whose "function is that of filling in, elaborating, completing the kernel; they form the flesh of the skeleton."[246] Often in games with lots of endogenous narrative in the form of cut-scenes, for instance, they can be considered as the skeleton of kernels, the agency of the player-subject in between filling them with flesh. However, Chatman describes kernels as instances of having a choice of "branching points", while satellites "entail no choice, but are solely the workings-out of the choices made at the kernels."[247] In games, the situation is the opposite: cut-scenes and the like offer no chances to affect the story, but the satellites in between offer the only choices available.

Thus we understand how the simulated narrative works in a different way from a non-simulated narrative because of its twofold nature; it is easy to see why some game scholars see gaming as an anti-narrative phenomenon. Admittedly, the kernels of a simulated narrative do not have to be points in the endogenous narrative, but even the agency of a player-subject is still heavily limited by the predestined fabric of the state sequence largely predetermined by the rules. These narrative points are manifested as something that can be presumed to be appropriate for a walkthrough formulated on the basis of a given game.

[245] Bordwell, David (1990, 14).
[246] Chatman, Seymour (1993, 53-4).
[247] Ibid.

As stated above, to simulate is to dynamically represent a system through another system. Through the synthesis of the ludic and the narrative space, the rule system of the game, manifested by the theme, is able to dynamically represent a narrative, which encompasses both its endogenous dimension and the elements over which the player-subjects have agency. Thus games with endogenous narratives feature a blending of the game and the narrative spaces, which means that an inherently narrative content is conveyed through a ludic system. Consequently, the narrativized elements intertwine with the explicit narrative content to form a narrative that is simulated.

4. Conclusion(s)

> What have we decided? That underneath the flashy graphics, cinematic cut-scenes, real-time physics, mythological back stories and everything else, a videogame at bottom is still a highly artificial, purposely designed semiotic engine. And its purpose is not to simulate real life, but to offer the gift of playing a game. When we are at play, whether in front of a videogame screen, in a chess café, at the bowling alley or in the park, we are citizens of an invisible city, built of signs.[248]

Here, Poole underlines the virtuality of gaming, which has been strongly emphasised throughout the thesis. In regard to games in general, the virtuality is in no way mediated in itself, making immediacy an inherent quality of any gaming experience. In this light, despite the virtuality of the game world, considering electronic games as a medium is highly suspect.

Games are extremely hard to define. Reasons for this are manifold, but it does not make the search for a clear definition any easier that gaming is an activity which is able to transform meanings via the perspective the ludic experience presupposes. Like Aarseth describes "cybertexts" as perspectives for textuality,[249] gaming can be seen as a perspective for playing. Murray even goes as far as to calling games "structured activities",[250] which makes games' position as actual objects even more faltering.

This thesis presents games in a similar fashion, more like vehicles for a ludic experience than has been traditional in game studies. Perhaps there are no 'games' as such, but only constructions designed to appease the human need to play in certain way? After all, the author of rules can be anyone, anywhere, anytime. The answer to the question and whether it is even a reasonable one in the first place is naturally a matter of perspective in itself. Be that as it may, it seems that after almost a lifetime ago when the author died and the reader was born,[251] the reader has now been possessed by the ghost of the author.

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[248] Poole, Stephen (2007, 349-50).
[249] Aarseth, Espen (1997, 18).
[250] Murray, Janet H. (1997, 129).
[251] See Barthes, Roland (1982, 142-8).

Despite the design behind it, however, the game space is primarily a subjective construction, rendering the game world itself into a partly distinct but more explicitly spatial phenomenon. Ludic experience transforms an actual space into a virtual whole, which is kept together by various factors including immersion and agency. The space itself is governed by the rules, which also steer the ludic motivation towards certain endogenous goals.

Events in the game space must be distinguished from the game states through which the interpretations are made by the player-subjects. Events represent the occurrences in game space that a non-player-subject, in other words a member of the possible audience, is able to access. From the point of perception of the player-subject herself, understanding the game space as a sequence of states enables us to see any gaming experience being based more profoundly on its spatial dimension as opposed to the temporal one.

The state sequence is constantly narrativized by the player-subject during gaming. Every state is interpreted in relation to the states past and the states to come; the gaming experience is necessarily contextualised by the game space. As we have come to note during the text, narrative has a twofold relationship with games. Every game imaginable is narrativized by the player-subject, while those with a narrative space of their own form a simulated narrative, in which the agency of the player-subject is a factor in the creation of the narrative. In other words, the game and its simulated narrative are both spatial phenomena whose meanings are connected by the player-subject's motivation to act according to the rules and goals of a particular space.

In regard to the juxtaposition between ludology and narratology taken up in the introduction, the thesis presents a mediating resolution. The basic premise of ludology is undoubtedly a correct one, since the gaming experience itself is the most essential aspect of gaming. However, games include many elements within the realm of narratology, some of which are fundamental to the act of gaming. The approach adopted by the this text gives an opportunity to examine narrative constructions in ludic contexts without losing sight of what is the most important thing in game studies. Ludology takes

precedence, but it cannot really exist in all its forms without narratology. In addition to examining all the new aspects games has brought to the field of cultural studies, it is also of importance to see gaming as a continuation of developments in the field concerned.[252] That means continuing to take advantage of both the ludic and the narrative traditions.

We can also assert that at this point in time, the history of electronic gaming having only spanned about half a century, it is quite understandable that in games, we are still 'fighting the bad guys' instead of 'fighting the bad guys to save someone'. In other words, the processes of signification and narrativization in the ludic context are perhaps not yet given enough attention. Maybe it is not even a question of whether gamers or game scholars would 'get it', but whether the designers can integrate to games satisfactory elements which draw from other sources than glittering graphics or booming sound effects. Although the basic building materials of electronic games have remained the same for decades,[253] the explicit narrative dimension can still be considered one of the most important points of evolvement.

As always, there is much room for further studies. The different roles narratives play in ludic spaces are in need of additional scrutinising. For instance, it would be very useful to analyse further the way the narrativization relates to the simulated narrative and to the endogenous substance, in order to better outline the different kinds of narrative construction possible for ludic spaces. Also the way individual interpretations of the same game spaces relate to each other has been practically left out of the discussion in question.

The aim of this thesis was to show how the act of gaming is really a point of view, a perspective. It transforms what is to what can be, giving birth to something virtual in the process. The space created is characterised by a certain sense of formality inherent only to that particular environment. The rest is reality.

[252] Sihvonen, Tanja (2004, 48).
[253] Sihvonen, Jukka (2004, 99-100).

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