



J. TUOMAS HARVIAINEN

Systemic Perspectives on Information
in Physically Performed Role-play



ACADEMIC DISSERTATION

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SUMMARY

This dissertation examines information phenomena that take place in, and related to, physically performed pretence play. The most obvious of such is live-action role-playing (larp), but other forms also exist. The emphasis is on one hand the play experience and the elements constituting it, but underneath that all exist information processes which essentially define the perimeters of what can be done and during play and how.

Being primarily a metatheoretical work, the dissertation draws on the empirics of earlier researchers and practitioners, further supporting with the author's own experiments and field observations. References are analyzed with the use of systematic analysis, a hermeneutical method for finding their key essences, which are then compared with other works. Through this process, new data emerges from the combinations of the old, as seemingly disparate concepts are shown to actually discuss the same things.

The primary research question of the dissertation is "What are the essential information systems traits of live-action role-playing situations, and how do those traits affect information behavior during play?" To understand that question, I explain how live-action role-playing can be defined and what the discursive limits of the phenomenon are. Through a look at how larping takes place also in activities such as historical re-enactment, sadomasochist role-playing and post-modern magic, I show that the same processes exist in them as well, but with a different type of framing. So as to understand their differences, I discuss the ways games and role-playing are defined as concepts. In my definition, for something to constitute larping requires three criteria: 1. It has to be role-playing in which a character, not just a social role, is played. 2. The activity has to take place in a fictional reality shared with others, and breaking that fictional reality is seen as a breach in the play itself. 3. The physical presence of at least some of the players as their characters is necessary, or the activity becomes some other type of role-playing. Role-playing consists of the intentional evocation

of artificial experiences through the use of fictional characters as masks, identities or personas. In larp, it is done physically.

To assist in explaining the information-environmental properties of the fictional realities of play, I use Andy Letcher's (2001) concept of the temporary tribal zone (TTZ). TTZs are temporary realities (such as religious rituals) in which normal rules do not necessarily apply. They are liminal, i.e. steps beyond the mundane. TTZs rely on social contracts between their participants. The border of the temporary space, commonly called the magic circle, acts as an information systems boundary that either blocks or transforms incoming information. People inside a TTZ require information, and their play, in the case of game-TTZs, consists of information behavior: active searches, ongoing searching, passive attention and passive searching are all utilized. Players interact with each other and the fictional environment through cognitive subject representations, constructed as extrapolations from information given by the organizers. This makes a larp a self-referential, multiple index entry information system. Within it, the play is its players' primary frame of reference, and the activities within seem separate from mundane existence.

Parts of the missing information, however, cannot be found inside the system. Players therefore use various strategies to handle the conflict between needing more information and not being able to access optimal sources for it without breaking the fictional reality. Their reliance on second-hand sources, particularly cognitive authorities – persons or groups presumed to be in the know – is heightened, and certain cognitive authorities (usually the game masters) are vested with the power to re-define the document properties of anything within the fictional reality.

Players also protect the illusion, by engaging in boundary control, the act of screening what is allowed to cross the magic circle. Boundary control consists of several processes: Participants berrypick information so as not to disturb the illusion of play with direct searches to outside sources. They also blunt information that would cause problems to the activity at hand and its fiction, and they seek to follow the agreed upon rules of the play while supporting the immersion of others. Boundary leakage is nevertheless inevitable, but players seek to minimize it through such measures.

In a hermeneutical sense, role-playing consists of multiple texts that interact with each other. Some of them take place outside the fictional reality of play, others within, and some cross the magic circle, being transformed by it. Players constantly re-signify elements within the fictional reality, so as to keep it functional and interesting, thus creating evolving texts out of the re-significations and any meaningful actions they perform. The participants interpret such texts and reference to them in their own play. In order to be intriguing, many larps manipulate their players' information uncertainty, in the form of an anomalous state of knowledge (ASK). By extending the state where participants know that they need more information, but not exactly what, they create emotional arousal and increased credulity. Educational games, in turn, may seek low ASK, so as to facilitate a higher learning potential.

To study and explain these issues I construct and introduce the sub-field of *liminality informatics*, the analysis of ritualistic, liminal activities as information systems. What it studies are the information roots and fundamental information-environmental prerequisites of liminal experiences. Liminal spaces do not just include key (tacit) information processes. Their liminality, in the first place, requires those very processes (as well as others) in order to exist. Players actually perceive the game environment on multiple levels, including an external perspective. They are aware of potential information sources and conflict negotiations that exist outside the fiction, but for the most part, they try to act as if those elements did not exist. Accepting the limitations of play makes the play more interesting to them.

All these phenomena also exist in information environments that are not connected to games or play. The play-context, however, makes them more prominent and visible than in many other cases, and thus easier to observe and analyze. The artificial nature of games, including the way a designer can manipulate their systems properties and internal documents, further emphasizes this. By analyzing the impact of the information environment in liminal games, it is possible to understand much more also about the influence of information environments in mundane life.

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Klabbers, whose review of Article Six inspired several absolutely necessary changes in this dissertation, well beyond the scope of just that one article.

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FOREWORD

A decade and a half ago, I found myself in a larp where I played a fictional version of myself, caught in a strange set of events. A lot of my friends were acting strangely and one of the other characters kept telling everyone that we should organize a summoning ritual, just for fun. By game rules and the background information given, I should not have been suspicious. As a player, on the meta-level, I totally was. I remember dropping out of character and thinking of all the meta-factors, of conflicting information at hand, and what I should and should not know and think as my character, versus the ever-suspicious real me. My main question then was “how the hell am I going to navigate this mess and actually enjoy this damn thing?” Then I consciously returned to thinking like my character, within the boundaries given and, soon enough, the enjoyment arrived, as my focus shifted to ignore a lot of the information processes around me, while favoring others. In retrospect, that moment had within it all the parts of this research: Role-playing, layers of information, immersion, narrative, a fictional reality – and even a ritual. Of such insights is research born.

In this dissertation, I analyze the information-environmental properties of certain forms of pretence play, which I see as being pseudo-isolated systems. The tools I use come from various directions: organizational learning and systems theory, philosophy, semiotic hermeneutics, cognitive science of religion, game studies and, especially, library and information science. In many ways, it reflects my own academic background: From a start as a theologian whose hobby was designing and studying role-playing games, I have become an information scholar, who applies all he has picked up along the way into that field. I see library and information science as a wonderful discipline, which is exceptionally inclusive and constantly evolving along with the technologies and conventions it studies. During these six years, I see myself as having become first and foremost a library and information scientist, who just uses a rather atypical toolkit. This also reflects my personal philosophy of research. Following Gadamer's (1972) ideas on science, I form phenomenological (trait-descriptive) explanations, and see how far they can be treated as valid, while I try my best to shoot them down, and hope my colleagues do likewise. I also try and see connections between various fields and concepts, and then see if they match. I want to examine if Phenomenon A and Phenomenon B really are homologous, like they appear to me. When they usually are not, I study where they differ. I have a particular love of secondary empirics,

for taking field research conducted by others and seeing if something more can be drawn from it through a new analysis. In this, I see how I return to my old days as a dogmatician, just with a very different set of texts under my magnifying glass.

Like with my game designs, I see my scientific work as a hobby and as an art form, and conduct it the same way. For me, they are both like creating paper planes. I fold them as carefully as I can, applying everything I have learned so as to do as good a job as possible, and then I throw them into the air, to see if they fly. The six planes making up this dissertation are particularly complex, possibly strange-seeming designs. Thank you for joining me on watching how far they will glide until an improved design is needed.

In Vantaa, Finland, August 2012.

J. Tuomas Harviainen

1. INTRODUCTION

This doctoral dissertation discusses live-action role-play (larp) from a systemic perspective. In it, I seek to answer the question “What are the essential information systems traits of live-action role-playing situations, and how do those traits affect information behavior during play?” Live-action role-playing (larping, i.e. the activity performed within larps) is a type of pretence play, in which participants play fictional characters, and perform those character's actions physically, i.e. their body language and other non-verbal cues consistently correspond to those of the characters during play (or at least attempt to do so).¹ Such play takes place in either a temporary space imposed upon a real place, or in public spaces temporarily re-defined as play-space, usually unbeknown to non-players in the area.

As the participants play, they inevitably encounter information gaps. These gaps may be due to organizer errors or simply an accentuated version of what Patrick Wilson (1977) calls "incomplete world-knowledge". In either case, game participants are forced to seek new, missing information in order to preserve the illusion of play, which is usually their primary reason for attending the larp. To seek such information, however, is in itself a disruption to the gameplay experience. Players therefore resort to various strategies with which to minimize game breaks, to them and for others.

The articles which make up this dissertation introduce the information systems properties of role-playing environments (Article One), the way participants re-define symbols and appropriate information in such spaces (Article Two), the systemic nature of the processes inside the space (Articles Three and Six) and the discursive limits of the phenomenon itself (Articles Four and Five). This synopsis further outlines the phenomena presented in those articles. I have chosen to concentrate on live-action role-playing, as different representation systems have a strong impact on the game experience (Klabbers, 2009), and larping has the advantage of containing embodied reactions as well as digital or abstract representations (as per Brier, 2008).

¹ See Habbe (2012) for examples on when non-verbal cues do not correspond during larp.

My motives for writing this dissertation and its constituting articles have are many. First and foremost, I believe that since the described phenomena exist, they are worth studying, for both increased scientific knowledge and for improving the design of future games. At the same time, I acknowledge that a significant reason has also been my personal curiosity and the need to see where the meta-research would take itself, once I started combining existing data. Furthermore, it is my firm belief that such a study of pretence and social contracts in a limited context will provide new knowledge on the impact of such things also in life outside of ritualistic circumstances.

On the side of information studies, aka. library and information science (LIS), the primary purpose of this dissertation is to answer Ingwersen and Järvelin's (2005) call for studying the effect of information environments to information behavior, particularly information seeking. In environments that are liminal, i.e. sufficiently ritual-like to create a 'step beyond the mundane', information constraints created by the environment become particularly visible. These are furthermore not new information phenomena, but rather accentuated versions of social information constraints seen in more mundane situations. Therefore to study them is to create also scientific knowledge of information constraints in general. The primary research question I answer is: “What are the essential information systems traits of live-action role-playing situations, and how do those traits affect information behavior during play?”

On the side of interactive media and game studies, this dissertation and its constituent articles show how both LIS and methods adapted from the study of religion can significantly contribute to the understanding of game phenomena, particularly social contracts and the heavily debated immersion/engrossment. As its primary theoretical framework, it combines the re-signification ideas of Deleuze and Guattari, Paul Ricoeur's theories of appropriation, and Patrick Wilson's thoughts on incomplete world knowledge and second-hand sources of information. Its main focus, as far as gaming is concerned, is to show that the activity of physical pretence play is not tied to its most visible form, but also exist elsewhere, in so-called sibling activities, and to present fundamental information processes necessary for the game experience. By doing so, and by analyzing the information properties of physical role-playing, I build bridges not only between game studies and library and information sciences, but hopefully also towards other disciplines. For this purpose, I have intentionally extended my reference base towards directions typically not associated with my main fields - at least

not both of them. The dissertation furthermore makes its own contribution to the ongoing discussions on how to define role-playing (section 2.0.2), games (2.0.3) and immersion (2.2), by presenting my reasons for using Montola's (2008) definitions for role-playing, and especially Suits' (1978) and Whitton's (2009) for defining games, instead of creating new definitions of my own. The issue of immersion(s), as will be displayed, I find far too context-dependent for any of the current definitions.

What makes larps and their siblings difficult for study is their inherent ephemerality (Ahlroth, 2008). Larping cannot be analyzed during play without breaking the illusion, and thus ruining the initial "during play" clause. Furthermore, as soon as they are "complete", i.e. played to the finish, they cease to exist (Koljonen, 2008, Stenros & Montola, 2011). Therefore any foray into the study of live-action role-play has to use indirect means. The articles that form the basis of this dissertation therefore use combinations of systems analysis, interviews and observational data, often in unconventional manners that may seem strange to researchers used to just singular-paradigm approaches. As noted by Mäyrä (2009), this allows for increased accuracy through methodological triangulation.

In a wider cultural context, my research touches on issues of serious leisure (Stebbins, 2007), participatory culture (Haggren et al., 2008; Jenkins et al., 2009), and especially the social contracts (e.g. Goffman, 1961) regulating information behavior in such contexts, when they touch on issues of pretence, play and liminality.

The Structure of this Study

I begin this dissertation by examining my main subject, live-action role-playing, including its origins, as well as the difficulties in defining both role-playing and games in general. To give the phenomenon itself sufficient framing, I then analyze some of the closest siblings of live-action role-play, such as historical re-enactment, sadomasochist role-playing and psychodrama.

Following that stage of definitions, I move into game phenomena that relate to information during play. The most central of these are the questions of character immersion - the way some players seek to become their characters as closely as possible - and game narratives,

including the way certain people break the implicit or explicit rules of play, using meta-information, in order to create what they see as a better story out of the play. Also discussed are questions of winning and commitment to play.

In the methodology section, I first explicate the methods I have used in constructing this dissertation, particularly the hermeneutic technique of systematic analysis, in which texts are condensed into their essential content. From the methods I then expand into perspectives on understanding systems and the concept of information itself, including issues of what exactly counts as a document, and on how human interaction with information is viewed in library and information science.

In the third chapter, I present the sub-discipline of liminality informatics, i.e.. the modeling of ritualistic activities as information systems. In order to present a holistic view on the subject, I first explain the concept of liminality, the step-beyond-the-mundane that takes place in many rituals. I then show how ritual spaces are constructed and how they function, after which follows a series of analyzes regarding semiotic processes inside such spaces, the spaces' information-system processes and the way participants obtain, appropriate and interpret information within them or relating to them. The chapter ends with an analysis of the way ritualistic activities rely on the manipulation of information uncertainty, in the form of their participants' anomalous states of knowledge, towards either high-impact experiences or increased learning potential.

After the synopsis conclusion come the constituting articles. In Article One, *Live-action, role-playing environments as information systems: An introduction*, to answer "What is the information system structure of live-action role-playing?" I present the central information-systemic properties of live-action role-playing environments. These include the way the border of the illusory reality of play acts as an information barrier and the way world-knowledge is always limited within it, key information sources within the play-space and outside it, yet in relation to what takes place inside, the influence of persons or groups invested with the status of being in-the-know regarding the activity, sometimes also with the power to overwrite documents within the fiction. After detailing these traits, I then move to describing and analyzing how the game-space functions as a social information system, where participants conduct information searches, retrievals and distribution.

In Article Two, *A hermeneutical approach to role-playing analysis*, I present my main methodological points, as well as show how role-play itself is a set of texts, appropriated, appended and often also altered by the participants. The main question there is “How does information appropriation take place in role-playing?” Starting off with the way role-playing gets defined, I show that an interpretative bias exists regarding role-play, and affects discourse both on and within it. Using that observation as a basis, I then present the way hermeneutics, the art of interpretation, can be applied to analyze both role-playing research as well as the play itself. Special emphasis is placed on the way role-playing is not a text, but a set of texts, which exist in different, yet often simultaneous, layers of interaction.

In Article Three, *Similarity of social information processes in games and rituals: Magical interfaces*, I (with Andreas Lieberoth Wadum) return to the information-systemic properties introduced in article one. The primary question in the article is “How is the illusory reality of role-playing maintained?” Showing how the fictional reality is maintained through information processes and the ritualistic nature of the activity, we discuss the game-space as not just a system, but as an information environment, capable of creating strong cognitive changes in its participants. Forming an analytic connection between pervasive and pretence games, we display the likeness of ritual and role-playing, and the way they both rely on fundamentally the same processes, many of which deal with limitations to information behavior. The limitations are a key part of what makes the participation rewarding, which is why people not only accept them, but maintain them for the duration of the activity, and find it pleasurable to do so.

In Article Four, *Sadomasochist role-playing as live-action role-playing: A trait-descriptive analysis*, I compare a sibling activity, sadomasochistic role-playing, with live-action role-playing. Its primary question is “What exactly counts as larping, and why?”, applied to one particular sibling. After describing the basics of such play, I compare key definition traits such as whether sadomasochist role-play counts as a game, whether it has a game master, proper characters and not just social roles, and whether its goal-orientation is not something comparable to the freedom of larping. In conclusion, they are shown to be facets of the same activity, under different framings.

Article Five, *The larping that is not larp*, widens that discussion and the application of “What exactly counts as larping, and why?” In it I, in addition to sadomasochism, analyze the potential connections of larp and larping with historical re-enactment, bibliodrama and post-modern magic. Through that analysis, it is revealed that the pretence-parts of the activities are indeed akin to larping, but the framings are not the same as larp.

In Article Six, *Ritualistic games, boundary control and information uncertainty*, I again ask “How is the illusory reality of role-playing maintained?” In it, I continue analyzing the information systems properties, taking into account the earlier works and showing the significance of boundary control, the maintenance of the illusory reality, to the play experience. The article consists of three related themes: the boundary control, the way the play-space functions as a primarily self-referential system, and the way emotional arousal and information uncertainty affect both actual play and the experience of play. In many ways, the article is an expansion on the key concepts of Article Three, one that takes into account the concepts introduced in the other articles as well (including Lieberoth & Harviainen, in press, which likewise expands from Article Three, but towards the study of rituals).

The order of the articles is chronological, and does not correspond with the structure of this synopsis. This is intentional. Each work, excluding the first two, builds upon the earlier ones’ arguments, even when they are not included in the lists of references. The articles also had to include certain repetitive parts, and I thus integrate them all, as needs be, into the text.

2. LIVE-ACTION ROLE-PLAYING: A PRIMER

Live-action role-playing is a form of physical pretence play, one where players take on the personas of fictional characters and enact those within a fantasy context (Brenne, 2005). Fantasy, in this case, can mean anything from Tolkienesque worlds to a slightly altered version of the real world. All games are based on an internal (endogenous) fantasy world (Costikyan, 2002; Klabbers, 2009), with some games using much less complex fantasies than others do – being an “investment banker” in a board game about buying real estate, for instance, usually involves a less complex fantasy than does the fictional world of a larp. The fantasy, as will be shown, furthermore leaks, and is affected by many game-external (exogenous) meaning systems in addition to its endogenous structure. Likewise, in all games players play roles, at least social ones, and “role-playing” proper is a more accentuated version of that fact (Klabbers, 2009).

For quite some time, live-action role-playing games have been abbreviated as "LARP", even though the abbreviation does not contain the "game" part (Tresca, 2011). Much national variation exists, some of it cultural, some due to linguistic reasons, and what exactly counts as larp may vary from one area to the next. For example, in France historical re-enactment is counted as as one facet of *les jeux de rôles*, whereas in many other countries (see below) it is seen as a forerunner or a shoot-off of larping. To confuse things further, some small larps are also listed in France as “murder mystery parties”, even if they are not murder mysteries (Trenti, 2011). In the United Kingdom, the abbreviation LRP seems to hold sway, with a fraction of players who like smaller-scale, more dramatic games preferring the use of "freeform" so as to not be associated with generic fantasy play. In Germany, vampire larps are not seen as larping, in stark contrast to other countries.

To confuse things further, in more recent times, some theorists and larp designers who have broken into mainstream media with works such as the Emmy-winning SANNINGEN OM MARIKA (“The truth about Marika”) have started favoring the use of artistic terminology like "indrama", "participatory performance", "interactive drama", and so forth.² While by no means inaccurate, such definitions sell the concepts to a wary, often even prejudiced wider

² SANNINGEN OM MARIKA was a TV show / alternate reality game hybrid run in Sweden in 2007, dealing with the theme of missing persons (see Denward, 2011, for details and analysis).

public by using their own words instead of the possibly juvenile-seeming "LARP". I plead guilty of that myself, having more than once successfully sold my larps to art festivals as "first-person installations". I still do consider the description rather accurate, however.

A facet worth special notice is that especially in the Nordic countries, spreading from the so-called Knutpunkt scene (described in section 3.0.1 below), larp is no longer an abbreviation. It has become a noun. As Finnish role-playing scholarship pioneer Markus Montola has repeatedly noted, we do not consider "radar" or "laser" abbreviations either, and larp has reached the same level. In the articles making up this dissertation it is still occasionally capitalized, but that is due to editors sticking to older standards. In this dissertation, larp will be used as a noun, and larping as a verb.

2.0.1. The origins of live-action role-playing games

Several histories for the origins of live-action role-playing exist (for examples, see Morton, 2007 and Tresca, 2011). What is known to a reasonably reliable level is that it has multiple sources, which have been combined and interchanged over the years in several of the so-called sibling activities (Morton, 2007), which I consider different framings for the same activity (Article Five).

Role-based pretence play has been with us from early on, so what exactly counts as larping is a very difficult question, more tied with opinions and pre-drawn definition lines than any real facts (Morton, 2007):

Defining live-action role-playing is not easy, and any definition is in danger of favoring some forms and styles of larp over others. Larps vary on exactly how "live" the "action" is: a genuine sword-fight is more "live" than a scripted one, which is still more "live" than a game of rock-paper-scissors or a roll of the dice. Larps vary on exactly how "roles" are "played." A water rescue training larp may involve players taking the roles of lifeguard and victim, without any real characterization, whereas a vampire larp may involve players immersing themselves into detailed characters, with little emphasis on the characters' roles in the game. (Morton 2007, p. 245.)

According to D. W. Winnicott (1971), infants first project their imaginations at their blanket corners, and from this process eventually develop all other forms of pretence, from child's

play to more regulated ones. Walton (1990) sees this as the root of all representative arts, and Rizzuto (1991) of even religion in all its forms. According to Rognli (2008), Lieberoth (2008) and Tresca (2011), larp really may be just an adult version of child's play. I personally do not think so. I believe larping to partially consist of the same processes, but to be much more. It is not *just* an adult form of how children pretend, but rather an expanded application of the same mental propensities to act-as-if. To define it as just adult play is in my opinion a dismissal of its actual scope and value. As noted by Vygotsky (1933/1966):

In play a child operates with meanings severed from objects, but not in real action with real things. To sever the meaning of horse from a real horse and transfer it to a stick (the necessary material pivot to keep the meaning from evaporating) and really acting with the stick as if it were a horse is a vital transitional stage to operating with meanings. (Vygotsky, 1933).

Through such processes, Vygotsky argues, humans learn to both re-signify and to create temporary spaces for enjoyable pretence and learning. These processes are further explored in chapter 4.

What can be known for certain is that human adults have been role-playing for millennia, at least in special circumstances. As noted by Ericsson (2004), the religious games at Abydos described by Herodotos do in retrospect look rather much like a heavily scripted larp, up to and including an epic end-fight (as per Faaborg, 2005), as do some rites. Morton (2007) describes several potential roots, from Roman gladiators with stage personas to role-including theme parties, some of which were already done in the first centuries of the Common Era. Moreno (e.g. 1953) certainly used larp-like methods, as do his followers in both psychodrama and bibliodrama. Educational larps, furthermore, have certainly been with us, under various names, at least since the 1970's (Crookall, Oxford & Saunders, 1987). These activities will be further examined in section 2.1.

The question is therefore: What counts as a credible root and, furthermore, is any such root really necessary to know? Criteria for defining limits do exist (Article Five), but are they really needed? As wisely stated by Tresca (2011), several notable lines of influence can be recognized, but none really defined: From Tolkien fandom to tabletop role-playing to larp (ibid.). From tabletop alone to larp. From religious rituals to carnivals to larp (Morton, 2007). From Commedia dell'Arte to murder mystery parties to larp (Tresca, 2011; Morton, 2007).

From medieval re-enactment to larp (Tresca, 2011; Bowman, 2010; Stallone, 2007); From experimental theater, including audienceless theater (see Kirby, 1987), Happenings and Spolin's theater games (Tresca, 2011; Flood, 2006; Harviainen, 2008; 2010).

Influences from all of the above, at least in certain communities of larp play, are undeniably obvious. For example, the Swedish larp scene includes, in my experience, lots of theater professionals with plenty of experience in experimental drama (up to and including co-production with larps, such as HAMLET INIFRÅN)³. One could easily also throw in influences from, say, urban exploration, party games, advertisement campaigns that take the form of alternate reality games (ARGs, i.e. games played in the midst of one's normal life), and so forth (Montola, Stenros & Waern, 2009).

The roots are not, therefore, really important. People have been pretence-playing for ages - and they will continue to do so, for various personal and social reasons. For example, most people attending a murder mystery (see Trenti, 2010 and Vanek & Joeck, 2011 for examples) party will not think of themselves as larping, but they obviously are (Article Five). Because of this very thing, before looking into the key forms of pretence play, a serious glance at the concept of "role-playing" is necessary.

2.0.2. On defining role-playing

Indeed, a movie actor, a confidence trickster, a shaman playing the role of a spirit in a religious ritual, and even a person pretending to be unconscious in a CPR training exercise are all engaging in live-action role-playing, even though they are not playing a game. Nonetheless, the custom is to restrict the term "larp" to live-action role-playing activities that are either games or very game-like. (Morton, 2007, p. 245.)

As noted in Article Two, definitions of role-playing and role-playing games have a tendency to reflect their authors' viewpoints, occasionally even play preferences. They also contain their discursive limits. For example, definitions concentrating on the aspects of "game" face

³ HAMLET INIFRÅN ("Hamlet from the inside") was a larp produced by larpers in collaboration with Riksteatern JAM, the youth division of the Swedish National Theatre. It later led to the production of a "director's cut version, HAMLET, run several times for adult participants (see Koljonen, 2004 and Bergström, 2010, for details).

problems due to the fact that some role-playing games lack clear goals, a defining characteristic of most definitions of "game" (Salen & Zimmerman, 2004; see also section 2.0.3 below). Definitions and descriptions favoring the aspect of storytelling and/or performance, such as Lancaster (1999) or Mackay (2001), in turn, have difficulties with the immersive aspects of play, which cannot be counted as "performance" except under the very widest definition of the term.⁴

Role-playing itself is a multi-faceted concept, even if one does not concentrate on the context where it takes place (see Article Five). Markus Montola (2008) describes role-playing as:

- 1) Role-playing is an interactive process of defining and re-defining the state, properties and contents of an imaginary game world.
- 2) The power to define the game world is allocated to participants of the game. The participants recognize the existence of this power hierarchy.
- 3) Player-participants define the game world through personified character constructs, conforming to the state, properties and contents of the game world. (Montola, 2008, pp. 23-24.)

The Process Model of Role-Playing, in turn, defines the phenomenon as "*any act in which an imaginary reality is concurrently created, added to and observed, in such a manner that these component acts feed each other*" (Mäkelä et al, 2005). Pohjola, in his highly influential Manifesto of the Turku School (1999), defines it as "*immersion ... to an outside consciousness ("a character") and interacting with its surroundings.*"

Drachen & Hitchens (2008) define a role-playing *game* as containing:

1. Game World: A role-playing game is a game set in an imaginary world. Players are free to choose how to explore the game world, in terms of the path through the world they take, and may revisit areas previously explored. The amount of the game world potentially available for exploration is typically large.
2. Participants: The participants in the games are divided between players, who control individual characters, and game masters (who may be represented in software for digital examples) who control the remainder of the game world beyond the player characters. Players affect the evolution of the game world through the actions of their characters.

⁴ For an analysis of the performative aspects of role-playing and their relationship to its intersubjective and experiential facets, see Pearce (in press).

3. Characters: The characters controlled by players may be defined in quantitative and/or qualitative terms and are defined individuals in the game world, not identified only as roles or functions. These characters can potentially develop, for example in terms skills, abilities or personality, the form of this development is at least partially under player control and the game is capable of reacting to the changes.
4. Game Master: At least one, but not all, of the participants has control over the game world beyond a single character. A term commonly used for this function is “game master”, although many others exist. The balance of power between players and game masters, and the assignment of these roles, can vary, even within the playing of a single game session. Part of the game master function is typically to adjudicate on the rules of the game, although these rules need not be quantitative in any way or rely on any form of random resolution.⁵
5. Interaction: Players have a wide range of configurative options for interacting with the game world through their characters, usually including at least combat, dialogue and object interaction. While the range of options is wide, many are handled in a very abstract fashion. The mode of engagement between player and game can shift relatively freely between configurative and interpretive.
6. Narrative: Role-playing games portray some sequence of events within the game world, which gives the game a narrative element. However, given the configurative nature of the players’ involvement, these elements cannot be termed narrative according to traditional narrative theory[.] (Drachen & Hitchens, 2008, p. 16.)

They further continue with:

It should be noted that this definition does not provide clear boundaries. Exactly how much of the game world is presented, how wide the choice of interaction possibilities and how much story element is contained vary between the forms of role-playing game and are not amenable to precise quantification. This leads to a blurring of the boundaries between what is and is not a roleplaying game. (ibid.)

As suggested by Crookall, Oxford and Saunders (1987), and later shown by Arjoranta (2011), these two types of definitions do not assess the same thing *per se*. Montola's deals with *role-playing*, while Drachen and Hitchens discuss *role-playing games*. This distinction is of high significance to this dissertation, and is further explored in Article Five. The first one is the process, the activity, a way-of-being, a fictional *Dasein* (Article Two). The second one describes its framing and context – or, perhaps (at least in the case of some of the games they

⁵ As I note in Article One, game masters’ functions can be further divided into design, preparation and control. In most cases, the same person or group tends to handle all three, but in the case of for example PRAYERS ON A PORCELAIN ALTAR, it is quite common that while I have designed it, someone else may take the duty of advance preparation and run-time control of the game (Harviainen, 2011). The effects of all three functions take place outside of play, but affect the diegesis nevertheless (Article One).

analyze), more accurately, *products*. This same distinction can, and should, be made between *larping* and *larps* (Article Five), which are physically performed types of them. Not all role-playing is done in role-playing games (see Moreno, 1953, Morton, 2007, and Article Five, for examples). Problems in definition do arise, however, from the facts that on one hand, as noted by Heliö (2004), anything can be role-played, should the participants agree to do so, and on the other, whether one is actually role-playing cannot necessarily be gauged by outsiders (Harviainen, 2006b). As stated by Norwegian larp designer Erlend Eidsem Hansen (private discourse), the sole thing that truly matters is each participant's inner experience, which means role-playing can also secretly take place in activities not considered role-playing (Article Five). As we cannot measure that, at least not beyond semi-reliable self-descriptions (Harviainen, 2006b), other criteria are necessary.⁶

In Article Five, influenced especially by Montola (2008), I define one way of approaching the issue. My own criteria, all three of which will be further examined in sub-chapters later on in this dissertation, for what constitutes something describable as live-action role-playing (i.e. the activity) are:

1. Role-playing in which a character, not just a social role, is played.
2. The activity takes place in a fictional reality shared with others. Breaking that fictional reality is seen as a breach in the play itself.
3. The physical presence of at least some of the players as their characters. (Article Five, p. 176.)

No “game” or “scenario” component is necessary, as those are questions of framing and not the activity itself. The first of these clauses means that the character has to be sufficiently complex to be considered a fictional persona.⁷ If too much of the player’s behavior and way of thinking is present in the role during play, immersion of any kind (see section 2.2) will not take place. How much is sufficient depends on player preferences and the activity’s structure:

A person with just a name change is not role-playing, but as soon as he uses that different name as a basis for an activity choice - any activity choice of any depth - the lines blur. As Harviainen (2006[b])

⁶ See McCauley (2011, p. 190-193) on the same issue in religious rituals.

⁷ In Article Five (p. 177), I use the clause “*a persona who could get by in the fictional environment on its own, were it torn apart from the player*”.

has documented, players may have extremely dissimilar relationships between their everyday persona and the fictional one. (Article Five, p. 177.)

Not everyone has to be physically present at play for it to constitute larping. Especially non-player characters (NPCs) may be simulated just by voice on a telephone, or even treated as abstractions (see Koljonen, 2004, and Vanek & Joeck, 2011, for examples). The fantasy world, in turn, may be either completely fictional or an altered version of the real world, as described in section 4.2 below.

In hermeneutical terms, role-playing consists of the intentional evocation of artificial experiences through the use of fictional characters as masks, identities or personas (Article Two). Play habits and prevailing identity theory determine the type of character use, and the relationship between player and character can fluctuate during play (Harviainen, 2006b). Local play preferences may also differ heavily, in addition to individual preferences, and alter the activity for all participants. For example, in the Nordic countries, the game organizers tend to write all game material, characters included, and the larps are systems-light, meaning the game mechanics are often made as simple as possible (see Brenne, 2005, for a good example). In contrast, German larps have a tendency for player-written characters and very complex game mechanics (Balzer, 2009). This is also to a great extent true of American and British mainstream larps (Tresca, 2011; see also Stark, 2012). In training-simulation role-plays, things may be prepared as much as possible beforehand by the organizers (Crookall, Oxford & Saunders, 1987). Such factors have a strong influence on game narrative design (see 2.3), and not just character immersion (see 2.2), as well as the kinds of information gaps people experience during play.

Larping takes place in a temporary space imposed upon a real place (see 3.2). Religion scholar Andy Letcher calls such spaces temporary tribal zones (TTZs)⁸:

⁸ TTZs are basically an academic, field data based version of P. L. Wilson's (1991) temporary autonomous zones (TAZ). Note that while I later in this dissertation use the concept to describe phenomena reported by other researchers, it does not mean that they too used that concept. I am saying that they used the equivalent, just in other terms, and I have chosen to apply it to them for the purpose of increased clarity and argument consistency. Amongst the references of this dissertation, in addition to Letcher (2001) himself and my own works, the sole other utilizer of the term TTZ itself is Evans (2007).

A temporary gathering of people in transformed space [...], the TTZ is a spatial arrangement of the neo-tribal. The TTZ also involves the transformation of space, albeit at a smaller scale, by the rules and conventions of the neo-tribe. Such is the strength of this transformation that it gives the illusion of autonomy, but in reality this is never achieved for the gathering is ecologically dependent on the wider world for its existence. Hence it is a tribal, not an autonomous, zone. (Letcher, 2001, p. 144.)

In TTZs, normal rules and moral codes may not apply. Of extreme importance to the activity in all its forms is therefore the presence of a social contract stating what is being done, and how (as per Huizinga, 1939; Goffman, 1961). It need not be explicated at all, and often works on the level of implicit mutual understandings (Montola, 2005). At its core, it is what Stanislavski (2010) calls the “magical if” (*magitšeskij jesli by*), i.e. it is asking the question “How would I react, were I my character in this situation” and then following up on that question, while respecting the others doing the same thing. As we will see in the following chapters, the social contracts define a significant majority of the information-environmental traits of temporary tribal zones, even if they themselves cannot be exactly defined. They are like black holes, detected by their effects even if they themselves cannot be clearly observed.

[I]n *agreeing* to draw up the contract, the people seem to possess already that which the contract was supposed to create. Further, the very notion of a contract presupposes an agreement about its sense. We can see that it is not the contract which makes possible that agreement, but an agreement in understanding which makes contracts possible. And that agreement is not based on a contract, since it is not an agreement which people decide to come to. Rather, it is an agreement which shows itself *in* their common reactions[.] (Phillips, 2001, p. 230.)

Following media studies, role-playing scholars use the concept of *diegesis* to denote that which is real within the context of the game (Montola, 2003). In a movie, for example, music heard by characters would be diegetic, and a background score heard only by the viewers of the film extradiegetic.⁹ Borderline cases naturally exist. If a diegetic element in a larp has no exact physical representation, players will act on rough assumptions on how they are. These representations need not be identical, as long as they are sufficiently equifinal (i.e. their end results are sufficiently alike, no matter through which processes those were reached) to support play (Loponen & Montola, 2004). These issues will be further discussed in section 4.3.

⁹ As shown by Timplalexí (2011), this use of the word “diegesis” is somewhat incorrect, but it has already established itself within media studies as well as larp.

2.0.3. On defining “games”

The definition of what exactly counts as a game, not only role-playing or role-playing games, also haunts all research on the subject. While defining games exactly may not be mandatory in all cases, at least some inkling of what is being discussed is absolutely necessary (Whitton, 2009). According to Ludwig Wittgenstein (1953), concepts used to define what is a "game", such as rules, play or competition, fail to account for all possible variations of gaming. He therefore concludes that games are a set of activities, connected together by family resemblance, i.e. having some similarities and being associated by people as parts of the same phenomenon. Suits (1978), critical of Wittgenstein, defines games as the acceptance of unnecessary limitations, for the purpose of increase challenge and thus enjoyment:

To play a game is to attempt to achieve a specific state of affairs [prelusory goal], using only means permitted by rules [lusory means], where the rules prohibit use of more efficient in favor of less efficient means [constitutive rules], and where the rules are accepted just because they make possible such activity [lusory attitude]. I also offer the following simpler and, so to speak, more portable version of the above: playing a game is the voluntary attempt to overcome unnecessary obstacles. (Suits, 1978, pp. 54-55; brackets included in the original text.)

Numerous other definitions exist, some of them more complex than others. For example:

A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome. (Salen & Zimmerman, 2004)

A game is an *activity* among two or more independent *decision-makers* seeking to achieve their *objectives* in some *limiting context*. (Abt, 1970)

A game is a rule-based formal system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels attached to the outcome, and the consequences of the activity are optional and negotiable. (Juul, 2003)

At its most elementary level then we can define game as an exercise of voluntary control systems in which there is an opposition between forces, confined by a procedure and rules in order to produce a disequilibrium outcome. (Avedon & Sutton-Smith, 1971, p. 405.)

Many theorists also find it crucial to differentiate between "game" and "play". Caillois (1961, p. 13) distinguishes between *paidia*, uncontrolled fantasy play, and *ludus*, which is "*completely impractical, yet requires an ever greater amount of effort, patience, skill, or ingenuity*". Klabbers (2009), as working definitions, offers the following:

A **game** is a *form of play*. It is an activity involving one or more players who assume roles while trying to achieve a goal. Rules determine what the players are permitted to do, or define constraints on allowable actions, which impact on the available resources, and therefore influence the state of the game space. Games deal with well-defined subject matter (content and context).

Play is a voluntary activity or occupation, executed according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy, and the awareness that it is different from ordinary life. (Klabbers, 2009, p. 24.)¹⁰

Several other theorists, however, would at first glance disagree with the latter part of Klabbers' definitions (see Article Three for an example) - children, for instance, constantly negotiate their rules of play. It is therefore necessary to understand that games and play contain different kinds of rules, and the clause of "absolutely binding", in play, refers primarily to the rule of "we are playing, and this is not serious", and its permutations and extensions.

According to Huizinga (1939), defining the limits of play is a slippery slope filled with risks:

To our way of thinking, play is the direct opposite of seriousness. At first sight this opposition seems as irreducible to other categories as the play-concept itself. Examined more closely, however, the contrast between play and seriousness proves to be neither conclusive nor fixed. We can say: play is non-seriousness. But apart from the fact that this proposition tells us nothing about the positive qualities of play, it is extraordinarily easy to refute. As soon as we proceed from "play is non-seriousness" to "play is not serious," the contrast leaves us in the lurch-for some play can be very serious indeed. Moreover

¹⁰ Klabbers furthermore emphasizes that all game definitions should take into account the presence of actors in the game.

we can immediately name several other fundamental categories that likewise come under the heading "non-seriousness" yet have no correspondence whatever with "play. (Huizinga 1939/1955, p. 5.)

For Huizinga (*ibid.*), play is characterized by freedom. This is why it also takes its practitioners outside of mundane reality - a phenomenon that will be extensively examined below:

Be that as it may, for the adult and human being play is a function which he could equally well leave alone. Play is superfluous. The need for it is only urgent to the extent that the enjoyment of it makes it a need. Play can be deferred or suspended at any time. It is never imposed by physical necessity or moral duty. It is never a task. It is done at leisure, during "free time." Only when play is a recognized cultural function - a rite, a ceremony - is it bound up with notions of obligation and duty.

Here, then, we have the first main characteristic of play: that it is free, is in fact freedom. A second characteristic is closely connected with this, namely, that play is not "ordinary" or "real" life. It is rather a stepping out of "real" life into a temporary sphere of activity with a disposition all of its own. (Huizinga, 1939/1955, p. 8.)

For Bateson (1955/2000, p. 183), play holds certain peculiarities: Its internal messages are in a sense untrue or not meant and that which is denoted by them is nonexistent. Huizinga (1939) furthermore claims that play demands order, from which no deviation is possible without ruining the game (or ritual). Later theorists and researchers do not, however, agree. Myers (2010), for instance, claims that games rely on freedom, and if players are not able to practice "bad play" (play against the intended ideas of the game) they will not enjoy playing. Significant here is the difference between various sorts of rules: Some work as the "natural laws" of the game reality, and cannot be broken. All other rules, however, are subject to negotiation, at least in theory (Suits, 1978).¹¹ If someone breaks the rules in too sharp a way, that person ruins the illusion and shatters the fictional reality of the play (Huizinga, 1939, p. 11). Therefore, the exact limits of what exactly is included in a game vary on a case-to-case basis, even within activities beforehand defined as games.

¹¹ Misunderstanding this difference has, in my opinion, led to many misinterpretations. Calleja (*in press*), for example, refutes Suits' concepts of voluntary limitations because he fails to observe the difference between the "natural laws" of certain digital games (such as having to run at a certain speed due to the game's specifications) and their game-defining (as per Suits, 1978) voluntary limitations, such as the necessity of using certain powers, or having a sufficient level, to defeat a certain opponent. The former forms a part of the game's setting and framing, whereas the latter is what in Suits' terms creates the necessary challenge.

Exactly describing a thing such as games is furthermore a tautological process, as noted by Suits (1978). One first decides which things to include within “games”, and then constructs a fitting definition. This is the reason why, for example, Wittgenstein (1953), Klabbers (2009), Juul (2003) and Costikyan (2002) can and do contradict each other, on if and how games may contain exogenous meanings.

The problem of conflicting and imperfect definitions can, luckily, be at least sidestepped. Whitton (2009, p. 23), for instance, has opted for a practical approach. She uses a cluster theory (on applying cluster-type definition theories on games, see Tavinor, 2009) to define traits that a game *usually* includes: Competition, Challenge, Exploration, Fantasy, Goals, Interaction, Outcomes, People, Rules and Safety. According to Whitton, the more an activity includes these, the more "game-like" it is. "Game" is, however, only one facet of the subject of this dissertation. The concept of "pretence", as shown below, is at least as important to the issue at hand. As noted by Klabbers (2009, p. 45-46), all games are social systems which rely on a kind of role-playing and the social contracts related to that, but games of pretence (as to some extent do other pretence activities as well) rely on particularly limiting social contracts, ones that influence both the systemic structure of the activity as well as information behavior relating to it. Their character roles are more holistic and their fiction more refined and complex (Article Six).

Because this dissertation seeks to discuss the information-systemic properties of physical pretence, rather than to offer new definitions on what counts as a game, or to describe participant communities to certain game types, I find Whitton's (2009) cluster approach very suitable for the matter at hand. Because my subject is heavily intertwined with both the presence of actors in the game (Klabbers, 2009) and the way voluntary restrictions are added (Suits, 1978), those criteria are very much included in the cluster criteria I utilize in the dissertation.

In the same vein, for the purposes of this dissertation, I, following Klabbers and Bateson, define “play “ as *a voluntary activity or occupation that is executed according to freely accepted rules, has itself as its primary aim, is accompanied by feelings of tension, joy and the awareness that it is different from ordinary life, and may treat non-existing elements as*

temporarily real.¹² The rules may be completely tacit, and at their simplest simply be “this is not real”, but they may well be more complex. Should the rules become formalized, the activity starts approaching the concept of a “game”. The activity of *playing*, in turn, consists of performing actions within the parameters of play or a game. *Pretence playing* is thus the activity of pretending to be something other than oneself within a pretence play or a game that consists of pretence, such as a role-playing game.

2.1 ADULT PRETENCE ACTIVITIES - A BRIEF OVERVIEW

In order to understand the discursive limits of the activities analyzed in this dissertation and the rules governing them, it is necessary to take a brief look at what they are, and are not (see also Morton, 2007, and Article Five). Regardless of whether they are the roots of larping, the offshoots of it, siblings, or something that simply overlaps with larps and larping, a wider category of obviously trait-sharing phenomena exists.

Huizinga (1939, p. 13) says that the “differentness” of play reaches perfection in activities that require dressing-up, making a masked or pretending person not only pretend being someone else, but actually someone else. Caillois (1961, pp. 14-26) claims that there are four basic components that exist in games, alone or together. They are: *Agôn*, competition, including both tests of skill as well as player-versus-player challenges; *Alea*, which is chance, luck and divine favor; *Mimicry*, pretence¹³; and *Ilinx*, or vertigo. While it would seem that larping in its various forms would fall under primarily mimicry, I do not believe so (Article Five), even as Caillois (1961, p. 19) claims that “*Play can consist not only of deploying actions or submitting to one’s fate in an imaginary milieu, but of becoming an illusory character oneself, or so behaving*”, when he describes mimicry.

On the contrary, my studies seem to point very strongly towards the direction that at the base of all role-playing activities lies *ilinx*. This is not the vertigo, however, gained by attending some fairground attraction and being dizzy, but rather the sense of “becoming-other”, by

¹² In cases such as gambling or professional sports, play or a game may also have allotelic goals such as monetary gain, but those goals exist outside the game-as-system and are thus systems-wise not its *primary* aims (see Suits, 1978, Juul, 2003 and Klabbers, 2009, for discussions on this aspect of play).

¹³ As noted by Klabbers (2009), Caillois’ description of mimicry as simulation, while related, differs from what game studies considers to be “simulation”.

taking over a fictional persona. It is the loss of one's sense of mundane self, induced through experiencing a perception altered by the adoption of a distinctive role, a mentally rather than physically-based vertigo, even as it in larp may affect also physical reactions. Players then use the three other facets, in varying combinations, to enact their characters' wills. John Kim (1998) and Ron Edwards (e.g. 2004) speak of players as either “gamists”, or favoring competition, “narrativists”, favoring a strong story, or “simulationists”, favoring the illusionary reality’s integrity. These so-called Creative Agendas can be seen as favoritism towards agôn, (anti-)alea (in the sense of controlling one’s, and the game’s, “destiny”), and mimicry.¹⁴

Many other forms of adult pretence, however, are a combination of precisely ilinx and mimicry. This is because in those, the pretence is only a part of a larger palette of activities (Article Five).¹⁵ For example, in historical re-enactment, people participate in actual events that very much resemble larps with next to no scripting (Bowman, 2010).¹⁶ In addition to that, they may prepare costumes, attend lectures, study the time-period they are enacting, and so forth (Vartiainen, 2010). Simply put, re-enactment is the temporary adopting of the crafts, customs and personas of some historical period of choice, or (very often) rather an idealization of those (see Stallone, 2007, for details). Popular time periods include Medieval and the American Civil War era (see Lee, 2005, and Hunt, 2004, for examples). The role-play is only one, if very significant, part of re-enactment.

As shown by Hunt (2004), re-enactors place great importance on the authenticity of the illusory reality when they are pretend-playing (i.e. larping, even if under a different moniker). Yet to many, the main emphasis seems to be on meeting friends and making social contacts. In many cases, historical accuracy is sacrificed for the sake of a more enjoyable fiction, but

¹⁴ Caillois (1961) furthermore believed that most games are only combinations of two of the factors, with tripartite versions also existing, yet being very rare.

¹⁵ Although one could construct a plausible case of many siblings differing because they consist of mimicry as the primary activity, I see an ilinx/mimicry combination far more likely. To do otherwise would be to devaluate the immersive experiences of for example re-enactors, sadomasochists and post-modern magicians.

¹⁶ In most countries, larp seems to be at least a partial off-shoot of re-enactment (Stallone, 2007; Morton, 2007). In at least some parts of Russia, however, it seems that the opposite is true (Kann & Rozkov, 2010).

that fiction has to feel “right enough” to the participant. (Bowman, 2010).¹⁷ Therefore, those people lessen the integrity of the characters they portray. Because of this, the social contract of re-enactment permits personas that may, determined by participant preferences, be as simple as only a period-appropriate name, or as complex as any larp character played for years. (Lee, 2005).

Such a lessening of character identity towards just a social role is what, if anything, separates the role-play parts of re-enactment from larping, including historical re-enactment larps. As noted in Article Five, the lessening is nevertheless not so drastic as to make them distinctively different activities. Role-players in larps, too, may play with shallow characters and have purposes other than total immersion (Hakkarainen & Stenros, 2003; Harviainen, 2006b), and even the lower-level roles match the criteria set by Lukka (2011, p. 163) for the dual-faceted roles used in role-playing, being consciously learned personalities within the diegeses, different from the own persona of the participant, and adopted for use in a temporary environment.

A similar case can be found in sadomasochist role-playing (Articles Four and Five). It too is a part of a wider set of activities (Newmahr, 2011), even as the playing of roles has a high importance to it all (Weinberg, Williams & Moser, 1984). The central roles are “dominant” and “submissive, and the activity relies on a temporary power exchange, the length of which the participants agree upon, at least in rough terms (Dancer et al, 2006). In more complex enactments (“sessions”) with a strong role-play component, the participants invent a fantasy world like in larps, and pretend to be persons inside it (Article Four). Examples of such would be prisoner and interrogator, assailant and victim, and so forth.¹⁸ The dominant partner usually handles the “game master” function of the session, but it is not unheard of for submissives to assume it, by “topping from bottom” (Article Five).¹⁹

¹⁷ For example, the medieval re-enactment society of which I am a member has a tendency to favor as perfect as possible dress and weaponry, yet has strict rules against authentic portrayals of gender roles and religion.

¹⁸ For more examples, see Sandnabba, Santtila, & Nordling, 1999, p. 280.

¹⁹ The game master function in sadomasochism is not particularly developed, but nevertheless bears a strong resemblance to the run-time game mastering described by Lancaster (1999).

While the participants will give and/or receive pain, humiliation, bondage or a combination of such, the activity itself is still make-believe (Stear, 2009). It takes place within a fictional world (Deleuze, 1967; Gebhard, 1969), being a fantasy depiction of behavior (such as violence) within a fantasy setting (either an altered power-dialectic perception of mundane life, or a constructed fictional space). It also has a game-like quality to it, due to its intentionally assumed limitations (as per Suits, 1978, p. 83). Its temporary roles and worlds are adopted for the purpose of mutual pleasure, which is heightened by said role-play (Article Four). In some sadomasochist communities, role-playing beyond the basic dominant/submissive power exchange is rare (see Newmahr, 2011, for examples). In others, it is a preferred form, giving participants personal leeway to experiment further (Article Four).

Sexual role-play exists in other forms as well, but evidence on those is often anecdotal. For example, it seems common knowledge that some people play character roles as part of their sex lives: “The housewife and the plumber”, “Man in bar and a prostitute”, and so forth. Such activities may get a passing mention in research (see Forel, 1905, for an early example), but no actual data on the phenomenon seems to exist. The most likely reason for this is that it has been disregarded by sexologists as just a part of foreplay not worth including in surveys (Article Four).²⁰ In general, sadomasochist role-playing has a very strong resemblance to fantasy role-playing. Its chat versions are very much akin to tabletop role-play (Cross & Matheson, 2006). Its virtual world representations are alike role-playing in other massively multiplayer online role-playing games (MMORPGs; see Boellstorff, 2008 and Sixma, 2009, for examples), and the physical form consists of larping with just a framing other than a larp (Article Four). Furthermore, if the boundaries of such role-play are not carefully controlled (see 3.6), some potential participants may end up mixing the illusion of play with reality, whereas other intentionally do not wish to discuss the differences between role and persona (see Mortensen, 2003, pp. 223-225, for an example).

²⁰ Other examples of sexual role-playing include gender roles adopted by certain same-sex couples (Article Four), and - debatably - people who undergo the so-called “gay reparative therapy” and at least functionally change their sexual orientation (Article Five). The latter of these has a high resemblance to the mechanics of both cults (as per Galanter, 1999) and regimental thought control (as per Lifton, 1961), showing that the same systems of role-based behavioral changes may be used in a variety of activities.

Playful, physical role-playing has been practiced for centuries, in forms that have also blurred the lines of characters and real personas. An interesting link can be found in the so-called Hellfire Clubs of the 18th century Britain. Their members practiced both role-playing (including sexual role-plays) and, at least allegedly, pagan and Satanic rituals conducted for the sake of enjoyment, not belief (Lord, 2008). Post-modern magicians, such as practitioners of chaos magic, take the same principles further.²¹ According to their magical system, fictional content can be used to produce real magical effects, as long as the magician has complete faith in that content during the ritual (Evans, 2007). One tool for achieving this is role-playing, where the magician pretends to be a god or spirit that is to be summoned into him, so strongly that the possession becomes reality, even if the entity is known to be fictional (Sherwin, 2005; Hine, 1999).²² Such actions can be seen as both highly playful and utterly serious at the same time (Lieberoth & Harviainen, in press). Some practitioners also adopt a view of affecting the real world via an imposed, virtual one, which brings the activity one more step closer to larp (Dukes, 2001).

Many of the siblings of larp²³ have at least as one of their roots in psychodrama, which is a form of therapeutic role-playing developed by Jacob. L. Moreno. In it, people act out scenes in order to benefit from that dramatic self-expression (Moreno, 1953). The connection is openly admitted by scholars of larp (Morton, 2007), sadomasochism (Mains, 1984) as well as by practitioners of chaos magic (Hine, 1999). Some further developed forms of psychodrama, such as bibliodrama (the study of Biblical passages by way of role-play; see Condon, 2007 and Räisänen, 2008, for examples) is basically strongly directed (being both allotelic, i.e. done for an external purpose, and allopoietic, controlled/ordered from the outside) educational larp (as described by, for example, Henriksen, 2009), done under another moniker. The same goes for role-playing versions of scenario planning sessions (Van der

²¹ Note that this is an umbrella classification I have borrowed from other researchers of magic (e.g. Evans, 2007). Its usage does not in any way mean that the practitioners would necessarily identify themselves as users of "post-modern" magic.

²² As noted in Article Five, the accepted potential fictionality is what sets such practices apart from possession in religions such as voodoo.

²³ Note that the ones presented here are just obvious example cases. Many others also exist, such as improvisational dance, role-play used by social psychologists, contact improv, Boal's "Theatre of the Oppressed", and so forth with various levels of similarity. See Montola, Stenros & Waern (2009), Stark (2012) and Blatner (Ed.; 2007) for good examples.

Heijden, 2004) and role-played military training exercises (Laakso, 2005; Hjalmarsson, 2011).

Live-action role-playing of course also shares a lot of commonalities with role-playing games performed on other platforms, such as digital and tabletop (pen & paper) role-playing (Tresca, 2011). All these adhere to the basic role-playing processes described by Montola (2008). The social contracts they rely on, especially regarding information behavior, are quite different, however (see S. Adams, 2009, for an example on information behavior in and relating to MMORPGs, and the way it tends to break the illusionary reality of play). Digital games can also be re-played to a great extent, in at least most cases (Waern, 2011), so they are not as ephemeral as larps, even if the exact play sequence each time is. A re-played larp, in contrast, is always very different, even with the same players, unless the players decide to follow the first run as a script. That, however, would make the second run a performative piece, no longer a larp (see Montola, 2012a, on the effect of ephemerality on studying and documenting various game types). All this, combined with the lack of physical performance in them, leaves them for the most part outside the scope of this dissertation. Given, however, that much of the literature on role-playing games discusses digital role-playing or tabletop instead of larps or larping, they are discussed at relevant points, when lessons from them also apply to live-action.

Figure 1, quoted from Article Three, illustrates how example types of pretence, proximity and/or pervasive games (PGs), such as larps, alternate reality games (ARGs) which one plays amidst mundane life, and children's pretence play - differ in terms of cognitive engagement, authoritative constraint and the way they are distributed spatio-temporally.

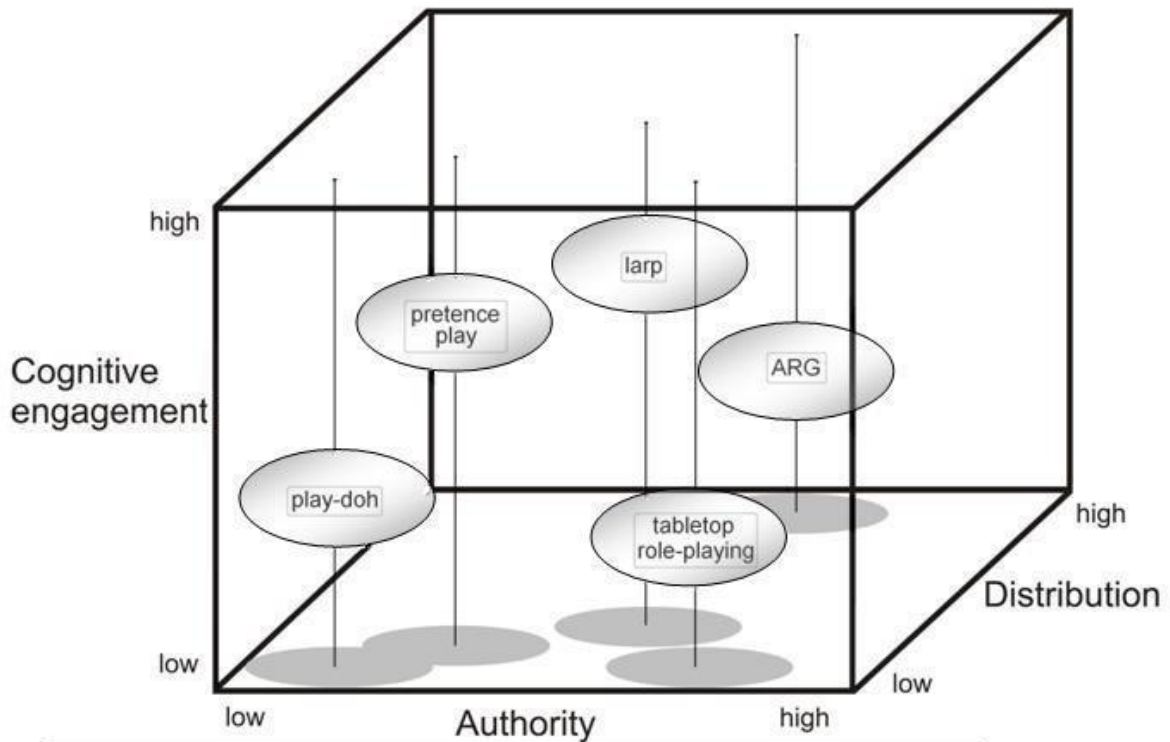


Fig. 1: Continuum of different PGs and other games as functions of authoritative constraint, cognitive engagement and distribution across time and place.

The field of pretence play itself, even inside the umbrellas of larp and larping, is very broad. One cannot necessarily extrapolate from one local play culture to the next (Article Two; White, Harviainen & Boss, 2012). Many researchers, particularly those from outside the larping communities, do however try (see Falk & Davenport, 2004, for an example). An isolated single-run larp like PRAYERS ON A PORCELAIN ALTAR²⁴ is furthermore very different from pervasive larps, which intentionally blend real life and larping (see Montola, Stenros & Waern, 2009, for details on pervasive larps). In the latter, the isolation of the game-as-system is traded for an interpretative framework that is shared between the participants, as anything can potentially be a part of the game, and the game integrates real-world content and information sources into its fiction (Article One).²⁵

²⁴ PRAYERS is a larp about ten applicants to a theater academy, waking up after a night of heavy drinking and trying to find out what happened the night before, while insulting each other. It has next to no game mechanics, and optimally runs for about 1½ hours (see Harviainen, 2011, for more details).

²⁵ In such cases, the game loses its nature as a unique information system, and becomes more or less a variation of normal-life information practices, just applied in a ludic context (Article One).

One key attraction of physical types of pretence play is that they all appear to offer the penultimate "mimetic interface" for playing games and performing game-like pretence activities: actual physical presence within what is taking place. This means they go a significant step further than video game systems such as Nintendo Wii, the appeal of which, as noted by Juul (2010), appears to be to a great extent based on the familiarity and physicality of the play. Likewise, they offer a sense of "being within the work of art" far more total than what Tavinor (2009) claims of video games. Their required competence levels are not the same as for real activities, in many cases, even if they are more realistic than that of mimetic-interface video games which share this trait (as per Juul, 2010) - hitting with a foam sword is not the same as using a real steel blade, and it is far less lethal. On the downside, many larps do not share the easy-entry quality or low time requirement of mimetic-interface video games, making them thus less appealing for many potential players.

An issue that needs further discussion is that not all roles in pretence are equal. So-called non-player characters (NPCs) are characters that are at least somewhat controlled by the game masters, regardless of the game type.²⁶ In a digital game, the computer handles running them. In tabletop role-playing they are the purview of the game master (or, occasionally, played by someone else), and in a larp they have specifically instructed players who tend to have less freedom of action than others do (Bowman, 2010). NPCs may function as information seeking incentives, information sources, or both. In library and information science terms, they are system-internal incentives and retrieval sources.

Case Example 1: An American Fantasy Larp

Excerpts from Mark Mensch's report of attending one episode of the American larp campaign PROPHECY II, posted on the larpa-gen mailing list on April 3rd, 2007 (used here with the author's permission), illustrate a rather typical, quite refined fantasy larp. These kinds of larps are particularly popular in the United States, the United Kingdom, and Germany, but are played all around the world (see Balzer, 2009 and Stark, 2012, for examples).

²⁶ Similar characters also exist in for instance psychodrama and bibliodrama, but under different monikers (see Moreno, 1953, and Räisänen, 2008, for examples).

So, I went out to my friend's game, Prophecy II, the weekend of April 1st. It was a long haul [... b]ut as I crested the hill at Ye Olde Commons, my expectations were already exceeded.

Let us start there. The grounds are fantastic! On a large plot of land owned by a LARPer himself, the Ye Olde Commons is everything a LARP would want. It has a large tavern (complete with kitchen staff), a good sized module building with lots of walls and other props to fit the situation, a half dozen period looking cabins for players to sleep in, a large forested area with plenty of paths as well as a scattering of more buildings to use for your event. Like I said, it is amazing. [...]

I arrive as a new player but as an (very) old LARPer. After the initial hello with my friend I hadn't seen in over a decade, check in starts. This is the first thing that players get to experience about a game and believe it or not, how it is handled does leave an impression on people. The first table did a quick check on my payments (all done via PayPal) and then, after a quick weapons inspection, I was whisked off to the next table. There, the person printed out my character sheet and checked to make sure I had all my starting gear. As it turned out, they didn't have my money for me but I wasn't worried. Things were running smoothly. I went with another player who needed to get his starting trade skill supplies. [...]

Now came the pre-game meeting. The owner went through a quick list of items, a new special maneuver that would take place in the game, what are the do's and don'ts of LARPing, etc. It was handled quickly and without any real interruptions. Again, a speedy process. During this time, I was given my starting money and another pre-game item I was assigned and then the game was on, I believe only a half hour behind schedule and that was only because the owners wanted to wait for a couple of pre-regged people to show up.

[About 20 minutes after the game started, a] NPC²⁷ showed up and took us across the field and began to lead us through the trails at night. We all met up on the road to the setting and were helping the local baker get back to her town. Well lo and behold if not along the way we run into a `damsel' in distress being hunted down by five ugly brutes. After a bad fight with one of our party going down, the damsel turned out to be one of the `fish people' that were trying to start an alliance with the townspeople. She handed me a small birdcage with a stuffed toy octopus. I was told that it was a baby kracken and I was to keep it safe until another of her kind came for it.

So, less than 10 minutes into the game, less than 2 hours from when I walked into the building for check-in, I was part of what seemed to be a major plotline. Rather good there. Usually you have to follow around the more powerful players for a bit to be `invited' into things. This thrust us right into the heart of things and made us important for the old players to come interact with us. Bravo.

²⁷ A non-player character, a character whose presence is supposed to assist the play of others, and whose actions are at least somewhat pre-scripted or controlled by the organizers.

Oh, and I noticed these pieces of paper attached to the kracken. They were folded and on the outside it said 'nature's voices'. There are skills in game, such as Nature's Voices, Second Sight, etc. that allow you to read what is in those pieces of paper – to glean special knowledge. [...]

The combat system in Prophecy II is rather deadly. Average people have around 5 hit points (including armor) and I don't think anyone has above 10. Every weapon does minimum of 1 point and can do upwards of 3 with special maneuvers. This means combat is quick, lethal and therefore something that is taken with great care. Likewise, healing can be just as tricky from simple bandaging to requiring all out surgery. If you enjoy a bit of grit to your game, this is the stuff. [...]

The alchemy system in Prophecy II is THE best trade skill system I have ever seen. Period. Between the myriad of components that can be found (probably in upwards of 50), the various combinations thereof can create different effects and they even allow you to 'experiment' with things. For example, you know that hollyroot heals and that devil's weed can be turned into a potent poison. Well, even if you don't have such a recipe, you can mix the hollyroot with the devil's weed and hope to make a potion that will cure poison. At least that is what I was getting. It is much more involved than that but as I was not an alchemist, I didn't spend much time on it.

Then, a gaggle of nobility arrived. Apparently there is an ongoing contest as to who will become the new baron of the land and this time it was a contest of negotiation – who could be the best negotiator. I wanted in on it as I love to negotiate but just as things got started, bandits arrived at the front door along with an ugly Cyclops and I was needed to help defend the place. Again, the fighting was intense, especially with the Cyclops. Apparently, they are all but immune to weapon blows UNLESS you can hit them under the arms. Luckily cyclopean combat requires you to raise your weapon high with two hands so after some time, we could bring him down. The raid continued though until almost the end of the contest – at which point the nobles left and the raiding stopped.

Now here is something that doesn't happen in many games. The attack upon the town had a solid, visible purpose. The bandits wanted to try and kill all the nobles in one place, thereby keeping the land without rule and keep their bandit actions free of organized reprisal. Too often attacks have no meaning other than to give the players something to swing at or something a bit weak as a band of monsters looking for food. Whenever I picked up my weapon, I always knew why and what was at stake. [...]

I was lucky and had one of my 'free deaths' available (you are given 3 in order to get accustomed to their playstyle) so I just popped back. Apparently if I don't have one, the powers that be called the Nym will look over your deeds, see how you died and then decide if they'll send you back to life and how. I didn't get to see that happen so I can't comment on it.

Oh, the Nym. This is such a good idea for a LARP. They are basically in game GM's – creatures that players can interact with and that have the power to do anything in the game. Need a divination?

Summon a Nym. Have a cave to explore for riches? Have a Nym be the recorder of your deeds. It is a great way to do things.

Double oh! As a quick note, I wanted to say that the players in the game did a great job of staying in character. I rarely heard an out of game comment and would really only get one when I would ask about the game itself. Yes, I was the cause of many breeches of character –damn my curious nature. [...]

As we escape, the game is called and we head back for the post wrap up. I didn't stay around for cleanup as I had a flight to catch but by the time I was showered, dressed and packed, it appeared like it was 85% done. I bid my friend a good bye and headed back to the planes.

All in all, I would have to say that this was the best LARP I have ever played in. SomeLARPs do things better than this game but if you combine it all, Prophecy II is the best hands down.

It should be noted that while "fantasy" in role-playing contexts usually - as in the example above - points towards orcs, elves, and running-in-the-woods, the concept is much wider. As noted by Whitton (2009):

[Fantasy] is the element of make-believe underlying a game, including the creation of a fictional gaming environment, the narrative that holds together the action and the characters that inhabit the game world. (Whitton, 2009, p. 24)

A fantasy location can therefore also be a mundane place, where something fictional is left for the players' imaginations. This is sufficient to transform the area into a fictional, imposed space (as per Aarseth, 2001).

Analyzed from a library and information science perspective, Mensch' comprehensive report offers various points of interest, the likes of which will be discussed in the later parts of this dissertation:

The location of play is relatively isolated. This prevents unwelcome information from disturbing play and from requiring additional re-signification. The players have character sheets, which list their character's traits, equipment, histories and personalities. From these, each player creates a subject representation, the character he will play. Characters are

provided with skill supplies, i.e. tradable or symbolic representations of a character's abilities, such as merchandise. A pre-game meeting is organized to prepare for the play. There is plenty of plot information, which includes both given material as well as expectations on "the usual". Some system information, attached to the baby kracken, guides both actions and re-signification. Game mechanics and system information, including rules, are described on issues such as hit points and alchemy. Of special interest are the Nym, which are highly powerful sources of information within the game's framework, and thus allow players to bypass many information gaps. Strategic information is also present, in forms including the cyclops' armpits and the bandit plot, functioning as a motivation for action. Mensch reports an immersive feel from other players staying in character, and breaches caused by his own information seeking. There is also an example of a large in-game information seeking task, the plague quest. All of these elements can be analyzed as parts of the information system that the PROPHECY II larp too is.

When looking at both larps and their siblings, it is imperative to note that nothing prevents a person from clandestinely performing one inside the apparent framework of the other. Nothing, beyond the social contract, prevents someone from larping his persona inside a re-enactment event, up to an including almost total immersion (Article Five). Likewise, a re-enactor may treat a historical larp as re-enactment, putting low emphasis on character integrity and high on historical delays. Without communal acceptance on what may and should be done (as per Heliö, 2004), however, the main activity remains within the framework it was designated with, and the alternatively playing participant is an exception. Larping at its most obvious, too, may take place outside larps. This is exemplified by pre-larp workshops, like those described by Mensch above, done to prepare players to take part in the main event and to ease becoming the character for the duration of the actual larp (Bruun, 2011).

2.2 CHARACTER INTEGRITY AND THE QUESTION OF IMMERSION

A key question to defining character integrity and the play experience itself is the elusive concept of "immersion", and it ties directly to the way players appropriate information as knowledge and fill in unavoidable information gaps during play (Harviainen, 2006b). Such

gaps are inevitable, as knowledge of a world can never be complete (P. Wilson, 1977)²⁸, and in an artificial world, facing that fact is even more common. The emphasis one places on staying in character affects his or information seeking very much, as nothing except the social contract (and pressure) and the personal desire to stay in character prevents him from seeking answers outside the game fiction (Article One).

Immersion is typically, but not always, used as vernacular for the phenomenon of a player (possibly) having the character as his or her primary identity during play (see Pohjola, 1999, for an example). This is very much alike what Stanislavski (2010) calls "experiencing a role" (*pereživanije*), i.e. the creation of a human life for an actor's role, by experiencing it also internally, in a "lived experience". Asking players, however, about their state of mind and identity during role-play is as difficult as inquiring about religious experiences: The situation may be very real to the believer, but describing to others is next to impossible (see Lawson & McCauley, 1990, on describing religious experiences). In an earlier work (Harviainen, 2006b) I have therefore utilized tools from the psychology of religion to examine immersion experiences and preferences amongst live-action role-players. The results, while not sufficient without further research, pointed towards immersion as a key factor in determining the probable information behavior of players during role-play.

On some level, pretence, and thus immersion, is contrary to game rules, because those very rules point out that the activity is not real:

[E]ach time that play consists in imitating life, the player on the one hand lacks knowledge of how to invent and follow the rules that do not exist in reality, and on the other hand the game is accompanied by the knowledge that the required behavior is pretense, or simple mimicry. This awareness of the basic unreality of the assumed behavior is separate from real life and from the arbitrary legislation that defines other games. The equivalence is so precise that the one who breaks up a game, the one who denounces the absurdity of the rules, now becomes the one who breaks the spell, who brutally refuses to acquiesce in the proposed illusion, who reminds the boy that he is not really a detective, pirate, horse, or submarine, or reminds the little girl that she is not rocking a real baby or serving a real meal to real ladies on her miniature dishes.

Thus games are not ruled and make-believe. Rather, they are ruled or make-believe. (Caillois, 1961, pp. 8-9.)

²⁸ For the sake of clarity, referenced authors with the same last names (e.g. Wilson) have their initials included throughout this dissertation.

Caillois, however, seems to disregard that different sorts of game rules exist, not all of the explicit, and that, as pointed out by Piaget (1962), games are essentially a form of play that has formal rules. The dissonance he mentions is nevertheless real, and as showed in chapter 3.4, central to the question of games as information systems (see also Harviainen, 2006b).

Immersion is tied to concepts such as engrossment (Fine, 1983; Douglas & Hargadon, 2001), flow (Csíkszentmihályi, 1990) and arousal (Article Three; Article Six), yet is not exactly the same as any of them (Harviainen, 2006b). It is such an elusive issue that some theorists have suggested giving it up (see Holter, 2007, for an example). Furthermore, the community of play within which one participates in role-playing may have a significant impact on how one views immersive game experiences (White, Harviainen & Boss, 2012; see also Yee, 2005), and character-immersive play also exists as a potential goal in some siblings of larp, including certain types of acting (see Stanislavski, 2010, for an example).²⁹

In addition to issues of identity, immersion also ties into questions of primary levels of perception and the sense of being-there, issues typically studied within the concept of *presence* research and connected to concepts such as virtual realities and telepresence (see Turner & Turner, 2006, for an example). Presence can be seen as the sense of being there (e.g. Steuer, 1992) and experiential immediacy. In a larp, an immersed player's primary presence is within the game fiction, the diegesis, and game breaks are moments that move the presence outside the diegesis.³⁰

To address the issue of the in-game self, many theorists have attempted to define the essence of immersion. Several of those definitions have been based on general assumptions on the fluidity of social identity (see Hakkarainen & Stenros, 2003, for an example). Others use the very opposite, being ideological and experience-based, rather than scholarly, definitions of a

²⁹ Some of Stanislavski's (2010) *études* (etjud), which are small improvised acting exercises, are furthermore almost identical to mini-larps.

³⁰ Note, however, that whereas in a virtual reality or remote control situation, as commonly studied in presence research, the environment is visible but the physical body elsewhere, in a typical larp, the body is present but the environment has to be at least partially imagined. Some larp designers, known as the *360° illusion* (see Koljonen, 2007) school of thought, seek to eliminate this problem by making the entire game environment as perfect as possible. In my observation, sadomasochist role-play has a particularly well functioning sense of presence within its fiction, because of the visceral nature of the activity itself (see also Wetzstein et al., 1993).

nearly absolute state to be aspired for (see Pohjola, 1999, and also Pohjola, 2004, for a later amendment). Bowman (2010) fuses both approaches. Lukka (2011) seeks to differentiate between the fluid social role, yet to include that aspect as well, by suggesting that the playing role-playing role ("creative role") is an attempt at encompassing a whole person, not just a social aspect. This, in turn, creates its own problems, as not all creative roles are whole personalities (see Article Four for an example). For others, such as Harding (2007), what matters is a change of perspective: The play-world becomes the primary referent for the player/character, instead of the real world (Lappi, 2007; Balzer, 2010). As far as the level of "naturalness" is concerned, they act, as characters, in the same way inside the fictional reality of the TTZ, as they would as normal persons outside it (Balzer, 2011). In immersion, the ease of the activity becomes that of similar mundane activities would be to a person like the character. In contrast, players who prefer strong narratives over immersive play may intentionally "over-act" (to emphasize, for example, a character's death) instead of seeking the naturalness of action (Stark, 2012).

To explain differences in game engrossment, researchers of role-playing done in various forms have suggested different types of immersion. My own model (Harviainen, 2003) used three levels, character immersion, narrative immersion, and reality immersion, and explained play behavior through their various combinations (see also Harviainen, 2006b). Ermi and Mäyrä (2005) speak of sensory, challenge-based and imaginative immersion, the last of which incorporates all three of my categories (see also Hopeametsä, 2008). Cover (2010), in turn, uses four immersions, three of which (temporal, spatial and emotional) are directed towards diegetic elements, and the fourth (social) towards other players.³¹ Ernest Adams (2004), in discussing virtual reality, splits immersive experiences to tactical (moment-to-moment), strategic (cerebral challenges) and narrative immersion. The first two can on one hand be seen as specified facets of Harviainen's (2003) character immersion category, on the other as Ermi and Mäyrä's (2005) sensory and challenge-based immersions. For Cashman (2010), the variations are even more numerous. As this illustrates, the situation of definitions is extremely complex.

³¹ Most immersion theorists referenced here would not consider the last of these as immersion at all, which reflects the fact that unlike many of the others listed, Cover's work has apparently been done without studying the corpus of immersion research done before it.

Some seek to “become” the character as much as possible, some treat it as a social identity similar to the way a “home” self may be different from a “workplace” self. And some either blend the two, or appear to have them as “interlaced wholes”. The relationship is not stable, and players experience “bleed”, a leakage of information and emotions between the character and the player [Montola 2010], to either direction. (Article Five)³²

Calleja (2011, pp. 32-33) lists four key challenges to the gaining a clear understanding of immersion: “*Immersion as absorption versus immersion as transportation.*”, i.e. that no consensus exists on whether immersion means general involvement in the medium or the sense of one’s perception being transported inside the play-frame; “*Immersion in non-ergodic media*”, i.e. a lack of knowing the potentially immersive specifics of each medium (an argument well countered by, for example, the multi-platform liminality research presented in section 4.1); “*Technological determinism*”, the fact that a fiction-representation system’s realism (e.g. a larger, better TV screen) does not guarantee better immersion (something potentially true as far as digital games are concerned, but rather absurd in the context of larp); and “*Monolithic perspectives on immersion*”, which, according to Calleja, means that immersion is an experiential facet which cannot be unified and measured, which according to him is a bad thing.

While Calleja’s concepts aptly describe the issue in digital games, they do not necessarily function in the context of other kinds of games. The last of the “key challenges”, especially, cannot sustain the light of day in its expressed form beyond Calleja’s target of commercial digital games: As noted by Jørgensen (2012) and Harviainen (2006b), ignoring players’ own reports of their immersive experiences is a drastic oversight, which leads to unsubstantiated conclusions. That a unified theory of player experiences cannot be formed has been noted as a symptom of the state of the current research a long time ago: For example, as Klabbers (2003) well notes, we cannot gauge the results of games (for learning, yet the principle is adaptable much further), since we are currently lacking a reliable epistemology for such measurement.

Typically, the more a player favors character-immersive game experiences, the less likely he is to seek information from outside the play’s fictional reality. Such players avoid gaps as far

³² I is furthermore worth noting that without a subject-defining context around it, this quote could just as well describe variances in stage-acting rather than immersion. The borderlines indeed blur.

as possible, often inventing missing material so as to minimize damage to the integrity of the TTZ and their own immersion (Harviainen, 2006b). Immersion is, in a way, maximal dependency on the fiction inside the TTZ and the transfer of one's primary presence there. A role-playing character's *Dasein* (a person's summary existence in the historical continuity; as per Heidegger, 1927) is an artificial one in many of its facets, as that fictional character relates to its fictional world, not that of the player. This does not, however, mean that it has to be analyzed or interpreted solely on game-fiction entrenched terms (Article Two).

The concept of immersion is not only tied to its discourse community, but also to the platform in question. The parlance of each gaming community strongly affects the way each community's participants describe their experiences of game engrossment (Article Two). Calleja (2011), in turn, offers an excellent example of how looking at just one type of games (in this case, digital) may result in misattribution of player experiences as far as the personal play experience is concerned, despite being accurate on its intended subject area. This issue also ties with "immersion skepticism", i.e. the phenomenon of denying others' depth of immersion, if not the existence of immersion itself (see Hakkarainen & Stenros, 2003, for an example). Very reliable grounds do again exist for such assumptions, but they are based on extrapolation from limited data (for a wider look at immersion and theories relating to it, see Torner & White, in press).

For the purposes of this dissertation, I define immersion as "*identification with one or more facets of the fictional reality of the TTZ, typically but not always including one's character, so strongly that the facet becomes one's primary frame of reference during parts or all of the activity.*"

2.3 ROLE-PLAYING NARRATIVES

Games consist of stories, narratives, that are properly perceived only in retrospect, but may be consciously constructed during play (Myers, 2010, p. 93). Narratives are event-action sequences by active agents, which are in their way "written", and can be later "read" (Ricoeur, 1988). Role-playing narratives are effectively centralized, focused forms of information behavior, and they exist heavily intertwined with immersion (character and other) issues (Article One; Harviainen, 2006b). When a player-character is sent on a quest, or

follows a pre-written motive, he or she is, in LIS terms, given a seeking task, which is potentially fulfilled by information behavior in interaction with other people or documents inside the closed system, i.e. game-space (Article One). The sole obvious exception to this are very blatant combat missions that require next to no information.

Role-playing narratives are not easy to construct. Players are not given ready scripts, just “story seeds” (*fabula*), from which potential narratives may or may not emerge (Fatland, 2005). In larps, *fabula* are any and all of the elements embedded in the game material, out of which players then construct their actual play events. Some of the *fabula* are intentionally included by the designers of the game, others may emerge unexpectedly.³³ Some *fabula* get realized as actual play, and some may not be utilized at all. Each player expects to have sufficient playing material, and wants to form a story of their own out of the game, hopefully intertwined with those of the others (J. Kim, 2004). Assisting the process is the fact that human beings tend to form narratives inevitably, as the brain makes them up (Gazzaniga, 1998). Yet it does so only in retrospect.

In a like fashion, sadomasochistic role-playing contains its own narrativity, which rises from similar *fabula* (see Siegel, 1995, on sadomasochistic narratives). Such scenarios arise from basic templates people have in mind, but evolve without a clear script (Alison et al., 2001), and they do not necessarily need any narrative template as a basis, as they inevitably construct their own (Weinberg, 1978). This seems to be an essential part of the action, as the transgressive uncertainty, combined with predictable safety, is part of the appeal of sadomasochist role-play (Brandhurst, 2011).

In order to design plots and narratives in advance, larp designers resort to various techniques, most of which can easily be combined. In countries where players write their own characters, such as Germany, the main plots tend to be pre-scripted and implemented regardless of player actions or goals (Balzer, 2009). This in no way prevents creativity or individual freedom for action. On the contrary, as shown by Bienia (2011), such plot structures can be very effectively used to facilitate both information seeking, as well as combat, based plots.

³³ Note that this use of the concept of *fabula* differs somewhat from that used in fields such as literary theory (e.g. Bal, 1997), as do the resulting stories.

In Nordic larps, the game masters usually design the characters, and embed in them various seeds and mechanics for narrative construction. This can be likened to Kaprow's (1966) concepts of Chance and Change art (Harviainen, 2008; 2010; see also Zimna, 2010 and Stenros, 2010). According to Kaprow (1966), Change artworks are designed to be altered by their audiences, or their environments, or both. Chance works, in turn, are literally left to chance, with the idea that when they end, whatever became of them is to be treated as the intended result of the process. Happenings and larps can be designed and analyzed in such a manner. For example, in what I call a Lehrskovian reduction, one takes the total events of a larp and condenses them into a singular story, to which can be attributed various interpretations in retrospect, and which is treated as the designers' original intent (see Lehrskov, 2007, for details).

In addition to leaving works to chance (or Chance), other options exist, on a line that goes from complete freedom to complete control ("railroading"). Players have clear preferences on these, preferences that do not always match. PRAYERS ON A PORCELAIN ALTAR is a good example on this: for some players, it is too open and thus empty of narrative drive, for some, one game element (the presence of blood on sheets) is such a strong incentive that they try railroading the game to focus on that. Most players, however, seem to seek a path between the boredom of inaction and the drive of focused seeking. Designers use various methods to convince players that they have both freedom and clear goals (see Harviainen, 2005a; 2005b, for examples).

Larp systems are shrinkable to narratives (Heliö, 2004; Article Two; see also Bienia, 2011 and Timplalex, 2011). Plots either close or open other plots (i.e. either restrict or motivate new information seeking) when they are resolved. To manipulate such processes for maximal satisfaction (or for learning goals), designers apply tailored tools that drive plots - and, as a result, information behavior. Fateplay, for example, consists of interwoven rules that have to be followed (Fatland, 2005). An example would be "When you exit the hospital, hand the first person you see this rose" given to one character, and "You will stand next to the front door of the hospital at noon". These "fates" then create a web of events, a plot.

Westlund (2004), in turn, recommends that if one wants characters to support a central plotline, their smaller personal plots should be tailored to reflect and support that.³⁴

Westlund's idea emphasizes the fact that if the plot is too strongly directed, players will think their actions have no significance, and will thus not enjoy the game. This is because, as stated earlier, games are effective meaning-creation systems, the perceived narratives of which are truly formed only after they end (Myers, 2010, p. 93). After the larp, things are indeed often analyzed and explained with a diegesis-based logic, regardless of the original reasons for choices (Article Two). For example, a player who prefers making "epic" scenes to following character logic may during play ignore cause and effect, but explain the actions he took afterward with (misattributed) character reasoning. By doing so, he is creating a better-fitting personal narrative about the game for himself.

In extended digital role-playing, issues of play balance tend to take precedence over narrative, as players are "inequality averse" (Myers, 2010, pp. 122-123). In larps, inequality aversion is not as drastic. In competitive play cultures, some players will clamor for it, but the artistic nature of Nordic larp (see Stenros, 2010) makes it rare in those circles. Digital role-playing also differs from larp narrative-wise in that in it is common to list meta-level reasons as the primary causes of game decisions (Yee, 2006).

Of an extra note are advance narratives. An example of such are the so-called "strategic narratives" of corporations and individuals, used as the bases of scenario planning. They represent estimates of how things would likely progress from a given starting point, especially if no conscious alterations are made (Van der Heijden, 2004).

2.4 LUDIC AWARENESS AND THE SERIOUSNESS OF SERIOUS LEISURE

A further factor, the question of "winning" and its consequences, ties into questions of immersion and narratives. As noted by Juul (2010),

³⁴ Westlund's idea can also be reverse-engineered, to make almost sure no central plot can emerge.

[F]or every choice in a game, there are three different considerations you must weigh against each other. These are as follows:

- The *goal orientation question*. You want to win.
- The *game experience consideration*. You want the game to be fun and you know that this entails making sure there is uncertainty about the outcome. You may play a little badly in a multiplayer game in order to keep the game interesting.
- The *social management consideration*. When playing with other players, you desire management of the social situation. You know the outcome of the game may make certain players sad or happy. You know the outcome of the game may influence your social standing and the social dynamic of the group. (Juil, 2010, pp. 126-127.)

Likewise, Lainema & Saarinen (2009) and Harviainen, Lainema & Saarinen (2012) describe real-time business simulations as immersive, meaningful and motivating, yet competitive. Things are not so simple in live-action role-playing, however. First of all, some play cultures are downright hostile to the idea of "trying to win" (Harviainen, 2006b).³⁵ Many larps are by nature non-winnable, and some even non-competitive, even if they are based on conflict (Pegg, 2011). Second, "fun" (or "entertainment") is not necessarily a significant factor in many games, even if arousal and engrossment are (Klabbers, 2009). As shown by Montola's (2011) interviewees, a larp can be extremely serious and disturbing, yet still be considered a worthwhile, interesting experience by its participants.

In general, many people devote a lot of time to pursuits that are normally seen as pastimes, yet taken very seriously by some of their participants. Stebbins (e.g. 2007) calls this "serious leisure". It is the "systematic pursuit of an amateur, hobbyist, or volunteer core activity that captivates the participant with its challenges and complexity" (Stebbins, 2009). Many larpers, re-enactors (Hunt, 2004; Vartiainen, 2010) and sadomasochists (Newmahr 2010; 2011) commit to their hobby-lifestyle on this level, making it for them a participatory medium (as per Jenkins, 2006; see also Harviainen, 2008; 2010, on larp as a medium) rather than just a hobby (see also Denward, 2011 and Articles Four and Five). The central study of such practices within the field of library and information science comes from Jenna Hartel (e.g. 2003; 2005; 2007), who examined gourmet cooks' information practices. A comparison of Hartel's research with that of Vartiainen (2010), Hunt (2004) and Newmahr (2010; 2011) shows that participants of pretence play activities engage in

³⁵ See also Myers (2008) for a digital example of competitive playing style in conflict with other players.

information seeking and distribution very much in the same style as do other practitioners of serious leisure. By doing so, they feed the “art of experience” (Pettersson, 2006) aspect of what they do. Given, however, that these processes take place outside the magic circle (the systems boundary of the fictional reality within which the participants act), in preparation for it, they are outside the purview of this dissertation.³⁶ While essentially an imaginary projection of the participants, it functions as a boundary for them, because the participants themselves form the whole of the system. The results of such information practices do, however, form a major part of the information brought inside the magic circle by players (as per Crookall, Oxford & Saunders, 1987; see also Ingwersen & Järvelin, 2005, on brought-with information),³⁷ and studying them would thus also contribute to further understanding the play experience itself as well.

³⁶ The concept of the magic circle comes originally from Huizinga (1939), but its more common uses stem from an appropriation by Salen & Zimmerman (2004). On debate on the concept, see for example Klabbers (2009), Calleja (in press) and Stenros (2012).

³⁷ As with the concept of the TTZ, I have chosen to apply, for consistency and clarity, Huizinga’s (1939) concept of the magic circle (later appropriated by Salen & Zimmerman, 2004) on referencing also works that do not use the particular term, yet clearly speak of the same phenomenon. For example, it is not used by Crookall, Oxford & Saunders in this particular 1987 article, but they refer to effects that amount to the same thing, when describing the importance of brought-with information.

3. METHODOLOGY: SYSTEMATIC AND TRAIT-DESCRIPTIVE ANALYSIS

To understand an author better than he understood himself is to unfold the revelatory power implicit in his discourse, beyond the limited horizon of his own existential situation. (Ricoeur, 1981, p. 191.)

In contributing to the call of contextually concerned information research (e.g. Hjørland & Albrechtsen, 1995), as my primary method, I use a technique called systematic analysis (Jolkkonen, 2007). It is a way of condensing the contents of documents, typically ideological or phenomenological ones, into their key essences (Article Five, see also Article Two). The results are then compared with each other, so as to create a holistic understanding. The method's key advantage is in *systemic immanence*, in that the subject is analyzed through its own contents and not outside criteria (Article Five). It, and the wider trait-descriptive analysis drawn from it, are a type of hermeneutics. The former resembles classical hermeneutics, in that it concerns texts (as per Jeanron, 1994). Its classical application is the analysis of religious texts, especially in the form of so-called "Old Man Research", distilling a thinker's opinions on a subject into a summary (Palmer, 1969). The latter, however, expands the approach to the wider sense of hermeneutics, which includes also phenomenology (Phillips, 2001). Bridging the two here is an idea from the semio-hermeneutical work of Paul Ricoeur, according to which any meaningful action can be seen as a "text", interpreted and subsequently appropriated or ignored by those observing it (Ricoeur, 1981). As Lloyd (2007) has observed, this is the way implicit learning takes place in cases of embodied knowledge transfer, being a form of information literacy. Given that sign-games and language-games derive from embodied systems (Brier, 2008), and live-action role-playing is by nature an embodied performance of sign-systems through a fictional role but by the physical player, this is a highly appropriate starting point for the study.

Applied on, for example, Bowman's *The Functions of Role-Playing Games* (2010), this method will produce "Bowman's opinion on certain facets of role-playing games", not direct data on role-playing games themselves. I have therefore expanded its use here, so as to provide sufficient information for the formation of theories of a more general use. For this purpose, I use three tools. The first of them is that the works which I analyze, my own included, have been drawn as much as possible from empiric works, preferably those that

have gone through as rigorous a peer review (in either a journal or by a dissertation review board) as possible. Examples of such include Fine's (1983) seminal ethnography on American tabletop role-players, Evans' (2007) dissertation surveys and interviews of British practitioners of post-modern magic and my own interviews and questionnaire surveys of Nordic larpers (Harviainen, 2006b). For LIS comparisons to them, I have likewise, whenever possible, used relevant empirical works, such as Baker (1996) and Todd (1999), and not solely metatheoretical material. In my opinion, the combination and comparison of such sources has been both a reliable and an extremely fruitful data base, which has a system of critique-through-comparisons mechanism built into it.

The second, which follows from this, is that I have consistently sought to draw material from several empirics-based sources on every issue, thus moving the method towards structural analysis, so as to avoid a bias build-up caused by my own pre-understanding on what is an especially good or necessary source (as per Article Two). Whenever possible, I have utilized more than one study. Selection of the sources has been continuous during the last six years. It was based on, as much as possible, the way and frequency of how the works are cited as reliable by other scholars, and the way their findings match with other existing research on the subject. In my opinion, my corpus of reference and source literature represents well both the scale of what research currently exists on role-playing, as well as its high end as far as quality is concerned.

The third is that I have, whenever possible, supplemented the sources with my own experiences from either experiments I have conducted on the subject at hand or phenomenographic observations from the field (on hermeneutics and multidisciplinary within game studies, see also Mäyrä, 2009). In cases where it appears that a role-playing theory or field observation does not apply outside its native play culture, it has been contextualized, if possible, or discarded as faulty, in cases where its original author has baselessly generalized from it (Article Two). It is my firm belief that the study of role-playing is currently too often conducted within just singular disciplines, in which the researchers too easily default to reading just their colleagues' interpretations of potentially relevant works, instead of the actual works themselves. In my opinion, such approaches are likely to create a methodological bias. I have therefore intentionally sought to combine sources from differing

disciplines, so as to show how looking beyond one's confines can lead to improved research results.

The last facet of the distillation is the examination of the ontological assumptions and beliefs embedded in each analyzed source, so that they really can be combined. In this, the fact that systematic analysis was first developed in order to study religious texts, particularly dogmatic treatises, helps immensely. I believe this set of processes creates a sufficient mass of reliability. My key aim with it is to display that by combining seemingly disparate things found by other researchers, while understanding their social and cultural contexts, we can find out more about role-playing phenomena, systems-wise and other, than we until so far have. This concerns both their primary findings as well as some "leftover data" which they mention but not actually use. The central difficulty in it, naturally, is seeing which corresponds to which. This dissertation therefore draws from my expertise in not only library and information science, but also game studies, philosophy, hermeneutics, the cognitive study of religion and some even more obscure fields. I see my work as that of being a secondary empiricist, in that I re-analyze the empirical work of others. I am, however, not free of bias - as is no analyst of larps (Harviainen, 2004).

Hermeneutics extensively discusses the questions of pre-understanding and meaning. When trying to understand a subject, we are always already using a set of pre-understandings (*Vorverständnis*) about it. Without those, we could not relate to the subject at hand at all, be it text or a phenomenon. They are necessary for initial approaches. The pre-understandings, however, also inevitably bias our view on the subject. As we learn more on what we study, the prejudices (benevolent, neutral and hostile) do not vanish, but rather get refined or consciously rejected. This phenomenon, combined with the way we have a need to understand wholes in context to their parts, and vice versa, forms what is called the Hermeneutic Circle (Jeanrond, 1997).

Likewise, "interpretation" is filled with, well, interpretations. The key question on it is whether an interpreter (reader, viewer, observer, etc.) can grasp the creator's "meaning" for the message, or if that is impossible (see Heidegger, 1927, Ricoeur, 1969; 1981, and Jeanrond, 1994, for examples). I follow Ricoeur's (1981, see also 1975 and 1988) basic idea that meanings are not transferable. The interpreter may make (even very good) assumptions

on the message content, but in essence it remains alien, and is appropriated into a suitable approximation (or inaccurate assumption) rather than transmitted. A know-how interpretation is easier than a know-why (D. H. Kim, 1993), which is why fictional environments support shared interpretation frames well. Their contexts are suitably limited and goal-oriented.

As Stanley (2010) notes, while separating themselves from phenomenology, several hermeneuticians and philosophers turned to "game" as a central concept. A game scholar (e.g. Suits, 1978) feels at unease when confronted with the game-descriptions of earlier thinkers. For example, many of Wittgenstein's "games" (Wittgenstein, 1953) would not count as games nowadays. Neither do their extensions - bio-systemic and not (see Brier, 2008) - either. The concept of "game" itself has become blurred (see Klabbers, 2009, for a prime attempt at resolution). Through the use of systematic analysis, in both its reduction-to-essences and analytic aspects, the concepts are made to fit each other again.

A triangulation combining seemingly disparate empirics and analyses in order to produce emergent new data requires an extensive knowledge of both the material available and the analytic tools being used. As stated in Article Two, I (as I think every role-playing hermeneutician should) follow Gadamer's validity principle on hermeneutics: If one is able to apply the theory to the subject at hand, using the best-seeming research at hand, and it indeed appears to explain the phenomenon, one has to call it valid until proven otherwise (Gadamer, 1972). In order to gauge said validity, I use a set of theory frameworks, matching the empiricists' results to current presumptions on how the described processes function. I follow the idea that an academic work should have a sufficient grounding, at least through meta-theory, in reliable empirics (normally observed and analyzed, but sometimes also a personally experienced phenomenon, reported analytically, counts at least as well; as per Husserl, 1977). When a conflict presents itself, I compare the involved works to already academically supported analyses, in order to see if the contested new work fits with the existing corpus. If it does not, I further analyze it so as to see if it offers something new or just conflicts with already existing research.

I have chosen to use Husserl as the guiding line for several reasons. In my opinion his combination of acknowledging the personal, embodied nature of all observations, while nevertheless striving for objectivity, is particularly appropriate for understanding situations of

physical pretence. Husserl furthermore defines experiences of space as defined by the lived body (*Leib*), which is essential to the lived experience (life-world, *Lebenswelt*), including perceptions (Husserl, 1970). For Husserl, spatial presence is an "absolute here", the being with one's body in a particular place, in relation to others (Husserl, 1931, p. 249). Through the application of these limits pointed out by Husserl, and his call for objectivity through them, I believe I can explain the phenomena I discuss particularly appropriately.³⁸

The most central of set of frameworks I use is the theory of information selectively appropriated as knowledge. On this, I combine ideas from especially Paul Ricoeur (1969; 1975; 1981), Bertram C. Brookes (1980) and Ross J. Todd (1999), so as to build a bridge from semio-hermeneutic thought to practical experiments in the holistic cognitive paradigm of library and information and information science (see Grešková, 2006, for a general description). I, disagreeing with Myers (2010), believe that hermeneutics is a very suitable tool for understanding cognitive processes and not just social and cultural contexts. On defining the information environment of play, as both a re-signification zone and as a pseudo-self-contained system, I draw from sources as varied as the sign philosophy of Gilles Deleuze and Felix Guattari (1980) and Kristian Bankov (2008), ritual studies conducted by Harvey Whitehouse (1995; 1996) and Robert N. McCauley and E. Thomas Lawson (e.g. 2002), and organizational and information systems theory by especially Michael Buckland (e.g. 1991).

First and foremost, however, this is a work of library and information science. My guiding light in it has, along with Ricoeur, been the work of Patrick Wilson (1973; 1977; 1983), which concerns multiple areas of key interest to the study of special circumstances in information behavior: The effects of incomplete world knowledge, reliance on potentially unreliable information sources who simply appear more credible (or convenient) than others, and so forth. Of very high significance are also theories of variety in the states of information needs and reception, as they seem to explain certain facets of ritualistic phenomena rather accurately. Of those, I have particularly used ideas by Carol C. Kuhthau (2004), Nicholas J. Belkin (e.g. 1980) and Lynda M. Baker (1996).

³⁸ I furthermore find Husserl's idea of the bodily "absolute here" to be more applicable to larping than, say, Merleau-Ponty's (1962) view where emplacement requires embodiment, which I think rather problematic in the case of virtual and imagined spaces.

In all this, I believe I am still following the call to objective phenomenology expressed by Edmund Husserl (1977; see also Reeder, 2010), despite the mediated nature of the data, and utilizing Brier's (2008) idea of expanding it with semiotics. This is what trait-descriptive analysis is all about, after all: Describing the phenomenon at hand, including its central interpretations. For this dissertation, that descriptive goal invokes its primary research question:

“What are the essential information systems traits of live-action role-playing situations, and how do those traits affect information behavior during play?”

This question is in turn reflected by the research questions of the individual articles, each of which concentrates in one or more of these traits. In Article One, it is “What is the information system structure of live-action role-playing?” In Article Two, “How does information appropriation take place in role-playing?” In Articles Three and Six, I ask “Through what social and information processes is the illusory reality of role-playing maintained?”, and in Four and Five, “What exactly counts as larping, why, and what as a result can we understand of its systemic properties?” Together such facets answer my main question, by showing both the systemic structure of live-action role-playing, as well as what sort of phenomena can be considered to exist within that concept.

Before the actual analysis of the traits, however, it is imperative to give a further look to the sources and frameworks which this dissertation uses, so as to address the problems expressed above to a sufficient level.

3.0.1 Role-playing as a subject of academic study: Some additional considerations

This book, as well as the articles which form it, draws heavily on material from a set of volumes known collectively as "Knutepunkt books". They are collections of articles and essays published in conjunction with the Nordic larp event, organized annually since 1997,

which changes name according to the country in which it takes place.³⁹ Excluding the academic book of 2011 (Henriksen et al, eds., 2011), they are not peer reviewed works, although sections of some (particularly *Playground Worlds*, Montola & Stenros, eds., 2008) certainly count as having gone through an editorial review no less rigorous than that of a conference proceedings book. The Knutepunkt books nevertheless represent the core of the corpus on live-action role-playing, in both theory and especially field documentation, and while semi-academic works per se, their key contributions (e.g. Fatland, 2005; Lopenen & Montola, 2004) are considered by researchers to be on par with, or even superior to, many refereed papers on larp. I have therefore treated them in a manner similar to academic conference proceedings papers. In cases where such a source is not an academic work, being rather ideological and/or design-oriented (e.g. the immersion-theory seminal Pohjola, 1999), I have marked it as such.

Similarly, some of the other key works within the field of game studies are not actually academic per se. Instead, they are design literature, and while their viewpoint and reference system may come close to academia, their intended purpose is different. A key example of this is the seminal *Rules of play: Game design fundamentals* (Salen & Zimmerman, 2004). It is the most central of academic game studies' books, but its goal is to explain and improve design, not to do research. This on one hand affects their value as references, but on the other hand, the very fact that they deal with practical observations from the field often makes them suitable sources for my type of research.

It furthermore is worthy of note that the study of non-digital role-playing also carries with itself a stigma of default non-acceptance: On one side, some practitioners may sometimes be outright hostile towards anyone seen as claiming "authority" over the subject, and have been known to dismiss any academic work on the subject as just pandering one's hobby for some academic credit, regardless of their own academic training.⁴⁰ On the other, certain academics have been documented as seeing any such work as just an apology of the hobby, dismissing

³⁹ The event, the name of which means "Nodal Point" in English, was established in Norway, and is by default as a general phenomenon, and when taking place in Norway, called "Knutepunkt". When organized in Sweden, it is "Knutpunkt", in Denmark "Knudepunkt" and in Finland "Solmukohta".

⁴⁰ For an example relating to this dissertation, see <http://www.kingdomsofnovitas.net/forums/index.php?showtopic=5292>

such works as pseudo-science or "undergraduate-level work" regardless of publication level (see Saklofske, 2011, for an example).

The situation goes beyond just bias, however. At the present state of role-playing research, it is quite difficult to obtain reviewers sufficiently skilled in both the subject matter and the methods and paradigms used to study them. Therefore, review processes on the study of role-playing tend now and then to be wobbly at best - though certainly not always - as professionals judge the works based on their own pre-expectations as regards to their disciplinary background. To combat this, some academic works on role-playing have within the last few years started using a system where they employ at least one expert reviewer from both categories, preferably more, so as to ascertain that the research is sufficiently strong on both sides (see Henriksen et al., eds, 2011, for an example). This is, however, still rare.

Such a review rarely helps with outsider reception, though, as few readers are sufficiently versed in either, being tied up to either their own academic or scientific paradigms, or their particular interpretations of the hobby. Relatively few larpers, for instance, have a chance to see larps outside of their own country, which influences what they think can (or should) be said about the phenomenon. The system does, however, have the advantage of weeding out at least some academically weak works, as well as those that are methodologically very solid, yet generalize too much from one local play group's habits (see Falk & Davenport, 2004, for an example of the latter).

One field that has taken the study of role-playing very seriously from early on is the study of educational simulations and games (see Crookall, Oxford & Saunders, 1987, for a seminal example). Not only has this contributed significantly to the way educational sciences have recently accepted role-playing games as something worth studying⁴¹, but also produced decades of peer-reviewed research on role-playing scenarios intentionally constructed as learning tools. The journal *Simulation/Gaming*, continuously published since March 1970, stands as a clear testament to this. Such scenarios have used role-playing as a teaching tool, on both the personal level (see Schick, 2008, for an example) as well as on an organizational scale.

⁴¹ For example, at the time I am writing this dissertation, over one half of all Finnish masters' theses discussing role-playing have been done within the educational sciences' umbrella.

For this dissertation the latter is of particular importance, as from that direction originates the use of systemic thinking used to understand role-playing processes as information systems. While many of the key texts of that area do not discuss role-playing per se, they can be directly applied to it as well, given their inclusion of tools such as social "microworlds" or "learning labs" (see D. H. Kim, 1993, for an example) and the existence of other works that breach the apparent gap with no difficulty (Crookall, Oxford & Saunders, 1987). PRAYERS ON THE PORCELAIN ALTAR, described as an example below, is a project devoted to exploring that idea via games (see Harviainen, 2011).

3.1 SYSTEMIC THINKING

Systemic thinking is a framework used in fields such as organization learning theory, to explain influence processes, the parts of which are often invisible to people involved in them (Senge, 2006). It is way of seeing interconnections, feedback cycles and recursions in a situation that may at first appear linear. Its purpose is to show how decisions affect other decisions inside a larger framework, which is usually outside the perspective of its members. The approach is closely tied to the concept of mental models, i.e. thought-patterns and habits that offer useful predictability, but prevent adaptivity (D. H. Kim, 1993). Games are an excellent tool for re-assessing and, if necessary, breaking them (Senge, 2006). Without systemic thinking, companies and organizations tend to resort to reacting to short-term feedback (D. H. Kim, 1993; see also Cyert & March, 1963).

Systemic thinking is a natural fit with hermeneutical methods, as many of its roots come from authors who have worked with both (see Schön, 1983, for an example). Systemic structures organize themselves by internal sign-structures (Brier, 2008), which can be organized from within the system (autopoiesis) or outside it (allopoiesis), processes which are explained below. If one influences a system, one is a part of it, even if not inside the system proper (Senge, 2006).

"Information systems", as a concept, normally concerns *information-supplying systems*, i.e. systems that retrieve potentially informative things, usually documents of some kind. In a broader sense the same concept can be used to denote *systems that inform*, networks where

people become informed, with suitable access to information and the willingness to accept it (Buckland, 1991). Regardless of system type, they are not technical, but social systems, and must be developed within a social and organizational context (Hirschheim, 1985). A systemic view, however, goes still deeper: Through it, it is possible to perceive certain situations - especially liminal ones, with their own supposed realities - as trying to be *self-contained information systems*, with their own rules and laws for information inside them (Article One). Such systems, in larp, present the illusion of self-sufficiency, yet are not in truth normally so (Articles One and Three; Harviainen, 2006b).

As noted by Buckland (1991, p. 181), "*Beliefs, values, alternative sources of information, and the resources with which to provide information all derive from the external environment.*" They are always present in information environments (the sums of situational and/or local factors affecting the seeking, searching, appropriation, distribution and use of information or systems in that particular situation or location; Article Six), being brought in by the participants to even systems that appear isolated (Ingwersen & Järvelin, 2005). In the case of game systems, this is also necessary for the game's ability to function at all (Crookall, Oxford & Saunders, 1987). Games have to rely on such tacit knowledge (Klabbers, 2009).

Liminal systems are always social systems. They seek by nature autopoiesis (i.e. existence as systems that produce their own limits and organizations, by producing the elements of which they consist; Maturana & Varela, 1980), so as to preserve their existence as well as enable new possible forms of interaction (Harviainen, in review). This is because the participants are present there for that very illusion (Article Three), even in situations where they may believe everything to be real (Lieberoth & Harviainen, in press).⁴² Virtual or fictional items and concepts may have real value to the participants, value that sometimes can also be expressed in monetary terms outside of play (Castronova, 2005; Lehdonvirta, 2009). This matches with Luhmann's (1990) assertion that autopoietic systems are sovereign with respects to identities and differences, yet rely on the material world which they cannot create, and thus presuppose other levels of reality outside the self-referential autopoietic system. In larp, the autopoietic

⁴² Given the incompatibility of religious dogmas with one another and the invisible nature of supposed transcendental forces and entities present in them, this dissertation treats them in general as illusion-related situations of 'acting as if it were real' (as per Lawson & McCauley, 1990). This is not to be read as a declaration of all religious experiences being illusory.

qualities arise as emergent properties of the game material, including implicit assumptions about play.

To accept the limits of the self-referential system is to gain new rewards for it, which is why positive participant commitment fuels that of everyone else, and theirs, in turn, the originator's (Article Six). Participants refer to each other as members of that system, share the framing of its boundaries, and constantly construct and re-construct the system, their collective network (Klabbers, 2009). This is regardless of the fact that the system is not completely self-referential, as explained in 4.4 below, as participants subtly access information sources outside it, as well as sometimes invent it themselves (Article One). If the system has been suitably framed, participants will by nature contribute to it. Changing the frame changes the perspectives of the system, including what inside it is considered good and bad (Van der Heijden, 2004, pp. 128-130).

Larps can be modeled as complex systems (Bruun et al., 2007). In reality, however, they are far too chaotic for full specificity (Montola, 2004). What thus can be done realistically, is the modelling of their systemic properties, if not their exact details (Article One). Information systems tend to be complex systems, and are not isolated from the rest of the world (Buckland, 1991). This is the essence of understanding larps as information systems: They pretend isolation, yet are indeed very much connected to the reality they, by their illusory realities, supposedly have left behind. They rely on processes the roots of which lie outside their TTZs.

3.2 ON DEFINING "INFORMATION"

The concept of information offers peculiar difficulties to the theoretical scientist. Even at the commonsense level and however it may be thought of, information is an entity which pervades all human activity. It is therefore peculiarly difficult to observe information phenomena in isolation with the kind of detachment that scientific enquiry traditionally demands. Even the process of describing one's observations of some phenomenon is itself an information activity. So the separation of objective from subjective effects is not easy to maintain. Is it even possible? (Brookes, 1980, p. 126)

All play requires information. For example, dogs bow in a certain manner in order to show each other that they are initiating play instead of trying to hurt the other for real (Burghardt,

2005). Yet the concept of information itself is problematic. The articles forming this dissertation have been written using the following definition for "information":

“Information” [...] is [here] defined as the potential message content in any piece of data, ranging from verbal statements to physical objects. It is selectively ignored or appropriated into knowledge structures by persons seeking or encountering it. “Information environment” is a definition used in library and information science to denote the sum of situational and/or local factors that affect the seeking, searching, appropriation, distribution, and use of information by people or systems in that particular situation and/or location. (Article Three)

This practical definition draws influences from especially Ingwersen & Järvelin (2005). The issue itself is, naturally, far more complex, given for example that the concept itself is the subject of whole books (see Brier, 2008, for an example). Claude Shannon (in Shannon & Weaver, 1949), the father of information theory, considers it a signal, which is possibly distorted along the way due to "noise", and is strongly related to uncertainty and predictability. In the same volume, Warren Weaver states:

The word *information*, in this theory, is used in a special sense that must not be confused with its ordinary usage. In particular, information must not be confused with meaning. In fact, two messages, one of which is heavily loaded with meaning and the other of which is pure nonsense, can be exactly equivalent, from the present viewpoint, as regards information. (Shannon & Weaver, 1949, p. 8-9.)

This approach, typical of communication and information theory, is strongly in accordance with Ricoeur's critique of transmittable "meaning" (Ricoeur, 1975; 1981). While a signal may have an intended meaning, its communicated content is an aspect that is selected from a set of possible messages (Shannon & Weaver, 1949). Information is appropriated, made one's own, not transmitted as is. According to Cole (1993), Shannon sees information as both increasing and reducing uncertainty (a concept which will be further explored in section 4.6). Even if a signal were received perfectly without any noise, the recipient could never be sure that it had. Thus original meanings are lost along the way.

Given that games are information systems, as Salen and Zimmerman (2004) note, the amount of noise (irrelevant information) increases as the game grows more complex. It is not, however, always a negative element. In a larp, noise may actually make the game much more intriguing and immersive. According to Littlejohn (1989), in communication theory,

Information is the measure of uncertainty in a situation. When a situation is completely predictable, no information is present. (Littlejohn 1989, p. 46.)

This ties directly in with Bateson's (1955) notion of information as a "difference that makes a difference". Brier (2008) has further developed that idea, adding to it concepts also from Peirce (e.g. 1955), and claims that "*With Peirce, we can say that differences become information when an interpreter sees them as signs.*" (Brier, 2008, p. 99). This view on information takes no definite stance on whether meaning is transmitted via the signs or not, making it highly compatible with Ricoeur's (1975; 1981) ideas about interpretation as appropriation of an alien text or sign.

In contrast, economic game theory uses almost a reversal of such definitions, through the idea of information that is either perfect or imperfect, and asymmetric (Salen & Zimmerman, 2004). Perfect information means that a participant has access to all relevant data regarding a situation, whereas uncertain information means something is outside his control. In game terms, these can be explained as games of pure skill versus games with a chance or hidden element. As simplified by Rasmusen (2006),

[T]hink of a player's information set as his knowledge at a particular time of the values of different variables. The elements of the information set are the different values the player thinks are possible. If the information set has many elements, there are many values the player cannot rule out; if it has one element, he knows the value precisely. (Rasmusen, 2006, p. 14.)

The situation is a bit more complex in many games, however. As game designer and scholar Celia Pearce notes (1997), more variations can be defined. She lists the following:

Information known to all players: In Chess, this would consist of the rules of the game, the board layout, and piece movement parameters.

Information known to only one player: In Gin, this would be the cards in your hand.

Information known to the game only: In Gin, this would be unused cards in deck. In Space Invaders, this would be the paths and frequency of alien space ships.

Randomly generated information: In Backgammon, this would be the roll of the dice. (Pearce, 1997, p. 422-423; emphases in the original.)

Salen and Zimmerman (2004) criticize Pearce's inclusion of rules into categories of information, as according to them it is not useful. From a library and information science perspective, it is however very clever. It is information, potentially known for all players, but information nevertheless. It is information necessary for play, a part of the category of information without which the game could not be played (as per Crookall, Oxford & Saunders, 1987). That it is information that is not always manipulated during play (Salen & Zimmerman, 2004, p. 205) is irrelevant, when describing the total game as an information environment - or defining information in general. Players furthermore, contrary to that claim, quite often manipulate rule-information: As extensively noted by Montola (2012b), in many games, participants actually do manipulate rule-information all participants know. Pearce's model does contain ambiguities, nevertheless, on for example what exactly counts as random. Information - in play and elsewhere - moves between categories, being sometimes neither public nor private. In some games information is intentionally left unprovided, so that players may encounter enjoyable surprises (Myers, 2010).

In live-action role-playing, one information ambiguity factor in particular becomes very significant, and defies definition. A part of what Wilson and Walsh (1996) call "geographical barriers" to information behavior, the "fog of war" affects all play. In digital games, it is artificially modeled (Salen & Zimmerman, 2004), but in larp, it is an unavoidable fact as soon as someone leaves the line of sight (Fatland, 2005). Effectively, it means that not all actual data is, due to the chaotic nature of the situation and gaps and delays in messaging, available. Players also tend to favor sources in close proximity, even if they are less than optimal (Article One). This is particularly true for what Boyer (2001) calls "strategic information", i.e. information that concerns either immediate needs (particularly regarding swift decisions) or touches on a subject for which humans have a particular curiosity (such as anything related to survival or sexuality, of either oneself or of interesting others). As formulated by Justin L. Barrett (2004), strategic information is:

[A]ny information that people might draw on to plan on modify their social interactions. Typically, this information relates, in one way or another, to survival and reproductive resources. (J. L. Barrett, 2004, p. 49.)

Role-playing games abound with strategic information, as their designers want to hook their players with immersive experiences as well as interesting stories (Article One).

One factor of further note is the concept of relevance, which will be discussed in context below. Dan Sperber and Deirdre Wilson (1997) claim that in a communicative setting, human minds seek out the maximal amount of information for the amount of attention they commit to the seeking. The results of this process they call “relevance”. In contrast, Patrick Wilson (1973) states that the concept is tied to circumstances, so that relevances are situational, and the context defines what is optimal.

According to von Foerster (1970), the whole issue of what is “information” is problematic, as only documents can be stored, retrieved and so forth, not information itself. To von Foerster, this means that in such cases, information gets confused with the vehicles carrying it. In contrast, Lloyd (2007) perceives it as a readable property of such signs (including actions). Even if the readings may not be exactly accurate, they provide information that fits the person making them (Ricoeur, 1981). Brookes (1980) solves the problem by referring to objective and subjective information: The objective information contained in documents is appropriated into subjective information that may vary from person to person. Thus, again, we return to the idea of appropriated signals from information-containing documents of all kinds.

3.2.1 The broad concept of "document", and documents in larp play

In this dissertation and the articles that are included in it, I use a particularly wide concept of “document” (as per Buckland, 1997). In this, I follow Briet (1951) and Buckland (1991; 1997), according to whom all items that can potentially contain information may be documents. As noted by Buckland (1991),

(1) documentation (i.e. information storage and retrieval) should be concerned with any potentially informative objects; (2) not all potentially informative objects were documents in the traditional sense of texts on paper; and (3) other informative objects, such as people, products, events, and museum objects generally, should not be excluded[.] (Buckland, 1991, p. 47.)

Briet (2008, p. 45) defines a document as “*a human work with communicative intent directed towards other human beings and that is recorded in a material way.*” From them is retrieved potential information (Ingwersen, 1996). Most documents are composed of text, but not all.

This is particularly relevant within TTZs, as the documents inside the fiction are subject representations of material that exists outside the play (Article Two). The wide interpretation of documents well describes what a directive information source (see section 4.4) may overwrite during play or ritual - basically, any potential information source is fair game, as long as it can be defined, because of the magic circle acting as an information barrier (Article Three). Unlike Brier (2008) assumes, not all documents have to be materially embedded. A TTZ may contain completely fictional documents, which are discourse-based approximations of what a physical document would be like.⁴³ For example, one character can extend her hand and claim to hand over a parchment containing an imperial order, and another character receive it and become its current holder, while nothing is physically exchanged. On one interpretation that is only discourse, but within the diegesis, it constitutes an actual document. For the purposes of this dissertation, I thus, combining ideas from Brier, Brier and Buckland, define a document as *“a human work with communicative intent, directed towards other human beings, that is either recorded in a material way, embedded in a material object, or represents such a material object.”*

In larp situations are usually present many kinds of documents. Game masters in charge of designing it provide four: setting material, character material, genre information and game mechanics (Article One). All of them seek to be as complete as possible while not encumbering the participants too much, but they rarely succeed in this, and the fictional world knowledge remains incomplete (as per P. Wilson, 1977). Their function is to work together as the “given circumstances” of the activity, based on which the fiction is then created (as per Stanislavski, 2010) Setting material includes necessary information on the world of the play, its current context, social structures, cultural issues and so forth. Within it is also often embedded fabula, for the purpose of narrative emergence (Fatland, 2005). Setting material may also include references to non-game material, such as relevant movies or literature.

Character material is usually created as a document. It contains player-targeted information about the character’s traits, personality, relationships, social status, and so forth. How much of each is provided is strongly dependent on game culture and design preference. In the

⁴³ In this, they very much resemble Buckland’s (1997) description of digital documents as on one hand being just strings of bits, not documents in the classical sense of the concept, yet from another perspective can be clearly seen to form a document with visual properties.

Nordic countries, for example, the game designers usually write the characters (Fatland, 2005). In Germany, the players do, and then get them approved by the organizers (Balzer, 2009). This difference influences both immersion-support and plot design: the less control the designers have over character concepts, the more fabula they have to include in the setting material and pre-planned plot events (Article One).

The use of fabula is a way to guide information seeking during play. A quest to find the keys to a castle, for instance, is effectively a search for relevant information, although one often complicated by the agency of other players, combat and other randomizing factors.

Buckland's (1991) observation that information systems' designers cannot anticipate who searches for what and exactly how very much applies here. They can only manipulate choice probability (as per Iyengar, 2010), and clever designers very much do (see Fatland, 2005; 2006 and Harviainen, 2005a; 2005b, for examples).

Game mechanics - which include, but are not limited to, rules - contain all pre-expected resolution systems for various types and levels of conflict (Article One). They would nevertheless not function, if players would not take their pre-knowledge with them inside the magic circle (see Crookall, Oxford & Saunders, 1987). While in appearance dealing with just resolution of potentially problematic areas such as sex and violence, mechanics also govern information behavior in play, by giving it limits, or at least acting as guidelines for how to perform it without risking the illusionary reality of play (see Montola, 2008, on the impact of game mechanics on play). It is then up to the players to choose how strictly they want to follow the mechanics, as breaking them, too, can be a pleasurable and even positive, contributing way to play (Myers, 2010). The rules of the game - including tacit ones - are never completely known in pretence play - which means that players always work by approximations of rules, not the rules themselves (Caillois, 1961; Myers, 2010).⁴⁴

Genre information is strongly tied to setting material, and may be integrated within it, but it has its own focus: It informs players on the right playing style - which, in LIS terms, has a direct impact to information practices, such as searching, distribution and revelation. Genre determines the pre-expected way of all those, as the way an Agatha Christie -style mystery

⁴⁴ The same rule-use system also applies to sadomasochist role-playing, even if the rules themselves are somewhat different (Article Four).

unfolds (see Trenti, 2010 and Vanek & Joeck, 2011, for larp examples) is very different from the revelation mechanics of a soap opera larp that has a rule that “all secrets must, when the time seems right, be stated out loud so that as many as possible can hear them” (used in, for example, FORBIDDEN DESIRES, a Finnish one- shot larp that centered on the various clichés of soap operas).⁴⁵

The game masters (those of them in charge of preparation, to be more precise) make sure that game-internal (diegetic) documents are in place, and/or that players who have fictional representations of them know how to use them, such as in the case of “your character has a letter of marque”, when the player has no prop to show for it (Article One).

When play begins, players appropriate (not copy) material from extradiegetic documents and take it with them inside the TTZ, as approximations. Some documents may also be carried from the outside into the diegesis

3.2.2 Three umbrella concepts regarding information

Before moving on to analyzing the play environments as information systems and information environments, one more foray is necessary. My work is mostly grounded on the cognitive interpretation of the concept of “information behavior”, but uses tools from other library and information science perspectives as well. “Information behavior” and “information practices” are concepts utilized by information scholars to describe the way people “deal with information” (see Savolainen, 2007, for a comprehensive analysis of both concepts). They have much overlap, but are not equal, nor are they neutral. The former emphasizes the issue of why an information seeker or user behaves the way he or she does (T. D. Wilson, 1981), and while a highly useful tool, its cognitive aspects mean that results are hard to verify to a sufficiently reliable level (Savolainen, 2007). The latter tries to overcome this problem, by concentrating on the social and contextual aspects of information seeking and use (Talja, 2005). It particularly well applies to interactions between members of communities (Tuominen, Talja & Savolainen, 2005). This means that while information

⁴⁵ Over my years of coaching larp designers, I have noticed that one of the key flaws in first-timer designs is that they tend to require the addition of a clear revelation mechanic, implemented through character motives or explicit rules.

behavior material fits extremely well with the cognition-related parts of this dissertation, including applications of ritual theory, the communities and actual acts within TTZs are often easier to explain in information practice terms.

The third necessary concept is information literacy. In its traditional form it refers to the ability to recognize information needs and to identify, locate, evaluate, and use information for a current task (see Webber & Johnston, 2000, for an overview of information literacy concepts). It also tends to concentrate on workplace or educational contexts (see Bruce, 1999, for an example). For the interests of this dissertation, however, I have chosen to utilize the way Annemaree Lloyd (2005; 2006; 2007) applies the concept, as “*a way of knowing the many environments that constitute an individual being in the world*” (Lloyd, 2007, p. 182). Its key advantage is that it also includes the idea of perception of actions as information literacy. The firemen Lloyd has observed are in my opinion a prime example of applying Ricoeur’s (1981) idea of meaningful actions as text to the field, as a literacy where trainees learn by “reading” the actions of more experienced practitioners (as per Lloyd, 2007). This also includes non-verbal cues (Argyle, 1972), which are of particular importance in larping. Whereas in tabletop role-playing, it is possible to have dissonance between verbally described game events and non-verbal cues from the player (White, 2009), and in digital role-playing, the interface normally makes such cues absent from other players, in larp one’s real body language, clothing and so forth are part of the illusion. Therefore, when I throughout this dissertation apply the concept of appropriation, it is through this lens of an information literacy.

In Figure 2, I illustrate the way a hermeneutical pre-understanding, commonly called with its German name, *Vorverständnis*, so as to denote the particular type of hermeneutic pre-understanding which both enables connections yet unavoidably distorts them, corresponds with information literacy:

INFORMATION LITERACY AS A HERMENEUTICAL TOOL

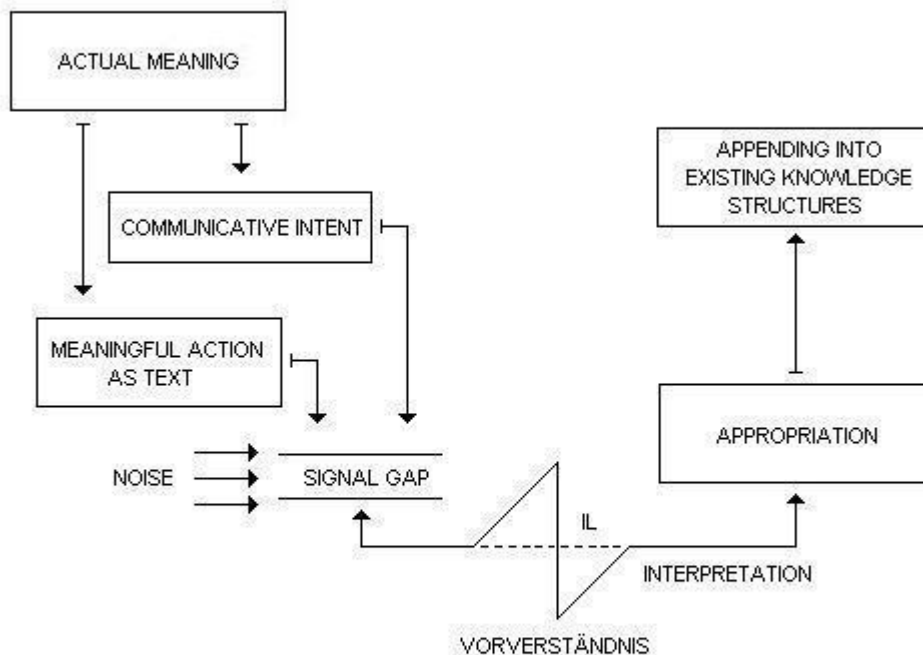


Figure 2. Vorverständnis creates the connection necessary for interpretation and potential appropriation, but also distorts the interpretative process. Information literacy is the ability to reduce the distortion.

Because the original meaning is not transmitted, the supposed recipient needs a set of tools to access the message content, regardless of whether it is intentionally communicated or not. As described in the beginning of this chapter, a certain kind of pre-understanding is necessary to bridge the signal gap. While such a *Vorverständnis*, as a manifestation of the recipient's communicative intent, creates the bridge, it also alters the way the received information is perceived. This is because the *Vorverständnis* originates from the recipient's own expectations and earlier knowledge. Skill in information literacy allows the recipient to recognize the alterations, so that both the bias of the pre-understanding is lessened and the likelihood of appropriating a less "noisy" message is increased. Information literacy, from a hermeneutical perspective, is therefore not only a source selection and evaluation skill, but also a central corrective tool against one's own pre-expectations.

4. LIMINALITY INFORMATICS: AN OVERVIEW

In 2004, two articles appeared, independent of one another, re-introducing the idea that role-playing might have something to do with rituals. One was by game designer Martin Ericsson (Ericsson, 2004), the other by religion scholar Christopher I. Lehrich (Lehrich 2004/2005). The concept has been repeatedly brought up since then by both researchers (see Bowman, 2010, for an example) and designers (Article Three; Ericsson, 2009) alike, but mostly in a "black-box thinking" kind of way: The connection is observed, either explicitly or off-hand, but not really analyzed (see Costikyan, 2002, for an example). Results are expected and noted, but the process itself has been only scratched on the surface.

In 2007, Andreas Lieberoth and myself decided to change that. The result was a series of articles (e.g. Article Three, Lieberoth & Harviainen, in press; Article Six), in which the information-based roots of the connection were examined and then contextualized with cognitive study of religion, game studies and library and information science. They showed that a similarity is indeed found, on the level of information processes and the way they seem to affect cognitive changes. Differences do exist: In rituals, people are usually (if not always) present as their own personas, whereas in game, they play roles created as subject representations of the base material given for the game (Article One).⁴⁶ The characters-as-representations are of the content-oriented kind (as per Hjørland, 1997, and Soergel, 1985), because they are primarily constructed by the players for themselves, with no duty to provide others with easy access to the data they contain.

Following Klabbers (2009) and social identity theory in general (see Holstein & Gubrium, 2000, for an example), even this difference does not seem so drastic: People switch social role all the time, and character roles can be interpreted as just a more drastic version of that process (Hakkarainen & Stenros, 2003). Liminality informatics takes into account those changes only as far as they can be observed to affect information behavior, as assessing the

⁴⁶ The subject-representation character includes material also from other documents, as well as from interaction with other players. From the player's perspective, the character seems to consist only of implicit subject data (Article One). Yet because the extra parts come from the game's designer, the character contains explicit subject data (as per Hjørland, 1997) as well. In cases where the game is completely open with its information (Wrigstad, 2008; see also Harviainen, 2006a) or collectively designed (Svanevik, 2005), all of the character-related data is explicit subject data.

actual cognitive states of the participants is beyond current-day technology (Article Six). What it studies are the information roots and fundamental information-environmental prerequisites of liminal experiences. Liminal places do not just include key (tacit) information processes, but their liminality in the first place requires those processes (as well as others) in order to exist. Of particular interest is that all TTZ-internal (diegetic) information sources are subject representations, i.e. extrapolations, of game (or dogmatic) material (Article One), direct references to sets of resources (Klabbers, 2009), or fiction invented by the participants (Article One). Because of this, methods of library and information science can detect them more easily than in mundane life, and designers can alter such facets so as to explore them further (Harviainen, 2011; see also Harviainen 2007 and 2009 for intentional larp experience design). The methods can also be applied to understanding the way rituals and games assist in appending and anchoring strategic information (Article Three).

As a methodology, liminality informatics takes its inspiration from other similar research practices, particularly bioinformatics, the application of information-systemic ideas on biological processes (see Brier, 2008, for examples). In order to understand what it exactly analyzes, a look at what liminality itself, is, even as it does tie into issues discussed already above, such as temporary tribal zones.

4.1 LIMINALITY

Liminality is one of the most central concepts in ritual theory, first introduced by Arnold van Gennep in *The Rites of Passage* (1909). Effectively, it means a shared separation from everyday rules and realities, with feelings of personal change (Article Three). Liminality is a temporary threshold experience⁴⁷, a “step beyond the mundane”, and may be also experienced in contexts such as reading (e.g. Klapcsik, 2011) or shared media experiences

⁴⁷ It also comes from the latin word for "threshold", *līmen*.

(e.g. Couldry, 2003), besides play, games and some rituals.⁴⁸ What exactly counts as liminal is a tricky question: Anything with a beginning, middle and ending can be analyzed as a ritual, if naïvely, using Genep's (1909) or Victor Turner's (1969) models (Lieberoth & Harviainen, in press).

Both modern sports and religious rituals are taken seriously due to contracts of shared intentionality. In anthropological thought, ritual situations are traditionally described as liminal (van Genep, 1909), denoting their removal from everyday reality. Although removed, they are still in continuity with mundane life and have the capacity to facilitate social and cognitive changes (e.g., marriage and other life transitions; the transmission of secret knowledge). Accordingly, we find it fruitful to refer to social situations with high levels of shared engagement, which also challenge existing attitudes as liminal. (Article Three, p. 8.)

Huizinga (1939), while noting the similarities of ritual and play, also talks of liminality, though not under that moniker. According to Huizinga, one key characteristic of play and games is that they have a fixed beginning and end, and the play-area is at the core solely designated by the magic circle, not any other distinguishing feature. By taking up the concept of the magic circle, game studies has effectively appropriated the concept of liminality as well (Myers, 2010). The issue is not simple: Calleja (in press), for example, very appropriately critiques the use of the "magic circle" idea, as its common binary application leads to unnecessary and inaccurate dichotomies. If one approaches the concept as an information systems boundary, however, and simultaneously as a shared illusion, the problem disappears: The liminal system actually relies on outside sources, its participants just tend to pretend that it does not. There is no real dichotomy, just a shared threshold experience with some altered properties, and in some game or ritual types the changes are more drastic than in others. For example, according to Myers (2010), computer games provide a bodily, physical component to the liminal experience. This may be so, but I dare say that religious rituals as well as larps provide that component much more strongly.

⁴⁸ Note that not all rituals (i.e. formal, often prescribed, activities performed in order to provide either symbolic or predictable results) are liminal. For example, interaction rituals of the kind described by Goffman (1955) do not create senses of liminality by themselves, under normal circumstances. It is furthermore of note that not all uses of the word liminal refer to the same idea. R. Barrett (2008), for instance, uses the concept to refer to the dissociation and "otherness" that Hansen's Disease patients may feel about their bodies.

Several variations to both liminal play and rituals exist. A Sunday mass and a brutal tribal initiation rite are very different from each other. According to Whitehouse (1996), rituals can be divided by mode, into imagistic (rare, extremely powerful) and dogmatic (common, reinforcing). Expanding on that, McCauley and Lawson (2002) suggested a system with two variables, frequency and (emotional) arousal, which are usually in negative correlation: The more often a ritual is performed, the less arousing it typically is.⁴⁹ The same scales exist with pretence games, where one can do either series of games or singular works (Articles Three and Six) of the so-called “one-shot game of narrative” type (i.e. OSGONs; Frasca, 2000).

Emotional arousal is important, in that it makes the event memorable and powerful. It is the sense of being on the edge of something unfathomable, of neurological tension, and gives meaning to the liminal act. Without it, participation is limited to social reasons. (Article Six). As noted by Klabbers (2009), engrossment is necessary for participation, but it can come from arousal, social reasons, or both. Together these form a wider category, involvement, which contains all reasons for attending that the player or ritual participants cares much about. If they do not, however, have sufficient arousal included, they will not experience certain key facets of the activity. What exactly is sufficient depends on the person and the activity in question, which is why even a low-arousal game can be very addictive and highly engaging.

Victor Turner (1982) separated activities that are liminal, steps beyond the mundane, and liminoid, things that approach it, i.e. resemble liminal rituals but are not truly such. An example of this would be a football match, which during play has different rules than the world outside it, creates a sense of community in participants, and so forth, but does not transform the players or the audience in a persistent, significant manner. Other religion scholars, however, might still consider that too a ritual, and it would loosely fit inside at least McCauley & Lawson’s (2002) schemas. According to Goffman (1955), nearly all human interaction is ritual in nature: As social creatures, we seek safety through predictable systems, including in some cases the ritualistic exaggeration of normal reactions, such as overly wide

⁴⁹ These are variables, not just attributes, because they can be calculated. For example, frequency can be modelled as a simple timetable, a raw count of performance rates, whereas arousal is observable through the amount of sensory pageantry, and often as an inversion of frequency (McCauley & Lawson, 2002).

gestures of disappointment in setbacks (Goffman, 1971). This is also the inclination underlying obsessive-compulsive, repetitive ritualization (Boyer & Liénard, 2008).

A liminal event, however, goes beyond mundane ritualization. In it, one deals with elements that cannot be observed with the human senses. This may be because they do not exist, or because (if they do), they are transcendent. In both cases, one “acts as if it were real”, using the imagined as a behavioral cue. Therefore the step inside the fictional world of a book is liminal, even if done while sitting at home, as long as the reader’s primary frame of reference changes (Klapcsik, 2011). Sadomasochism likewise uses such a step-outside-the-mundane in connection with "act as if it were real", in both its physical and other forms (Wetzstein et al., 1993). Similarly, media rituals can be liminal, in that through imagined connections to people such as movie stars, they create a sense of community that originates from the sense of “knowing” that star (Sumiala, 2010). Such processes align individual mental representations of a common subject matter (Lieberoth & Harviainen, in press).

Liminality has obviously ritualistic beginnings and ends, even in games (see Waern, 2011, for an example). While it is normally temporary, certain practices try and do extend liminality indefinitely (Article Three). This takes place in religious cults (Galanter, 1999), 24/7 sadomasochism (Dancer et al., 2006) and regimental thought control (Lifton, 1961). In such cases, social roles are altered, while the community of participants works as an anchoring system that helps the retaining of the liminal state. This also helps create the behavioral and moral changes associated with such activities. The changes nevertheless do not usually persist, if a constant community anchoring is not sustained (Article Six).

Liminality is a very loose concept still, despite a long history, and evolves in its definers' minds. My own opinion on whether role-playing games are rituals or ritualistic, liminal or liminoid, has evolved during the time it took to write the articles constituting this dissertation. In Article Two, I consider them liminoid, bordering on liminal. In Article Three, Lieberoth and I approach all role-playing games as being potentially liminal, as I do sadomasochist role-playing in Article Four. In Article Six, I have in my opinion found a suitable middle ground:

Not all games are liminal. A chess match may create significant engrossment, but does not take the participants to a new reality the way a live-action or massive online role-playing game does. Chess may

come close nevertheless, especially at intense high-level games where the atmosphere is similar to a football match and the game arena itself becomes an extended space with its own rules. Games that are liminal, or at least approach liminality - being thus liminoid, as Turner (1982) put it - can be analyzed as information systems. (Article Six)

As will be further discussed in section 4.6, it should also be observed that some liminal play activities are designed so that they foster direct learning. In such cases, whether using mobile technologies (see Whitton, 2009, for examples) or larping (Article Six), the illusion of play is both lessened and strengthened by the presence of a guiding figure, paradoxical as it may seem. This is because in those activities, the magic circle is indeed porous, and made to support either data feed from the outside and back, or the "bleed" experience described (Article Five). In such cases, the participants are also aware that a strong level of immersion is neither presumed nor expected, and thus assist in keeping the magic circle sufficiently porous or leaking. Post-modern magicians seem to be an exception to this rule: While their magic circle is mostly porous, they have to adopt a dual cognition, as an absolute belief in the reality of their current pretence is a mandatory component of their ritual activity (Evans, 2007).⁵⁰

4.2 IMPOSED SPACES AND THE FICTIONAL REALITY

Most larps, like rituals, take place in temporary spaces imposed upon real places (Article Three). Those can be seen as artificially constructed "mythical spaces" of the kind which allow people to pragmatically function in their normal lives: As noted by Tuan (1977, pp. 86-87), we stay aware of elements outside our immediate observable vicinity, even as we have no direct means of accessing their existence without going to observe them. Our tacit awareness of the larger space is what gives us our orientation and sense of being emplaced.⁵¹ In a similar fashion, larpers are able to expand their sense of the fictional new reality to supposedly include much more than the area where they are actually pretence-playing.

⁵⁰ It is plausible, following the data of Harviainen (2006b), that some larpers actually use a similar dual-cognition approach to play.

⁵¹ Tuan (1977, p. 86) actually speaks of two very different kinds of mythical spaces. The one described here is his second kind, the other being a fuzzy area of defective knowledge.

According to Relph (1976, p. 47), place identity arises from physical setting, activities and meanings. Building upon this, Phil Turner & Susan Turner (2006, p. 206) note that "*[a]bove all, spaces need to become meaningful to become places*". The experience of place is of personal nature (see also Downing, 2003). What makes the imposed spaces remarkable is that they effectively create a second sense of spatiality, based on their connected settings, activities and meanings. Whereas a place is normally seen as something defined within the much wider concept of space (see Casey, 1997, for a summary of theories of space and place), in ritualistic situations a new, virtual "space" is imposed (imagined or, in the case of religious faith, supposedly "perceived") and expanded from one place outwards, through the re-interpretation of one's current locus as part of the fictional spatial continuum. A sense of place is nevertheless fundamentally important in such virtual spaces (see Boellstorff, 2008, for an example), and a sense of physical presence may still be preferable to a virtual sense of proximity (see Lentini & Decortis, 2010).

Such spaces are limited by one or more social contracts, which define the discursive limits, the physical limits and the essential re-signification properties of the space (Article Six, see also Phillips, 2001). Many of them also take place in specifically constructed or selected physical locations, such as churches and football fields, which separate them from mundane life. This makes it easier for the social contracts regarding them to function, and also significantly reduces the amount of potentially disruptive information that tries to enter the magic circle (Article Three).

Several definitions for these game-spaces exist. Aarseth (2001), in the context of computer games, speaks of imposed fictional spaces. Balzer (2009), drawing from van Ameln & Kramer (2007) calls the play-space a 'surplus reality'. Some authors (e.g. Pohjola, 2004) favor P. L. Wilson's (1991), aka. Hakim Bey's, idea of 'temporary autonomous zones', which are ideological collectives with their own rules, existing alongside but separate from mundane reality, supposedly eventually "spilling" into it. In this dissertation, however, in accordance with Article Three, I use Letcher's (2001) concept of the temporary tribal zone, itself an academic derivative of Wilson's ideas, but all four aforementioned descriptions essentially amount to the same thing: TTZs are temporary realities, "bubbles", either fictional or based on belief (which itself may again be fictional, as per Lawson & McCauley, 1990; McCauley

& Lawson, 2002; Article Five), which exist in continuity with mundane reality, yet, according to participant expectations, are not a part of it.

According to Letcher, certain types of group gatherings, ranging from rock concerts to religious rituals, become liminal because of a 'tribal' social contract. The tribe, in this case, does not have to be a real tribe, or even a 'neo-tribe' (as per Maffesoli, 1996). Any gathering with suitable social pre-expectations and a shared enough goal of liminal experiences will do (Letcher, 2001). In the case of for example sadomasochistic sessions, the gathering in question can be limited to just two participants (Article Four). TTZs have their own rules, which may not be at all those of the world around them (see Lappi, 2010 and 2011, for examples).

Play lies outside the antithesis of wisdom and folly, and equally outside those of truth and falsehood, good and evil. Although it is a non-material activity it has no moral function. The valuations of vice and virtue do not apply here. (Huizinga, 1939/1955, p. 6.)

Many elements and objects in TTZs are not completely real. They can be either completely imagined ("ephemera", Edwards 2004), half-real representations (as in the case of many elements of digital games; Juul, 2005), or physical items given new affordances by the situation (Article Two). Within the game's fictional reality, ephemera and new affordances must always make sense, and they furthermore only make sense within it (Edwards, 2004; Article Two). Inside the re-signification zone and its internal new reality, and only there, do they function perfectly. The configurational properties of the TTZ ensure this: For the characters, they are always real and follow the natural laws of their reality. Taken outside the fiction, they become just analogies, and flawed, weakening ones at that. The introduction of new information as ephemera to within the magic circle is always a risky moment: They either become a part of the fiction and comply with its natural laws, or they cause a game break. Given, however, that these are games of information, this introduction of information is necessary and constant. (Article Two). Play strategies therefore evolve, in order to allow players to navigate the risky borderline and ensure their enjoyment of the game (Harviainen, 2006b).

Case Example 2: A Dysfunctional Information System

KAKSOISJÄRVIEN MAA ("Land of Twin Lakes"; Finland, Dec 22, 2006; now "part one") was a larp extension of a pagan restoration project led by Tapio Virtanen. The game was advertised in a manner that made it very unclear whether it was a larp at all, seeming to stand somewhere between a religious meeting and a larp. That was, in truth, exactly the case. Through the use of characters, the organizer wanted to create extended discourse on a pagan movement's manifesto, the results of which could then be channeled into improving the manifesto in real life.

All eight characters in the play-group I was with (I have been told that at least one more existed) had been designed so that they would facilitate as much discourse as possible. All of them were based on real-life information about the players (given in the larp's extended application forms), with emphasis on skills and motives Virtanen had considered useful to the movement. So, for example, I was given a character with the same name and profession that I had in real life, but with extreme interest in talking about the project's political potential (due to my then-membership in the Finnish Green Party) and in formulating functional dogma for the movement (due to the fact that I specialized in dogmatics when I got my theology degree).

Above all, you see the Kaksoisjärvien Maa project as a chance to resurrect old views of morality, especially the respect of nature. You are certain that within the project there also people who do not share your views, as there always are, but you will not permit that to stop you. You know best, without a doubt it's you who knows best. The religion needs a hierarchy, an order, dogma and rituals, in addition to an organization that takes care of those things. Your mission is to develop the project into a credible religion that bases its beliefs into actual traditions and customs, one that can realistically be expected to function in the modern world. Only then can you see this religion fulfill the goals you have set yourself within this project. (From the character description of "J. Tuomas Harviainen"; translation by author.)

Players who did not have some specific area of expertise the organizer was interested in were given small, rather confusing pieces of plot material that did not really lead to anything.

The game itself proceeded as discourse (with no off-game time taking place during the larp) on subjects delivered by the organizer in envelopes before the larp began. Each envelope was opened at a predetermined time. Some of them had discourse material such as Virtanen's own suggestions for the religion's manifesto, some had instructions for lighting ritual candles outside the house. The whole game ended with a small invocation upon a solstice fire that was lit by a hillside. Near the end the participants were also given papers where they could sign up for further participation in the project. None in our group did so, listing reasons ranging from "*This is too vague*" to "*I was here just for the larp, the religion does not really interest me at all.*" After the game, some of us were also given letters expressing Virtanen's desire to discuss the points we were given in the character material, at some point in the near (off-game) future. I never received any further communication, despite having marked myself as willing,

Information-wise, the whole purpose of the project was to generate new extrapolations on pre-existing off-game material that was temporarily copied into the game's reality (especially on the manifesto). Participants were expected to function as information resources for each other, with the organizer providing just incentives and guidelines for doing so. On that part, the project was successful, but as a larp and as an information system it was quite dysfunctional.

Main reasons for the problems were:

1. A lack of credible game material (loads and loads of grammatical errors, grandiose ideology pushing through without proper context, etc.)
2. Inconsistency of narratives (some incentives were just, plainly put, stupid, others too clearly designed solely to facilitate off-game purposes, not create functional play).
3. The blending of diegetic and adiegetic goals, on both character/participant and larp/reality levels, conducted by the designer in a manner hostile to functional play.

In a larp environment such as KAKSOISJÄRVIEN MAA, the magic circle of play is highly blurred and obviously porous, making the event a borderline case with pervasive games. By removing most of the difference between character and player, Virtanen also removed many of the system characteristics of the game. Without a clearly defined, individual character to act as a subject representation, the players had no way of knowing what sort of document

access was acceptable within the game. This is especially important because the number and nature of organizer-provided documents was very limited, and the provided in-game questions required almost solely the use of off-game knowledge.

The closest system analogy for the game is thus a closed search engine where the organizer executes all the searches and the players are there only as information sources, not as the seeker-source subject representations of a typical larp.

Caillois (1961) claims that play is incapable of creating wealth or goods. This is in direct contrast with the aims of a larp like KAKSOISJÄRVIEN MAA, as well as many educational training games, if one thinks in terms of intellectual capital and allotelic⁵² play (as per Klabbers, 2009). In a sense, the issue comes back to defining what exactly counts as play or game, discussed in 2.0.3. If one thinks in Costikyan's (2002) terms, then the game failed because its supposedly endogenous reference system was too obviously directed towards producing exogenous products, thus removing the element of enjoyable playfulness. To follow Myers (2010), there was insufficient room for necessary "bad play". While some educational games can succeed regardless of that problem, that was not the case with KAKSOISJÄRVIEN MAA. Not knowing what is or is not a part of the game, and what is fabricated and what real, is also distressing to some participants, if they have not explicitly signed up for a game knowing that the concepts will be blurred in it (Denward, 2011), which further accentuated the problems in this particular larp.

4.3 IMPOSED SPACES AS RE-SIGNIFICATION ZONES

Playing games implies that the players engage in an evolving process, Playing a game is a total event of being involved in a temporary, provisional, and integrated world. A key question is: How can knowledge about a reference system be gained, assimilated among the actors, re-integrated and disseminated to enhance the social system's performance? (Klabbers, 2009, p. 22.)

⁵² According to Klabbers (2009, p. 52), a game is autotelic if the players have the freedom to act according to own goals and sources of motivation, and allotelic, if the players act according to predetermined goals and sources of motivation, which are often embedded in the game's rules. Note that from this pragmatic viewpoint, larps may often qualify as both.

Inside the magic circle, objects, tools and toys may acquire special functions or meanings. The handling of such may in fact sometimes constitute the whole activity, as in the case of chess. Huizinga (1939) called it “ludic re-signification”. As noted by Lopenen and Montola (2004), players navigate the larp play-space through such a constant process of semiotic re-signification.⁵³ They suggest that within such areas, participants share a set of re-signification cues, which allows them to reach at least equifinal interpretations of things (i.e. they imagine roughly the same type of swords, and so on), allowing for sufficiently functional play.⁵⁴ This idea is based on the triadic sign systems of Charles Sanders Peirce.⁵⁵ According to Peirce (CP⁵⁶, 6.32-3), logical systems contain three categories.

First is the conception of being or existing independent of anything else. Second is the conception of being relative to, the conception of reaction with, something else. Third is the conception of mediation, whereby a first and a second are brought into relation. (Peirce, CP, 6.32-33.)

These become sign-systems through the interpretation process:

A sign, or Representamen, is a First which stands in a genuine triadic relation to a Second, its Object, as to be able of determining a Third, called its Interpretant, to assume the same triadic reaction to its Object in which it stands itself to the same Object. (Peirce, 1955, 99-100.)

As noted by Brier (2008, p. 284), the object is the aspect of reality which the Representamen signifies. The Object is also a sign, due to which it can be argued (see Deleuze & Guattari, 1980) that everything can be reduced to a series of signs, unto infinity, in which no original

⁵³ The same takes place in other forms of larping, but to a lesser extent, as the objects present in for example sadomasochist sessions (Article Four) or re-enactment (Article Five) tend to be the actual objects they represent, i.e. when a whip is a whip and a goblet a goblet, little re-signification is needed for those particular elements. (On how the Peircean system fits with LIS, see Gluck, 1996, and Brier, 2008).

⁵⁴ As I note in Article Two, this is facilitated by the process of intericonicity, the presence of cultural icons providing set templates for imagining things (see Adelsten, 2002, for details).

⁵⁵ Given the extremely complex and (self-)contested nature of semiotics, I have chosen to present only a short overview of the kind of game re-signification processes players appear to use. How exactly they re-signify each element, and to which system of suggested semiotic processes this would best fit, is way beyond the scope of this dissertation (see for example Sebeok, 1994, and Brier, 2008, for examples of such systems).

⁵⁶ I follow here the established system (see e.g. Brier, 2008) of referring to Peirce’s *Collected Papers* (1931-1958) by book and section.

object or meaning exists, solely signs that point to other signs. Peirce, however, would disagree:

[A sign] is a vehicle conveying into the mind something from without. That for which it stands is called its object; that which it conveys, its meaning; and the idea to which it gives rise, its interpretant. The object of representation can be nothing but a representation of which the first representation is the interpretant. But an endless series of representations, each representing the one behind it, may be conceived to have an absolute object at its limit. The meaning of a representation can be nothing but a representation. (Peirce, CP, 1.39.)

The meaning of a sign is determined by a context, as there is no final and true object and representation in the present (Brier, 2008). This is why sign-systems are ultimately always dependent on prevailing paradigms of discourse, and require communities to support them (Bankov, 2008). Participants bring the paradigms (including personal systems of signification) with them, along with other information, when they enter the TTZ (Article Six, see also Brier, 2008). Such paradigms include things like earlier game experiences, group memberships, material about the game that was provided before play, and familiarity with cultural material connected to the game, such as movies in the same genre as the game (i.e. the “genre information” discussed in 2.2.1). Larps exemplify this fact, being pseudo-isolated systems with their own rules as well as implicit guidelines for re-signification (Article Three). Their physicality also emphasizes the process, because sign-meanings always arise from minds and bodies, forming personal signification spheres (as per Brier, 2008).

Signs exist in different types. In Peirce’s terms (CS 2.247), they can be iconic, indexical or symbolic. Icons are signs that directly, through their own properties and similarities, point to their objects. For example, a photograph of a person is an icon of that person. Indices are signs by relation to their object - the rotation of a windmill is an index of wind. Symbols, in turn, are related to their objects by convention alone. Examples of such include non-onomatopoeic words and abstract traffic signs.

In larps, players navigate all three types, and it affects their game experiences (Loponen & Montola, 2004). Thus an indexical red cloak is more easily integrated into the diegesis than is a cardboard piece saying “gun”. During play, interpretation and re-signification is actually quite easy (Article Two). Players can mostly rely on *imaginatio*, thought based on similarity

(as per Ricoeur, 1975), instead of *intellectio*, which requires rational processing, as long as they can recognize the icons, indices and symbols inside the TTZ.

Some elements do of course require *intellectio*. Examples of this are puzzles and difficult quests. Given that they exist within the diegesis, however, they too are also a part of *imaginatio* (Article Two), a part of what Mäkelä et al. (2005) call the “Shared Space of Imagining”. Here, too, the magic circle affects information passing through it, making even logical tasks requiring out-of-play *intellectio* into parts of the fictional reality, while actually relying on brought-with information (as per Crookall, Oxford & Saunders, 1987) for their solutions.

Sign-systems within a larp are constructed through shared discourse (Ilieva, 2010), which in turn is dependent on a validation process based on communicated assertions on what is an acceptable interpretation, what can be posited as potentially “true” within the TTZ (as per Bankov, 2009). Such prevailing paradigms and social contracts determine how far the re-signification goes, even if in reality one could continue the line or references unto infinity (Deleuze & Guattari, 1980; Article One). Game rules are a part of the semiosis, and give it necessary structure, but they do not shape the experience of play (Myers, 2010). What does give the experience shape is the contractually isolated, tribal nature of the activity (see Letcher, 2001), that it has not just a rules but a moral system of its own (Lappi, 2010), and that all its representation systems are in theory up to negotiation, i.e. uncertain (Article One).

When this process of constant, necessary re-signification necessity is combined with the presence of many TTZ-relevant documents, the issue grows more complex - and more immersive (Article Three). The participants are tied to the re-signification logic of the game, but need to negotiate the process on their own, so as not to disrupt the illusion of play. Following Suominen (1997), play is in LIS terms therefore a semiotic situation, where the manifested re-signification processes follow the essential attributes of each document (e.g. form and language). It is also nevertheless possible that the participants intentionally use only one selective point of view for interpreting the documentary communication, purposefully twisting the interpretations to suit their goals, such as competitive play or narrative emphasis. Since the “documents” resignifiable contain anything that is included in the widest definition of the term (see section 3.2.1), this means that players, and especially game masters, could

point at for example any given antelope, define it as a document, and then re-signify its meaning for the purposes of the game, even if it is at odds with the interpretations of others. As noted by Montola (2003), the most influential interpretation then wins, or they remain in conflict.

Players may not realize that they are re-signifying anything (Crookall, Oxford & Saunders, 1987). This is because of two reasons. First, animals and people project around them and within themselves their personal signification spheres. In humans, such spheres are organized into language through self-conscious, social communication (Brier, 2008). Second, some unnatural concepts come to people more naturally than others. Justin L. Barrett (2004) calls such phenomena “minimally counter-intuitive”, meaning that they are alien by a trait or two, yet understandable, and possibly seen as able to explain certain causalities.

[G]ods, ghosts, demons, angels, witches, shamans, oracles, prophets, and many other members of religious casts of characters appear to meet a sort of optimum of being largely intuitive but having enough counter-intuitive features that make them memorable, attention demanding, and able to be used to explain and predict events and phenomena. If they were too hard to conceptualize, people might not be able to make sense of them in real time to solve problems, tell stories, or understand the implications of them for their own behavior. If they were too intuitive, they would gather so little attention that they would soon be forgotten. (J. L. Barrett, 2004, p. 24.)

The fictional realities of many fantasy games function the same way: An orc is minimally counter-intuitive, being perceivable as fundamentally human-like, physical and evil. A beholder (an evil, floating spherical creature with one big eye and a dozen eye-stalks, all of which emit magical rays, first introduced in Gygax & Kuntz, 1975) goes against the grain in many ways. Envisioning a beholder thus requires considerable base knowledge, and the results will still not be even similar, but they may sufficiently function together nevertheless.

Not everyone is drawn in by the lure of games. Among game players, Whitton (2009) found three motivations: Mental stimulation, social interaction and physical challenge. People who did not normally play games in their leisure time, and did not identify as game players, still occasionally played. Their reasons to do so were the alleviation of boredom and the facilitation social interaction in otherwise awkward situations. Such participants are, in larps, problematic, not so much because of resistance to the play (as they are participating

willingly), but rather because along with a lusory attitude, they lack a sense of game-logic. For them, many game elements are not as minimally counter-intuitive as for the rest, making it much harder for them to re-signify the game environment and thus also to uphold the temporary, illusory reality of play.

4.4 INFORMATION SYSTEMS PROPERTIES OF IMPOSED SPACES

Temporary tribal zones (TTZs) are based on an illusion of being separated from the mundane world. Surrounding them is a socially constructed barrier, the magic circle. Such circles alter the meaning, relevance and significance of elements inside them, at least to some present (Huizinga, 1939). This is emphasized in cases where the physical location of the activity is also isolated (Letcher, 2001). Activities within a TTZ are perceived as situationally normal and relevant.

[G]ames are social systems and moreover, they represent social systems - real or imagined. They are also models of social systems. It is crucial to keep that dual position in mind. Even if a game involves a single actor, that actor will always enter the magic circle and steps into a social system, real or imagined. A player does not enter a social vacuum. (Klabbers, 2009, p. 100. Emphases in the original.)

In TTZs, information behavior, and the ability to “act as if it were real” also regarding things that do not exist or cannot be perceived, are intrinsically tied together (McCauley & Lawson, 2002). A social information barrier (as per Wilson & Walsh, 1996) exists at the borderline of the magic circle, making it a clear system boundary (as per Merali, 2004). It affects, but does not necessarily restrict, the information crossing it (Article One). The information is transformed by it, according to the rules of the TTZ (see Montola, 2012b). The situation therefore establishes a cognitive frame (Bateson 1955/2000) that orients participant thoughts to consider the TTZ as the primary reality and reference for the time being. As noted by Lieberoth and Harviainen (in press), frame-specific information behavior takes place in all situations, but the exceptionally constructed nature of games and rituals makes it particularly visible in them (see also Goffman, 1961; 1974).

As participants are committed to the activity at hand, it becomes increasingly real-feeling. The game "seeks to become real". McGonigal (2003) calls this the Pinocchio Effect. Players strengthen the illusion for each other, in a form of a sense-of-community (*communitas*; V.

Turner, 1969; see also Huizinga, 1939)⁵⁷, called "representational negotiation" (Lieberoth, 2007) or "inter-immersion" (Pohjola, 2004) in larp: The immersive activity of others fuels one's own sense of being-there, forming a sense of an active group and creating a feedback loop, where that sense again fuels that of the others⁵⁸. The intersubjectivity enables the emergent properties of play, as the participants inspire each other within the constraints of the game (Pearce, in press). Should communal immersion fail, an "Emperor's New Clothes Effect" takes place: Everyone realizes no one else is committed, either (Article Three), as without player participation there is no game at all (Taylor, 2006). This means that insufficient participation, also in the case of solving unavoidable information gaps, is a risk to the activity. Players are able to relatively easily slip back into role after small breaks (Harviainen, 2006b), but larger ones carry a serious risk of disruptions. Games, unlike rituals, do not usually have what is called "costly signaling", the show of commitment by enduring sacrifice or hardships (as per Bulbulia, 2008). Social risks and attendance fees may come close, though.

TTZs seek to be independent, autopoietic systems of activity, ones that present the illusion that they stretch beyond their boundaries. They are consistent information environments, even if some parts of the barrier do leak (Article One), and even if some information is missing or purposefully omitted for the purpose of providing surprises (see Myers, 2010, for examples). Therefore, they can turn actions into a narrative unity (Lieberoth, 2007; see also P. Wilson, 1977), and they invite those within to seek meaning for themselves within the TTZ's internal framework (Whitehouse, 1996). Players are aware of the real world around them, but the TTZ functions as a local reference system, and the magic circle affects what is seen as "being present" and how by the players.⁵⁹ Those bits are then "read" as "text" (as per Ricoeur, 1981; Lloyd, 2007) and either ignored or appended by the players to their situational knowledge (as per Todd, 1999). It has to sufficiently fit the person's existing cognitive skills

⁵⁷ Turner (1969) furthermore suggests that creating the sense of community and group-bonding also requires particular places of enactment to truly function. (On games and group-bonding, see Bergström, 2012.)

⁵⁸ According to Myers (2010), however, such a sense of community is rare in MMOs, because hierarchical groups restrict players' full access to the game, even as they provide new modes of access to it. Stanislavski (2010), in turn, regards it as necessary for successful stage acting.

⁵⁹ In this, Shannon's (Shannon & Weaver, 1949) theory of signal distortion is very visible also on the social level.

(Buckland, 1991), expectations and emotional values (Modell, 2003) as well as the current (in this case fictional) context.

Whether created for fun or for purposes of faith, TTZs rely on shared information. Their primary information network is constructed from a body of peers. Without it, sufficient re-signification (described above) could not take place. The sharing, and its accompanying reliance on second-hand sources, is emphasized by physical surroundings. The most efficient information constraint is to simply keep external signals to a minimum. Using segregation, sense-numbing, repetitive tasks and other techniques, cults have been doing this for a long time (Martin, in press; Galanter, 1999). Social contracts, however, are just as effective, if done the right way (Rakoczy, 2007). What counts is the rule not to access information from outside the TTZ. Many, however, still do (Harviainen, 2006b). This is furthermore often necessary, and while “bad play” per se, it facilitates a smoother, more enjoyable game for the participants (Myers, 2010). Such bad play may actually save a problematic game, as in the case of DeKoven’s (1978, p.31) “well-timed cheat”, which alters the nature of a play that has become boring so that it turns into something new but enjoyable.

While playing, players, as characters, perform TTZ-internal information seeking in order to complete their tasks and goals. Its results are added to the characters’ histories and experiences, as a kind of “commentary”. In systemic terms, this means that as play progresses, the characters start to refer to more and more diegetic information sources (documents and other characters), making the game-space a multiple index entry system (as per Buckland, 1991). In layman terms, as information gets distributed during play, it can be accessed, at least in some form, from an increasing number of sources. Some of those sources are inaccurate, others more or less reliable (Article One). As stated above, players may also avoid searches, by inventing missing information and possibly creating conflicting in-game “truths”, but that is much more common in cases of missing world information or character background data than in in-game information seeking quests.

During play, extradiegetic information-seeking barriers have little effect (Harviainen, 2006b),⁶⁰ but inside the TTZ may exist designer-implemented cultural and other barriers that have a serious impact on information behavior. (“Elves will not negotiate with orcs” is a simple example of such.) When playing, participants use all four of the information acquisition methods described by Wilson and Walsh (1996): active searches, ongoing searching, passive attention and passive searching. The passive forms are an important part of the play, as they increase the amount of playable material, through chance encounters with interesting information (Harviainen, 2006b). Information seeking within the TTZ, if neither too challenging nor too easy (see Henriksen, 2008), is a pleasure-giving act, as long as the context makes the seeking relevant and the game caters to the player’s play-style preferences to a sufficient extent (Article One). If, however, something (such as fabula or barriers) strongly conflicts with the player’s desires or mental state (see Ingwersen & Järvelin, 2005, on mental states conflicting with the information environment), the play is no longer pleasurable.

To prevent problems, the information system inside the magic circle works under restrictions. In such situations, cognitive authority (the framing of some people or group as being more “in the know” and more reliable as information sources; P. Wilson, 1983) is strongly emphasized. While tied to expertise, it does not require any, only a perception of it, particularly in act-as-if-it-were-real situations such as rituals and games (Harviainen, 2011).⁶¹ Most of the time, however, experts are those most likely to be framed as experts and cognitive authorities. A cognitive authority’s information is easily treated as knowledge, not just information, especially in a constrained zone such as a TTZ, which offers little opportunity for obtaining conflicting data (Article Three). Should there be conflicts, participants are likely to solve them by the same means that govern cognitive dissonance (Festinger, 1957) - information gets accepted and appropriated as frame-relevant, or not at all.

⁶⁰ An exception would be for instance a player deciding that her character avoids the character of a player he dislikes, even against in-game logic, but that is a break in the illusion of play, even if just for the player deciding to do so.

⁶¹ In J. L. Barrett’s (2004, p. 127) terms, the framing of cognitive authorities is a function of a mental facilitator system, the Social Status Monitor, which “*attends to the relative status of people in a group in order to determine the attractiveness of others for association and to serve as models from which to learn.*” This is in line with the idea that religious ritual and play share the same roots and/or utilize same mental systems for “acting as if what cannot be perceived is real”.

Presiding over these processes are special kinds of cognitive authorities, called directive sources (Article One). They are persons given the permission to "overwrite" the data content of any situation or document (again, in the widest possible sense of "document", Buckland, 1997; Buckland & Day, 1994) as situationally needed. Their power extends from outside the magic circle to within, granting them the ability to alter the self-referential system beyond just setting its internal goals (Article Six). Typically, they guide the activity and smooth over problems points. Examples include things such as a Catholic priest ascertaining through dogma and ritual that the communal wine really is the blood of Christ, despite its taste and chemical properties, and game masters declaring that a house is on fire in a larp, even when it in real life obviously is not (Article Three). The credulity of the participants in the latter case is probably not as high, but they have to, within the constraints of the TTZ, act as if it were.

The process functions rather well, as in addition to the smoothing presence of a directive source and seemingly reliable cognitive authorities, two other factors also affect the situation and preserve the magic circle: The participants' opinions on what is situationally relevant (as per P. Wilson, 1973) and their very wish to preserve the TTZ (see Fine, 1983, and Letcher, 2001, for examples). They therefore proceed carefully near the borders of the magic circle, familiarizing themselves by adding small bits of knowledge about the situation to their palette, by way of berrypicking (as per Bates, 1989) and small-scale inserting and appending (as per Todd, 1999), avoiding major changes in bodies of knowledge. This is both eased and charged with potential arousal by authorities (game master -type directive sources, tribal elders, etc.) who strategically restrict and apply cues (Article One), making all available information potentially strategic (as per Boyer, 2001). This type of a sought balance between individual learning and expert guidance exemplifies Vygotsky's (1978) concept of the zone of proximal development (see also Whitton, 2009, pp. 49-50).

Berrypicking is common in ritualistic circumstances (Article Six). It is the practice of selecting bits and pieces of conveniently available information from various sources, instead of choosing just the best parts (i.e. "cherrypicking") or performing optimized searches (Bates, 1989). This fits in well with the human tendency to seek meaning, and is accentuated in TTZs, because the social contracts limit available information sources. One berrypicks, so as not to disturb the illusionary reality of game or ritual (Article Six). Information does not have

to be turned into knowledge at once from a single source. It can be constructed from various sources over time, and retained until then as non-semantic notions (Whitehouse, 1996).

As the typical process of becoming informed is from seeking "a complete picture of things" to seeking "a perspective or position" (Todd, 1999), the guidance from cognitive authorities usually smooths any outright dissonance. Especially since "things" in this case is restricted to the frame-relevant material at hand (Article Three). In rituals, people may access the supernatural for information, even if it does not really prove a viable source (Kari, 2001), while in ritualistic games, the designers, a technical interface, and/or game masters serve the same function. Exact details on how, however, may greatly vary from game to game (Article Three). The appended new pieces of knowledge usually function well within the TTZ, but lose both relevance and persistence when one returns to the real world. This is because in the new context, they are subjected to re-evaluation. In the case of games, they are often simply dropped and left behind. In religious contexts, they are anchored by way of both symbolizing items and continual community support (McCauley & Lawson, 2002; Article Three). A good example of this is the presence of wedding rings and the societal acknowledgment of marriage as a continual state. As games do not have supernatural agents considered real in the real world, or host cultures, this is a problem for educational game design. Players may, however, create their own anchoring, if the social contracts regarding the game are powerful enough (Henriksen, 2009).

Assertions are a significant part of the game, of the competency of its players:

The actors constitute systems of interactions. They draw upon rules and resources while functioning in the game. By changing the interactions, the rules and/or the resources, they either transform the social system - represented via the game - or produce a completely new one. They can also change position, from inside participant (actor) to outside observer of the magic circle. (Klabbers, 2009, p. 88.)

In a TTZ, the requirements of the temporary space function as the indexing language of the play, creating a context between the subject representations there. This also affects the way elements are re-signified and sought within the play-space (Article One, applying Mai, 2001 to games). TTZs tend to include subtle retrieval clues that assist experienced participants in their information seeking, as well as hints intended to explain key elements of behavior and

meaning to novices. Both systems may be tacit, and they can result in thought-action processes that seem automatic.

For example, my own test larp *PRAYERS ON A PORCELAIN ALTAR*, which has been run as both entertainment and educational game for a total of 26 documented times, is designed to examine the effect of said clues in other to its function as an information studies laboratory and an enjoyable pastime (Harviainen, 2011). In at least 23 of the runs (of the remaining 3, I have no data on this), a cognitive authority arose during the game, following the mechanisms described by P. Wilson (1983): People were able to barter bits of information, combined with personal charisma, so as to create an aura of expertise and leadership in the situation at hand, even as in truth all characters are equipped with roughly the same amount of actual data. They are perceived to be “in the know”, so that what information they provide is more easily accepted as potential knowledge. In most cases, the seeking incentives have proven more than sufficient at providing interaction, as the game has no direct plot, “right answers” or an actual “truth” of the situation, but this is not the case. Problems with one run at the Aalto University illustrate this:

From here, it was pretty much confusion, all of us trying to force ourselves to attack the other character’s morals, etc. Hoping that we could turn up the killer, if there really was one. Unfortunately this never happened. A few people got up to go to the bathroom room and when they left, no one said anything special which I had assumed was a perfect time for us to gossip to find out what was going on, but alas things just drudged along. No one really finding anything out and after about ninety minutes of just sheer force and confusion the story never got anywhere. We were all just as confused as when we had begun.

I believe the main problems were that we all knew each other fairly well, and just had too much trouble really trying to attack each other to the point that something might have probably happened. It would have been nice to have some type of moderator, someone that knew the bigger picture and tried to help us along, but alas we just basically ran around in circles until people finally gave up and decided to leave. Afterwards we discussed the event and also read all of the sheets, hoping to find out who did what and still we were lost and confused into exactly what was supposed to happen and where we were supposed to go. What was the finally outcome supposed to be? Was it supposed to be so open ended that anything is valid? If this was the case then it is very hard to ever predict what will happen from this game and to guarantee a rewarding experience to all players. Though I really wanted this to go well, in the end, it just kind of became more of an awkward waste of time. (Sammander, 2011; used with permission.)

As the feedback from this player illustrates, and as discussed in chapter 2, preferences in game mastering, plot structure and so forth may actually negate information seeking incentives. In this run, too, however, one observes berrypicking in action. It is fueled by the desire not to deviate too strongly from the illusion of play, even if the situation is boring.⁶²

If I were to say one thing that might have made things easier on us, it would have been to specify strong clear goals that the characters have to achieve and what the outcomes of achieving or not achieving them would result in. Some type of risk versus reward, some type of direction. Anything so the players would know if they were on the right track, if there was any track to begin with. Maybe we missed the point. (Sammander, 2011.)

While normally autopoietic, larps can also be run in an allopoietic fashion, and this is actually preferable to some players. To do so frees them from the duty to berrypick and avoid more direct inquiries. Behind this issue is the fact that techniques such as the use of berrypicking are a part of a larger mechanism, called boundary control. The concept originates from systems theory, but is at its most apparent in tight religious communities such as cults, because of their need to separate their own from non-believers (Galanter, 1999).⁶³

[A]n open system must carry out its transformative functions while maintaining internal stability by monitoring its own components and responding to feedback. These functions, however, can be disrupted by intrusion from the outside. For this reason boundary control is a vital function of any system.

Boundary control protects social systems against dangerous outsiders. It includes not only the screening of people but also of information, since information is a potent determinant of behavior. (Galanter, 1999, p. 105.)

Through boundary control, the illusory reality, whether a fictional one or an altered version of the real world, is consistently supported by the participants, for the participants. A risk exists that if it fails for one participant, it may fail for all (Article Six). Usually guided by authorities, and always following sufficiently agreed-upon rules (which may be dogma, game

⁶² As noted later by Sammander (2011), *“I believe that our group did enjoy it. Its strengths definitely lies in it being completely free and open ended, which could lead to pretty much an infinite set of outcomes. So possibly our set was not as good as another, but of course that depends on each participant’s point of view.”*

⁶³ See DeKoven (1978, p. 32) on the necessity of boundaries for games.

rules, unexplicated social contracts, etc.), participants maintain boundary control and sometimes through it, adjust the properties of the magic circle. Done consistently, boundary control contributes to the Pinocchio Effect - the game “wanting to be real” (McGonigal, 2003). If it fails for all (or many enough for a cascade effect leading to all), in turn, it leads to what Andreas Lieberoth and myself call the Emperor’s New Clothes Effect, the moment where everyone realizes that no one else believes the fiction either, and the illusion stops functioning (Article Three).

To protect themselves and the play experience from this, players not only support boundary control, but they also engage in active blunting (Article Six), the rejection of information that might disrupt the play experience or its illusory reality (as per Baker, 1996). The bigger the game, the more layered the boundary control is, by necessity. This is because large-scale games have to facilitate layered participation (Denward, 2011), and thus require layered systems for different levels of how much out-of-play information players may want to access (Article Six). Therefore a small larp is, boundary control -wise very different from a massively multiplayer online game, especially since mini-larps tend to thrive on secrets and their revelation mechanics (Harviainen, 2011; see S. Adams, 2005; 2009, on information behavior issues in multiplayer online games). For example, PRAYERS ON A PORCELAIN ALTAR, like countless murder mystery larps (Trenti, 2010), is designed to function on its players’ choices on what to reveal or not, i.e. their in-game information behavior.

Figure 3 shows a rough division of a game-space’s information processes and illustrates the way such TTZs tend to be structured as information systems:

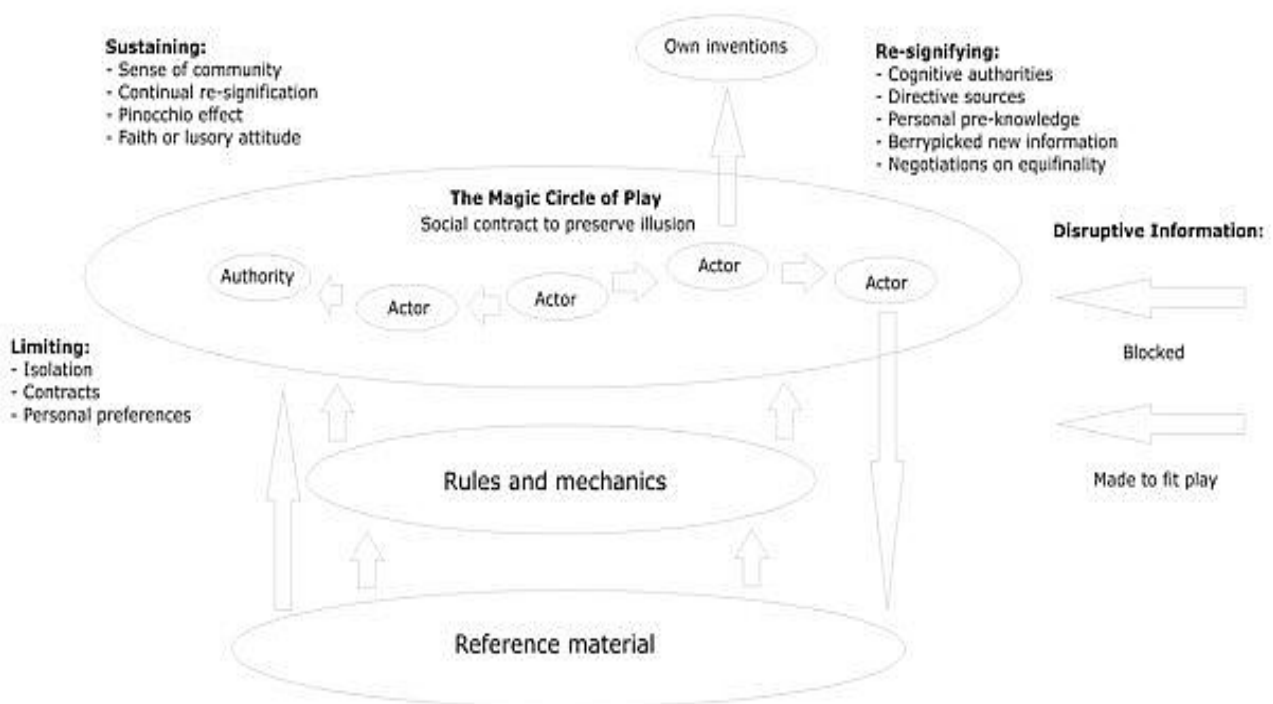


Fig. 3: The game-TTZ as an information system.⁶⁴

As shown in Figure 3, the larp environment relies on sets of processes that keep the environment relatively stable and meaningful to participate in. The systems boundary, i.e. the magic circle, gets temporarily perforated by participants in various ways, as they seek missing information that they cannot find inside the system. While doing so, however, they still try to contribute to maintaining the boundaries of play, in order to keep the illusion as intact as possible.

A higher performance (or attendance) frequency in a liminal game also increases the likelihood of boundary leakage. On the other hand, a frequently performed event more easily handles disturbances to its boundaries. High arousal, in turn, makes people less likely to notice small leakage, but is also makes significant breaks far more drastic (Article Six). This is emphasized by the physical presence of the player in a larp: As each player's both real and fictional *Dasein* is present⁶⁵, breaks and information gaps are perceived on both levels, as one

⁶⁴ Figure 3 is my expanded and adapted version of a rules-actors figure by Klabbers (2009, p. 48).

⁶⁵ As noted earlier, 'fictional Dasein' refers to the fact that the character, as a hypothetically "real" and complete entity within the fictional world of the game, would *within that fictional world* have a complete *Dasein*, its being-in-that-world, separate from the player's Dasein. As the character and the world, however, are fictional, that Dasein too, from the players' perspective, remains fictional.

of those (diegetic) is disrupted and the other (player) usually annoyed. The physicality can also lead to geographic information barriers, as there is no way to ascertain a directive source's commands. When high-arousal gaps and organizer mismanagement collide, the game can crash for some participants completely, as several "truths" are now at play within the TTZ. This is why some of the boundary control measures have to be directed also inside the TTZ, sometimes at the cost of breaking it in order to ascertain current facts from the directive source.

An excellent example of this is from the city larp RIKOS KANNATTAA ("Crime pays"), about organized crime in Helsinki, run in 2006. During the game, I was a member of a small group of criminals, given the order to eliminate a competing mafia boss trying to muscle in our leader's territory. In a meeting with that target (played by one of the game masters), we managed to eliminate that character, in an obviously lethal manner. We then escaped, informing our boss of the deeds, and then spent hours watching underworld doctors (who were also player characters) from our cars, just in case something had still gone wrong, and saw nothing to that direction. Meanwhile, the game master playing the target had simply decided that his character was too important for the plot, and could not yet be killed. He then, using his privilege as a directive source, retroactively ruled that he had been strongly armored (a fact against our visual cues at the time), the knife had been completely stopped, and he escaped unharmed. He then called this information to the other game masters. They, however, neglected to tell it to us, as well as to our boss. This is highly significant, as at the time of the deed itself, there was no ambiguity whatsoever. From this point on, because of that ruling and the lack of sufficiently communicating it, the game contained two absolute, incompatible truths about the situation: One in which we had failed and the main villain was still alive, and another where he was stone cold dead. Acting on the latter later got our boss killed by that very villain. So from the extremely enjoyable, engrossing, high-arousal play until that point, we dropped to almost total disinterest in the rest of the game. By showing that the diegesis was not logical, that our actions did not matter, the game master negated our contribution to play, and removed from us the illusion of the system being sufficiently self-referential.

RIKOS KANNATTAA also featured a good example of how character immersion (described in 2.2) and information can be at odds: The criminals in our group were all supposed to come

from Sweden, being first-generation descendants of Finnish immigrants. During the game, however, we by chance visited Hietaniemi cemetery, which has a special area reserved for the graves of people whose contributions to Finnish culture have been considered of exceptional importance. For all four players, it was the first visit there. Our characters would not have been familiar with most of those names, but after the game all of us admitted that it was practically impossible to stay in character while seeing what the graves of each famous person looked like. The information contained in the monuments imposed itself on the players so thoroughly that it made character immersion impossible, making the preservation of the illusion of play while at the graveyard extremely hard.

To explain why such information conflicts cause effects of this magnitude, we turn to examining the information layers (which are a type of frame as defined by Bateson, 1955/2000 and Goffman, 1974) in play, and the way their contents are appropriated.

4.5 APPROPRIATION AND LAYERS OF PLAY IN IMPOSED SPACES

As noted by Michael Buckland (1991), the process of becoming informed depends on two central preconditions. The first one is the physical perception of the signals, most significantly the question of whether they can be seen or heard. The second one is the cognitive process of becoming informed, which is dependent upon factors such as cognitive skills and prior knowledge. This is the paradox of systems that inform.

[I]nformation systems exist so that users may become beneficially informed, yet information systems cannot simply be evaluated on their ability to inform beneficially because becoming informed depends, in part, on factors that are situational and external to the information system. (Buckland, 1991, p. 109.)

According to Paul Ricoeur (e.g. 1981), information of all kinds is appropriated by one same way, through the process of seeing meaningful actions as texts. In other words, just as we read information from a textual document, we can read the actions of others (Lloyd, 2007).

My claim is that action itself, action as meaningful, may become an object of science, without losing its character of meaningfulness, through a kind of objectification similar to the fixation which occurs in writing. By this objectification, action is no longer a transaction to which the discourse of action would still belong. It constitutes a delineated pattern which has to be interpreted according to its inner

connections. This objectification is made possible by some inner traits of the action which are similar to the structure of the speech-act and which make doing a kind of utterance. In the same way as the fixation by writing is made possible by a dialectic of intentional exteriorisation immanent to the speech-act itself, a similar dialectic within the process of transaction prepares the detachment of the meaning of the action from the event of the action. (Ricoeur, 1981, p. 203-204.)

The information is then either discarded, or appended to suitable sections of our existing store of knowledge (as per Todd, 1999). If a suitable mental model exists already, it gets easily appropriated and appended (D. H. Kim, 1993). It is changed, however, by that which was already considered known (as per Brookes, 1980). This because the what is being appropriated is essentially alien, as the original meaning of the information can never be truly known by those appropriating it (Ricoeur, 1981). Given that these games are never played in information vacuums, but rather rely on the players' with-brought information and knowledge in order to function at all (Crokall, Oxford & Saunders, 1987; see also Ingwersen & Järvelin, 2005), there is a ready personal structure for each person to use as the interpretative framework for appropriation and to which new information can be appended, one however strongly influenced by prevailing paradigms of belief and tradition. Key elements brought from mundane life include forms, habits and patterns of action, presumptions and pre-expectations (including hermeneutic pre-understandings), information practices (seeking preferences, distribution, blunting, etc.) and both general and situation-specific rules and guidelines of conduct for various situations (i.e. situational scripts and schemas). Players can be temporarily distanced from them by certain design measures (see chapter 4.6 below), but that is neither easy nor even beneficial to some types of desired play.

The reality of the game is experienced on several layers at once. Those cannot be defined precisely, as they overlap, but some general observations can be made. In Article Two (basing it on Harviainen 2005a⁶⁶ and Montola, 2005), I use a system of four layers.⁶⁷ These are, counting inward:

⁶⁶ “External participant motivation (EPM) is roughly describable through the question “why do I want to play”, whereas internal participant motivation (IPM) is describable with “how do I want to experience in the game”. Note that IPM includes both diegetic and extradiegetic expectations.” (Harviainen, 2005a.)

⁶⁷ As noted in Article Four, sadomasochist role-playing also has clear frames, and participants move their focus between them the same way as they do in larps (see Weinberg, 1978, for sadomasochistic frames). 24/7 sadomasochism (Dancer et al., 2006) is frame-wise, in turn, identical to pervasive larps as they are described by Stenros (2008).

1. The completely exogenous level where the participants' social interaction and their game-external reasons for playing exist.
2. The level of exogenous internal motivators (i.e. thoughts and desires on how one wants to experience the play) and meta-game discourse.
3. The level of subjective diegeses and their interplay
4. The fictional reality of the characters (which can never truly be accessed by the participants).

Other researchers have use different sets of layering, many of them based on the frame theories of Bateson (1955/2000) and Goffman (1974). Fine (1983), for example, uses a system of three central frames, Mackay (2001) five, Brenne (2005) four, Schick (2008) two and Stenros (2008), following Fine, three. It is furthermore important to note that such levels are not the only frames they perceived in said activity, simply the ones the researchers chose to analyze (Brenne, 2005). Stenros (2008), for example, expands from his data to show a new intra-game frame, which the players used when playing their characters as possessed by spirits, and notes the fact that during the month of play, the players also engaged in countless other frames outside of play. Pearce (in press) discusses a preparatory and a performative frame, in addition to Fine's frames. Cover (2010) speaks of four "immersions", some of which other play researchers would rather classify as layers or frames, not forms of immersion as described in section 2.2. Definition and borderline differences aside, such layers describe the different, conjoined information sub-systems at play, all of which together for the game-as-information system.

When game breaks appear, for one reason or another - missing information, interpersonal conflict, temporary breach of fictional logic, etc. - the game is frozen on some levels so that the players can concentrate on solving the problem outside those levels. The layers always freeze in order from the inside outward, meaning that for example a rules debate will pause the fictional reality of the characters and the interplay of diegeses, and a personal conflict between two players would freeze also the level of game rules. The game grinds to a temporary or permanent halt, if the latter kind of break happens (Article Two). A transfer of perception to another layer may sometimes solve game breaks, as for example an argument between two players on the outer layer can cease when play is simply re-activated and their focus thus shifts.

The layers are constructed from discourse and imagination. The discourse does not last, but from it emerge the texts that are used as the basis of the game, whereas imagination supplies material for the discourse and guides its changes. Discourse is realized as event, but understood as meaning (Ricoeur, 1981). Ephemera (fiction-internal elements; Edwards, 2004) arise through that process, and undergo re-signification when necessary. The first layer, that of social interplay in the real world, is outside the fiction proper, yet inevitably influences it. Its morality is tied with the real world still, the presence of the participants in the world's continuity (Dasein) is their mundane one, and so forth. Players may discuss the diegeses at this level, in general terms, but diegeses do not exist on it. The texts that can be appropriated on this layer are mundane ones, as well as those created by the interplay of game-related goals expressed by the participants.

The second layer introduces meta-dialogue relating to the game, as well as subjective desires relating to play-style preferences. The texts on it are formed from events on levels 3 and 4, as well as the player preferences and some random disturbances coming from events on the first layer. For most analysis, this is the primary text of the game, where choices based on fabula (story-seed spread in the material; Fatland, 2005) are made and ethics become game-relatedly relativist (Article Two). The players are on this level connected to the diegesis, but all their discourse takes place outside it.

On the third level, player motivations become character motivations, fabula are actualized, based on the choices made on the second layer, and ephemera become real. On this level, the players' subjective diegeses exist, and interact (Montola, 2003). The interaction also includes points where the subjective diegeses signs are subtly negotiated, so that they are sufficiently alike. Easing the process is the fact that in a larp, the interpretations need to be just equifinal, not identical (Loponen & Montola, 2004). A further advantage comes from intericonicity, the cultural process of forming ready templates for things, based on prominent examples - North Europeans probably imagining rather similar swords, for instance (Adelsten, 2002). Humans organize their social universes through and as texts (Brier, 2008). Each subjective diegesis is thus a text in itself, but each player's personal text includes more than just his diegesis, and they are "texts" only in the sense of Ricoeur's "meaningful action as text", even if recorded (Article Two).

Levels two and three are basically processes where players appropriate material introduced by other players and then apply it to their subjective diegeses, in situationally fitting forms. During this process, it becomes the player's own information, despite being at the beginning alien (yet suitably contextualized for easy appropriation, in most cases). The players do not, therefore, really understand all information at play, but rather transform it into their own interpretations. Those interpretations are then re-introduced into play, to be appropriated by others, creating a feedback cycle, a self-referential system. In a sense, the players become each others' primary second-hand information sources (as per P. Wilson, 1983) for the duration of the game - and, like any other second-hand information sources, are not really the most reliable or most expert ones. They are, however, nevertheless usually the most situationally relevant ones (as per P. Wilson, 1973). Layers two and three furthermore work on a principle of immediacy, where the events - including decisions and information behavior - are, when possible, performed without undue distancing (as per Ricoeur, 1975). The physicality of larps is particularly conducive to this, giving them a party-like level of immediatism (as per P. L. Wilson, 1994). The fourth layer is unreachable: It is the "real world" of the characters. It can, as noted in chapter 2.3, be analyzed as if it were a story, and it can be attributed several (Article Two).

Events do flow from one layer to another, in both discourse and as emotions. Called "bleed" in role-playing theory, the (typically emotional) leakage between player and character is usually inevitable. The reactions of one now and then affect the other, and vice versa, and it may not be intentional or pleasant (Montola, 2010; 2011; Waern, 2011). For example, a romance played in a larp may leave romantic notions in the minds of the players after the event has ended. This is especially typical for players who seem to experience an interlaced persona (*perikhoresis*) with their characters (as per Harviainen, 2005; 2006b; see also Stanislavski, 2010, p. 57). Bleed is normally a side effect or an unintentional emotional and/or information leakage, but some designers intentionally plan their games to induce it (Montola, 2010). In addition to bleed, leakage between layers can also take forms where a competitive player treats narrative elements as solely tactical gameplay advantages (Myers, 2010). In most cases, players can distinguish between player and character emotions, despite bleed, but not always (Waern, 2011).

Hermeneutics can be used to understand these processes, as the inner layers' contents emerge from the outer ones, in a process of textual evocation. As noted by Ricoeur,

[W]hat must be interpreted in a text is a proposed world which I could inhabit and wherein I could project one of my ownmost possibilities. That is what I call the world of the text, the world proper to this unique text. (Ricoeur, 1981. p. 142.)

Pretence players, role-playing and not, indeed create the worlds they temporarily inhabit, as sets of texts. This makes them a natural fit with the kind of analysis Ricoeur is seeking (Article Two), especially since those worlds only function because of necessary information the players have brought with them (Crookall, Oxford & Saunders, 1987). As noted above, without that information, including preconceptions, the play would not work, but, furthermore, the same brought-with information creates the differing frames dealing with potentially conflicting (or at least immersion-damaging) information. This is why the layers can be analyzed as facets of information behavior (as per Ingwersen & Järvelin, 2005).

The expert reader, one with substantial relevant prior knowledge or insight, will get more out of the text than will someone without such knowledge, who would probably not even notice the symbolism and allusions. (Buckland 1991, p. 109.)

This principle also applies to games. What the players have brought with them, very much including their ability to manipulate game-relevant sign systems, as described above, enables them to make sense of the information available within the role-play environment.⁶⁸ The fact that some players will exploit the situation only emphasizes this: Whether they do so in order to try and provide a better game experience for everyone (Harviainen, 2006b), or to gain a competitive edge regardless of how much play-relevant information is revealed (Myers, 2010), they contribute to the play of all involved, by functioning as sources of information. As shown in the next sub-chapter, such sources are not necessarily welcome to either play or design, but they exist as a matter of course, and must be taken into account. For players engaged with this type of behavior, it is a central part of what makes the play worthwhile, and may eventually contribute beneficially to other participants' play, especially in larps where contesting sources is far more difficult than in continuous online worlds (Article Six).

⁶⁸ Some of the brought-with information may be unwelcome, as in the case of accidentally heard secrets from other players (Article One).

Players may actually need actions that make no real sense within the diegesis (Article Two). The addition of seemingly illogical elements often actually enhances the play experience for all, because in real life, choices are not always scripted-seeming and may in truth be very erratic. Tendencies can be predicted, but not the end results (Iyengar, 2010). Inside magic circles, this fits the activity: The human decision system weighs all new strategic information, judging its potential relevance. When it furthermore distributes that information, it has been altered by the experience of the provider, meaning that the signal is never clear, should any person be a part of the provision chain as a second-hand information source. The more intellectio is needed, the harsher the critique on incoming signals, and the more likely their rejection (see Boyer, 2001; J. L. Barrett, 2004). Because of this, and the way it affects the reception and appropriation of new information, we turn to the theory of ASK (Belkin, Oddy & Brooks, 1982).

4.6 THE ANOMALOUS STATE OF KNOWLEDGE, AROUSAL AND LEARNING

One of the key premises of library and information science is that information seekers are normally quite rational agents who know what they need, as soon as they have some idea of what is required (Kuhlthau, 2004).⁶⁹ If uncertainty⁷⁰ about information needs exists, it can, in Weaver's terms (Shannon & Weaver, 1949) be either desirable (associated with information) or undesirable (associated with distortion of messages). From it one moves to more clarified needs and eventually seeking tasks (Kuhlthau, 1993; 2004). As noted by Anderson (2010, p. 5288), "*Uncertainty is embedded in the interpretative processes by which people make connections between new ideas or information encountered and their preexisting knowledge.*" This is, again, Ricoeur's appropriation (1981) and Todd's (1999) appending in action - the making of own out of that which is alien, by accessing one's earlier frames of reverence and knowledge structures.

⁶⁹ Not that their information searches or seeking process are always logical, however.

⁷⁰ As noted by Anderson (2006), the concept of uncertainty has many differing meanings within library and information science. For example, information retrieval research has sought to model it after mathematical principles, so as to increase retrieval relevance (see Liu, 2004, for an overview of the umbrella concept), whereas information seeking studies concentrate on it being more a state rather than calculable issue (Anderson, 2009).

In rites of terror, as well as games that mimic them (e.g. PROSOPOPEIA BARDO 2: MOMENTUM)⁷¹, that process is intentionally twisted (Whitehouse, 1996). The participants are not supplied with the necessary reference frame that allows them to start appending clues (as per Ricoeur, 1981; Buckland, 1991), but intentionally kept away from one. Such events emphasize the way uncertainty is associated with fear, danger and risks, as well as its strategic use (see Anderson, 2006; 2010, for a LIS perspective on uncertainty).

In other words, some of liminal games, like certain high-arousal ritual activities, extend the participants' information uncertainty (Article Six). This situation, known in library and information science as an Anomalous States of Knowledge (ASK; Belkin, 1980; Belkin, Oddy & Brooks, 1982) denotes that the participant is aware that he needs more information to make sense of the current situation, yet is unable to recognize what sort of information.⁷² Whereas under normal circumstances they would soon move on to a clearer situation (as per Kuhlthau, 2004), in these games (and the rituals they resemble as systems) they are not given a chance to proceed in such a manner (Article Six). Games rely on novelty, which is brought forth by disruptions in the continuity (Myers, 2010) and the fact that without sufficient information on even information needs, engaging surprises can be easily encountered (Douglas & Hargadon, 2001; Balzer, 2010). It is further supported by the constant need to re-signify things (Article Six). The uncertainty, however, has to be made meaningful, so that it does not demotivate people from participating (Article Six).

By creating distressing situations, restricting action opportunities, overloading working memory, and dealing with matters of great cultural importance, imagistic rituals undermine calm, reflected information seeking. In stressful situations information appropriation becomes more erratic, as novelty becomes distressing (Wilson & Walsh, 1996), the scope of cognition narrows to few working-memory items (Wickens & Hollands, 1999), and secondary process thoughts are usually eliminated from consciousness. Reliance on immediate sources, supported by emotional salience including feelings of

⁷¹ MOMENTUM was a 36-day long, EU-funded pervasive larp, in which its 30 participants played themselves occasionally possessed by the ghosts of dead revolutionaries, fulfilling various tasks set by the organizers (see Nordgren, 2010, Stenros, 2008 and Stenros et al., 2007, for more details).

⁷² “Information uncertainty” is used here as a layman-friendly explanation of ASK, but they are not identical concepts. ASK usually denotes negatively experienced information uncertainty, whereas positive uncertainty is simply seen as something that fosters improvisation and creativity (see Anderson, 2006, for examples).

trust and belonging, increases. Such reliance even extends to shared symbols and narratives, which are usually already present in the foreground of rituals and games. (Article Three)

ASK extension is dependent on successful boundary control (Article Six). In rigid-rule games that are directed from the outside and are allotelic, the game master is primarily in charge of boundary control (Klabbers, 2009).⁷³ In the more free-form larps, players voluntarily handle that task as part of their game experience, protecting the illusion, their reason for participating (Article Six). As long as the players can be kept from accessing ready performative scripts, they have to rely on information sources inside the TTZ, such as cognitive authorities. ASK cannot be extended indefinitely (some cult applications of it possibly excluded, see Galanter, 1999), as it will at some point be replaced by a situational script that increases familiarity and adaptation to stimuli at hand. In play, the extension allows players to experience new material that they encounter as more interesting and immersive (Douglas & Hargadon, 2001; Balzer, 2010). Some players (see Bartle, 1996 and Harviainen, 2006b) are not interested in the liminal aspect of these games, even if they do accept their reference systems and re-signification so as to benefit from them. They will therefore not enter the extended state of ASK at all (Article Six).

Depending on game type, ASK extension strongly varies. Games resembling rituals of the dogmatic (high frequency, low arousal) type, such as sessions of long-term role-playing campaigns, work based on a low-key exposure enforced by shared pleasure, affirmation and sense of community (Bowman, 2010). In them, the game offers a confirmation of what is already known and shared, with just a few added elements such as new narrative events. Those elements are easy to contextualize and append (as per Todd, 1999; Lloyd, 2007), as they exist in the immediate presence of old, already appropriated information (Article Three).

⁷³ Rigid-rule games have detailed rules and they refer to a well-defined domain of application. They are often operational games. They are one end of a continuum, at the other end of which are free-form games. Free-form games, in turn, include just a few basic rules, such as start and stop rules), the game facilitator's right to intervene, and guidelines for the use of space and equipment (see Klabbers, 2009, p.51, for details).

Case Example 3: Information Manipulation for Arousing Play

As described by German larp researcher Carl David Habbe⁷⁴, in the three-day larp PROJECT JERICHO - IN VITRO / LUST FOR BLOOD⁷⁵ (2011),

The Orga[niser]s played much with information and its distribution. They changed Wikipedia, altered some websites and created a whole databank-network and a radio station, and started the LARP when the players entered their cars to drive to the larp. Some players were called while approaching and told to avoid some streets/locations/highways/city area because those were "closed". The immersion was huge, a group of players leaving the larp area to get gas for a generator (they were driving) were actually pulled over from the street and got nearly busted by the private corporation dealing with the Zombie Outbreak. During the pull-over, one of the officers (an NPC, pre-scriptedly) lost his key card (which could be used to enter the corporation's data-system) accidentally while searching the car...

As with SANNINGEN OM MARIKA (see Denward, 2011), here we see that organizers may extensively manipulate the information environments of the game, including sources that also exist outside the fiction. Players then integrate the elements inside the magic circle. This is particularly common to pervasive games, as they seek to blur the line between game and reality (Montola, Stenros & Waern, 2009; see also Harviainen, Gough & Sköld, in press).

Games with learning goals, in turn, may seek low ASK, while trying their best to retain strong engrossment (Article Six). Without the engrossment, they would not function (Klabbers, 2009), but as ASK is tied to states of arousal, too strong an engrossment will start adversely affect learning goals. In essence, the same thing that draws people to play learning games is harmful to their learning, if taken too far (Henriksen, 2008). With optimal balance, engrossed players will learn from the game, and then spread that learning further (as per Argyris & Schön, 1996), when they advertise their play experience to others. ASK is unavoidable, even in closely controlled systems such as rigid-rule games, but it can be reduced to a great extent (Belkin, Oddy & Brooks, 1982; Article Six). The trick is actually in accommodating uncertainty rather than reducing it (as per Anderson, 2006):

⁷⁴ Personal Facebook message, sent Jan 8, 2012. Used with permission.

⁷⁵ <http://www.heldentrutz.de/projekt-jericho-wir-laden-ein/>

Uncertainty is acknowledged as a persistent characteristic in information seeking. As [T. D.] Wilson ([1999,] p. 265) observed, from the searcher's perspective uncertainty is "always there." It is a natural experience within the process of information seeking and meaning making. However, if unexpected, it can give rise to feelings of doubt, confusion, frustration and anxiety ([Kuhlthau, 2004,] p. 200). (Anderson, 2010, p. 5291.)

Lainema (2008) recommends that in rigid-rule business and management simulations, for instance, the play environment should be made as transparent as possible, and the organizers' influence be minimized. These are both steps towards reducing ASK while preserving engrossment and the liminality of such play, and the same principle extends well outside just rigid-rule gaming (Article Six). For the same purpose, Lainema (2003) has also utilized real-time game systems, which appear to foster both realism and engrossment. In a similar vein, Lisk, Kaplancali & Riggio (2012) emphasize transparency of all game interface mechanics, so as to prevent learning outcomes and leadership skills from getting mixed up with a lack of mastery of the game interface (see also Kaplancali, 2008).

Learning games require that engrossment, because the more the players are engaged with the tasks at hand, the more involved they are in the learning processes conveyed through the game. They are continuously constructing and re-constructing their perception-action repertoires, and thus using the game to its full educational potential (Klabbers, 2009). If, however, emotional arousal is too high and ASK extension too strong - either due to designer choice or player preference - as in imagistic rituals, much of the learning potential is wasted. This is because in ritualistic circumstances with very high arousal, the memory imprint mechanisms of participants appear to change: Instead of the generalized schemas of semantic memory, such experiences get recorded as the unique schemas of episodic memory (Whitehouse, 1995; see also McCauley & Lawson, 2002).

As the realism of liminal educational games grows, they come closer to the risk of high arousal and over-extended ASK, while seeking high engrossment. Many larps already fit Klabbers (2000) criteria for "Mode III" simulation/games, even if that level of realism is not yet compatible with all learning or research goals (see Harviainen, 2011):

[Mode III simulation/games are] learning environments in which the learners are given the opportunity to interactively build their own system of resources and rules[, and which provide] conditions for the interactive self-reproduction of social systems. (Klabbers, 2000, p. 400.)

In such cases the simple reduction of ASK and arousal is not sufficient - if too much realism is taken away, the simulation or game is seen as just theory learning unconnected to real life and real-life practices (see Lloyd, 2007).

Games and rituals that in turn seek a strong reaction from their participants aim for high arousal and an extended ASK state (Article Six). An ASK extension carries within it problems for game design. It creates more powerful experiences, but their impact is less likely to last after the game ends (Article Six). This is consistent with research on thought control systems (e.g. Lifton, 1961): Changes rarely persist without a system to constantly support it. The same is true of religious cults, which rely on ASK extension and a strong, clear, singular authority to keep participants committed, and thus rarely survive the death of a leader (Galanter, 1999). Games that create a very strong sense of liminality can create very powerful motivations and experiences, but they are not likely to cause cognitive long-term changes (Article Three; Article Six; see also Lifton, 1961, on the duration of cognitive changes). While changes tend to remain temporary, they sometimes still foster personality development, because of new perspectives experienced during play (Meriläinen, 2011; in press). This is mostly true of just attitude changes, as learned skills are much more easily retained, if the participants have time and opportunity to evaluate, debrief, and explore the perspectives they adopted during play (Kayes, Kayes & Kolb, 2005).

Games may thus aid in appending skills, tacit knowledge and local information, particularly if well anchored (see Klabbers, 2009; Henriksen, 2009). It is naturally also so that since such games can be used to teach practical skills and offer new temporary viewpoints (Balzer, 2009; Hsu, 1989), they may lead to long-term cognitive changes. That change, however, is likely to be gradual, however, despite what the designers of political larps such as SYSTEM DANMARC⁷⁶ have hoped (see Article Three). It must also be noted that ritualistic games, like most rituals, but unlike cults and certain other continuous pretence activities (e.g. gay

⁷⁶ SYSTEM DANMARC was a futuristic three-day representation of life outside societal norms and social support systems, run in a specially built cargo container city, for 350 players and 50 organizers (see Munthe-Kaas, 2010 and Opus, 2005, for details).

reparative therapy), also stay quite stable, as their magic circles and ASK extensions are designed to function for only a relatively short time (Article Three).

A problem with relying on ASK manipulation, liminality and the protective frame of the characters is that in some occasions, players will not uphold the necessary social contracts (Article Three). For example, if the played, fictional situation cuts too close to traumatic experiences from real life, the protective frame of the game is lost. The game then breaks down, sometimes with tragic results to the player unable to separate real experiences from those within the game-frame (Schick, 2008; see also Olmstead-Dean, 2007). Since, as noticed by Balzer (2011), the safe illusion of play (some immersion included) is a necessary requisite for learning from role-playing, such breaks are especially problematic for educational play. The safety does not guarantee success, yet without it, nearly no learning is possible: Groups may develop new perspectives and role and task divisions, and then fail using those, as the necessary framework and context is missing (Lainema & Saarinen, 2009).⁷⁷

What is learned from play, through either high ASK and strong yet vague experiences, or with a low ASK and tailored experiences of competence, trial-and-error and significant anchoring, comes down to the strength and integrity of the game's boundary control. It is the process that enables the didactic content and potential of games to emerge. It is given form and strength by the interplay between game content, context and form that determines meaningful play and makes the illusory reality seem worth supporting (Klabbers, 2009). Designers cannot predict its exact function, but as choice researchers such as Iyengar (e.g. 2010) have shown, a clever organizer can make certain outcomes far more likely than average. This again ties into uncertainty, because it is extremely hard to gauge what exactly is learned during play, because of the participants' differing levels of information uncertainty (including, but not limited to, ASK, background, appending style, appropriation habits and earlier knowledge. The situation is far too complex for a reliable analysis on which stimuli affect what (Wolfe & Crookall, 1998). Furthermore, we still do not even have a sufficiently reliable epistemology for game-based learning (Klabbers, 2003), so as far as results go, it all comes down to noticing whether people have learned new things, but not exactly what.

⁷⁷ The experience may nevertheless prove highly motivating for the participants, prompting future learning, so not all is necessarily lost (Lainema & Saarinen, 2009). The game-frame's attraction keeps some players coming back to play, and subsequently learn, more (Whitton, 2009).

Further research is certainly needed, and it is my hope that the understanding of certain prerequisites of the process, presented in this dissertation, contributes to that purpose.

On a final note, due to the use of study of religion methods on liminal games in this thesis, it is necessary to note one central difference between the two: If we follow Suits (1978), games are about inefficiency for the sake of challenge and enjoyment. Rituals, in turn, are about efficiency, achieved in a convoluted but predictable and potentially safe manner (McCauley & Lawson, 2002; note that efficiency may also mean things such as gaining more convenient predictability, as presented by Goffman, 1955). Liminal learning games are an exception: They are inefficient for the sake of being later efficient - just like rituals, but through a different route (Article Six). Whereas games tend to move us further from reality and rituals towards ultimate reality (Lieberoth, in Article Three), liminal learning games seek the middle road, aiming to move their participants towards the immediate future but with a better arsenal of new perspectives and skills. This they do through cleverly manipulating their information environments.

5. CONCLUSIONS

In this dissertation I have answered the question of what the essential information systems traits of live-action role-playing situations are, and how those traits affect information behavior during play. I have also shown how a larp functions as an information system, how its illusory reality is maintained and by whom, and what the discursive limits of the phenomenon are. I have also shown how participants utilize information inside the play-space.

I think that by providing those answers, I have succeeded in introducing a relatively new way of analyzing physically performed pretence that extends well beyond just the case of games, as a coherent system. In my own assessment, this work stays mostly on the level of providing a toolkit for future researchers, myself included, but its combination of meta-theory and empirics (mine and others') also makes it useful as a phenomenographic contribution to both game studies and library and information science, with useful applications for the cognitive study of rituals as well. By using pretence games as examples of information phenomena, and information studies to explain game phenomena, I believe I have made the significant contribution of actually providing a firm scientific basis for future discussions of things that have until now been treated mostly through conjecture. Examples of these very much include both the importance of information processes for the game experience and the connection of games and rituals first introduced by Huizinga. I think I have also succeeded in showing how those two seemingly disparate elements are in truth strongly interconnected.

In ritualistic circumstances, the areas of activity become charged through information processes fueled by a special social contract. Participants leave mundane reality behind, but still leave points of potential contact to it, in the form of reasons for attending as well as potential information sources, in case of gaps. In larping, they take on artificial personas, which are subject representations of material given to them by the organizers before play. The interaction of the characters with each other and the fictional environment turns the play-space, a temporary tribal zone, into a pseudo-isolated information system with multiple index entries. Within it, the play is its (one way or another) immersed players' primary frame of reference, and the activities within seem separate from mundane existence.

Live-action role-playing games and their siblings contain several information-environmental properties that while also common elsewhere, are particularly visible in them because of their constrained, temporary nature. These include, in library and information science terms, a social contract regulating document access and information source selection, a situation where invented knowledge may take the place of known facts, the presence of cognitive subject representations (i.e. characters) and their interaction as second-hand information sources, and a particularly strong reliance on cognitive authorities, some of who are granted an atypical level of power to re-define document properties. The play itself is a form of information behavior, with both active and passive components.

Within the temporary tribal zone, participants perceive their surroundings through cognitive subject representations, their characters, which are constructed as extrapolations out of material that was given to them before play. To that representation is then during play appended new information, which is created or provided by encounters with other participants' characters and the fictional environment, as well as information actively sought as part of the play. Players actually perceive the game environment on multiple levels, including an external stance, and are aware of potential information sources and conflict negotiations that exist outside the fiction, but for the most part, they try to act as if those elements did not exist. Their preferences on immersion and narratives strongly affect the way they navigate the borderline between the two. Accepting the limitations of play makes the play more interesting, through increased challenge and a more tangible sense of the fictional seeming real. It creates a feedback loop for its players and, in systemic terms, makes the game-space appear to be self-referential as both a social and as an information system. The border of the play-space, its magic circle, is an information barrier that blocks problematic information from outside, or transmutes it into something suitable for the fictional reality.

The illusionary reality of play requires constant maintenance, often done without conscious effort. This process, called boundary control, consists of the players' isolation from potentially problematic information sources (including their active rejection, i.e. blunting, of some of such information), their heightened reliance on cognitive authorities and directive sources, and their shared sense of situational relevances. Within the fiction, participants' sense of information uncertainty, in the form of an anomalous state of knowledge, is either emphasized for the purpose of more powerful play experiences, or reduced, for the purpose of

game-based learning. They are all information processes, and furthermore vital underlying elements absolutely necessary for understanding the play experience.

All these phenomena also exist in information environments that are not connected to play. The play-context simply makes them more prominent and visible than in many other cases, and thus easier to observe and analyze. The artificial nature of games, including the way a designer can manipulate their traits, further emphasizes this. Understanding the way physical pretence play situations function as both information systems and as information environments, and the way they affect the information behavior of people inside them, brings us one significant step closer to understanding such influences also in more traditional subject areas of library and information science. At the same time, due to the same reasons, the comprehension of these underlying information processes increases game studies' knowledge on how the play experience itself is formed, as well as our understanding of how information systems function and the way they are understood by their users.

The logical next step would be to apply the same principles to studying similar phenomena elsewhere: Besides the obvious application to seeing if liminality informatics explains religious or magical ritual phenomena as well as it does ritualistic gaming, and applying it to games to see how well it fits with different game types, it should also be used to analyze the impact of social contracts on information environments in mundane life. That would not only show how far the methodology extends, but also how significantly social phenomena affect information behavior, and vice versa.

6. THE ARTICLES

Article One

Harviainen, J. T. (2007). Live-action role-playing environments as information systems: an Introduction. *Information Research*, 12(4) paper colis24. Printed under the author's personal rights within the Creative Commons license.

Available at <http://InformationR.net/ir/12-4/colis/colis24.html>

Article Two

Harviainen, J. T. (2008). A hermeneutical approach to role-playing analysis. *International Journal of Role-Playing*, 1, 66-78. Printed with permission.

Available at http://marinkacopier.nl/ijrp/wp-content/uploads/2009/01/harviainen_hermeneutical_approach_to_rp_analysis.pdf

Article Three

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Article Four

Harviainen, J. T. (2011). Sadomasochist role-playing as live-action role-playing: A trait-descriptive analysis. *International Journal of Role-Playing* 2, 59-70. Printed with permission.

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Article Five

Harviainen, J. T. (2011). The larping that is not larp. In Henriksen, T. D., Bierlich, C., Friis Hansen, K. & Kølle, V. (Eds) *Think Larp: Academic Writings from KP2011* (pp. 172-193). Copenhagen: Rollespilsakademiet. Reprinted with permission from Rollespilsakademiet.

Online version available at http://rollespilsakademiet.dk/kpbooks/think_larp_web.pdf

Article Six

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Proceedings of the Sixth International Conference on Conceptions of Library and Information Science—"Featuring the Future"

Live-action, role-playing environments as information systems: an introduction

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Abstract

Introduction. Live-action role-playing (LARP) environments are a special type of social information system. This paper presents the key traits of such systems and the potential impact of those traits on in-game information behaviour.

Method. LARP elements reported in earlier research have been identified as documents and subject representations and then analysed from an information system perspective.

Analysis. In order to access the information nature of this social activity and the temporary space in which it takes place, a combination of systems analysis and descriptive phenomenology was used to analyse the game elements.

Results. LARP play and its temporary reality are shown to match the patterns of information systems and LARP play to be analysable as a type of information behaviour.

Conclusions. It is possible to not only modelLARPs as information systems, but also define their traits to a degree that permits reliable study of information behaviour in such temporary environments.

Introduction

Live-action, role-playing games (LARPs) are a type of pretence play where participants are physically present in the activity ([Brenne 2005](#)). The players play characters, artificial personas, within a pre-described fictional environment, and experience the results of such play through that character. How players relate to their characters varies from participant to participant, and the same player may also vary his or her character relationship during play ([Harviainen 2007](#)). Some LARPs contain a very strong narrative structure, others next to none. They may or may not be competitive, and are often created to facilitate enjoyment, medial functions, or both ([Morton 2007](#)). Regardless of whether it is played only once or multiple times, and whether it is a singular work or a part of a continuity, each LARP is a unique event, environment and information system (in the sense of system-that-informs; [Buckland 1991](#)). Yet most of them share strong similarities and tendencies. This paper is a brief introduction to the similarities that concern information behaviour. Some LARPs do not share all of the traits or phenomena presented here, but, being exceptions to the norm, are beyond the scope of this article (for key variables see [Montola 2007](#)).

LARPs contain several extraordinary information-related traits. So, from the perspective of library and information science, they are worth studying not because they are now a commonplace phenomenon, but rather because the LARP environment provides insight into phenomena not normally available for LIS study. The most important of these are an exceptionally visible social contract regulating communication and document access, an environment where invented information may freely take the place of documentary knowledge, and the presence of cognitive subject representations. LARPs therefore work as useful test environments for observing the impact of culture and environment as well as personal attitudes on information behaviour. In this, they visibly include all of the factors listed by Steinerová ([2001](#)) as influencing information communication and use.

Information and the magic circle of LARP

A live-action role-playing game takes place in an artificial temporary reality, a play-space, created by a social contract. In LARP studies, this area is given a multitude of names and definitions, but, for the sake of convenience, I will refer to it as the "magic circle of play" ([Huizinga 1939](#); [Salen & Zimmerman 2004](#)). Within that space players ignore and re-signify events and elements in a way consistent with the game's needs ([Loponen & Montola 2004](#)). The reality is maintained by a group of semiotic processes aimed to preserve the illusion that the area is completely autonomous, and game participants act as if it were the only reality ([Pohjola 2004](#)). Yet, due to being a space imposed upon a real place (as per [Aarseth 2001](#)), and inhabited by participants practicing differing forms of pretence play ([Harviainen 2007](#)), the temporary reality is only pseudo-autonomous. The edge of the magic circle is a very clear information system boundary, one that affects but does not necessarily restrict the movement of information through it ([Merali 2004](#)).

It is because of these two traits, the illusion of autonomy and the fact that it is indeed an illusion, that LARPs (and certain of their sibling phenomena; see [Morton 2007](#)) are an important exception in the way information behaviour works. For example, in a typical fantasy LARP every participant pretends that they are new, real people within a new reality, not fictional personas in a fictional game environment. For the duration of play, the fantasy world is the "real" world, the "only" world for them. This is the illusion being preserved. However, at any point where there is an information gap - or player misbehaviour - that illusion is threatened. As knowledge of a world can never be complete, the gaps are unavoidable (as per [Wilson 1977](#)), and the

artificiality of the game world further increases the likelihood of encountering such gaps. Nothing exists beyond the social contract to prevent the players from seeking information from sources that are not within the illusory reality. Yet the social pressure to preserve the illusion intact is very high, leading to potential conflict between participants favoring different types of information behaviour ([Harviainen 2007](#)).

In addition to this players have definite tendencies to favor certain types of information while playing, as they presume that doing so makes the game more rewarding to them (*ibid*). During LARP play, game participants exhibit both typical search behaviour, such as favoring information sources based on their proximity and reliability (as per [Wilson & Walsh 1996](#)), and exceptional choices made to preserve or improve the game experience. These are further influenced by continuity issues, such as whether the game is a part of a series ofLARPs or a one-session game (for definitions on what qualifies as a one-session game, see [Frasca 2001](#)). Information sources for each LARP exist on two levels. The great majority of them exist outside the *diegesis*, the "sum of all that is real within the game". Before the LARP, and sometimes also during it, the players appropriate material from these *extradiegetic* sources and transform that material into elements and forms that are able to exist within the diegesis without endangering the illusion of reality required for functional play. In order to understand how this process works, it is essential to analyse the core traits of the sources and the way players access them.

Information sources in LARPs

Most, in many cases all, of the directly game-related formal documents are prepared and distributed by the game master(s), the person(s) responsible for creating, preparing and running the game. As these three game mastering functions differ in the way they influence play, I have divided the concept of "game master" into Design, Preparation and Control. The first two exist before play, the third during play but outside it. The effects of all, however, carry over into the diegesis. It is common that the three functions are actually the same person(s), but that is neither mandatory nor significantly affects information behaviour during play. The major exception to this, the strongly influencing conflict of Controls, is explained in the section diegetic information below. A few LARPs do not have a game master at all, instead dividing Design and Preparation among the players and replacing Control with group arbitration ([Svanevik 2005](#); [Harviainen 2006](#)).

The following source descriptions are based on an idealization: in theory the documents described below should contain all of what is attributed to them; in reality, they more likely than not have flaws, omissions, discrepancies and points that can be significantly misinterpreted. Throughout play the game participants encounter situations where these problems cause information needs, but are unable to directly address those needs without endangering or breaking the magic circle for themselves, others, or both. This is one of the key reasons why studying information behaviour in LARPs provides insight into library and information science issues that are not normally encountered elsewhere, such as the effect of invented, fictional information in environments where no corresponding factual data exists and where it may thus come into free conflict with other invented information.

Extradiegetic and pre-game information

Extradiegetic material provided by Design consists of four sets of documents: setting material, character material, genre information and game mechanics. These four may overlap in some parts, or add material to each other. Normally the great majority of such material exists in the form of formal documents shared by several players. Setting material ideally contains all the necessary information required to understand the temporary reality where the LARP takes

place, such as social structures, culture, religion language, even physical issues ([Fatland 2005](#)) . In reality, it is impossible to define those elements to a perfect level, so there are always information gaps in the material. In addition to this, those documents may contain normal flaws, as described above. Design may also include other information sources, such as movie references or internet documents created by people not connected to the game in any way, into the setting material. Much *fabula* (seeds for potential narratives) are often introduced into play beforehand as parts of the setting itself (*ibid*).

Character material is also typically created as a (set of) formal document(s). It contains what the player knows about the character's history, social connections and personality. It may or may not include information about other characters, setting information not given to other players, and personal seeds of narrative. In some LARP cultures, such as the German mainstream, players usually write their own characters. These are then accepted, modified or rejected by Design ([Jordan 2007](#)). In others, Design creates the characters ([Fatland 2005](#)). This difference in approach strongly affect the game's information traits: the less *fabula*, shared background or even diegesis-compatible information in general Design is able to include in the character documents, the more has to be included in the setting material in order to achieve functional play.

Fabula, whether prepared in advance or emergent during play, are essentially Design's attempts to guide information seeking and use - the narrative currents - during play. As in all information systems, the organizer(s) of information have no way to exactly anticipate who will search for what information in that system, but they usually do have an inkling about what sorts of inquiries are likely to happen ([Buckland 1991](#)). From a library and information science perspective, LARPs exemplify highly complex systems, while from a mathematical point of view they are closer to chaotic than complex systems ([Montola 2004](#)). The ability to weave a good narrative matrix for a LARP is therefore a form of organizing information to facilitate certain search patterns and give them successful results. This is accomplished by using a set of incentives that guide play by making some actions more likely to happen than others ([Fatland 2005](#)).

Game mechanics is a type of document that contains all the necessary rules and conflict resolution systems that the LARP is expected to need or that will be essential to have in case they are needed. In some LARPs these cover all forms of interaction, in others they are limited to provide safe play at risk points, typically sexual contact and physical violence. Game mechanics also cover issues such as pre-determined play time, rules on breaking game continuity and acceptable clothing and props.

Genre information is usually included in one of the abovementioned documents. In a LARP context, the word is used to denote a certain style of play, usually an emphasis towards certain sorts of narrative build-up, expected from all game participants. Examples of genre affecting information behaviour during play are a soap opera LARP's rule that every secret must be brought into the open, in as dramatic a manner as possible, and a murder mystery's rule that no character will leave the location, rationalizing a reason to stay, so that all of the plotlines will stay within the play-space.

Design itself is also an information source, one that is frequently accessed by players before the game. Both Design and Control are a special type of source, *directive* source, that has the power to override any other information source as it regards the LARP. Therefore if a directive source and a formal game document come into conflict, the directive source effectively "rewrites" the contents of that document, even if no actual changes to the document are made. This is typically done in order to preserve or improve functional play, but may, in cases where there is more than one member involved in either Design, Control, or both, lead to a conflict between differing information sources. This is especially problematic in cases where communication lines before or during the LARP break down and participants start acting upon incompatible information.

Preparation is strongly intertwined with design, but must be treated as a separate entity due to the fact that especially in large-scale games (100+ participants) the two positions are usually handled by different people. Preparation is in charge of making the playing area (the place upon which the play-space is imposed) as close to the play-space's attributes as possible. The duties of Preparation may also include placing prepared documents (formal or otherwise) within the area, so that players can later appropriate their content into the diegetic frame.

One set of significant extradiegetic information sources exists outside the control of Design: the other players. While it is possible to influence how much and what information the participants share, true regulation is impossible. In many cases such contact is welcome, as it creates stronger contact networks and helps smooth out problems in advance, but there is always the risk of unwanted information leaking from one player to another. This is especially important in cases where shared knowledge of certain narrative issues would endanger functional play.

Diegetic information

Before the LARP begins, and sometimes during play, players appropriate material from the extradiegetic sources, and build new, temporary documents based on that appropriation. The new material is never identical to what was in the original documents, due to both the influence of the now active magic circle and the nature of the act of appropriation itself. The players do not copy the information into the diegesis, they interpret the originally alien material into a form they can use (as per [Ricoeur 1981](#)). Most important of these appropriation-created elements is the character.

From an information studies perspective the character is actually a subject representation of the documents it was created from, just one that is given cognitive form. That there are also psychological, social and ludic aspects to the character ([Lieberoth 2006](#), [Henriksen 2005](#), [Montola 2007](#)) is, for this elementary LIS approach, unimportant (see [Dervin 2003](#) for criticism, though). While constructing that cognitive form the player appears to create it mostly out of explicit subject data concerning only that character, but the same process also inevitably adds much information about other diegetic elements into the mix. From the player's perspective all of that information is implicit subject data. However, as Design has intentionally included that data into the material, it is, in reality, explicit subject data as well ([Hjørland 1997](#)).

Similarly, documents placed within the playing area by Preparation are represented in the play-space, instead of existing within it. The requirements of the game's temporary reality function as the indexing language such representations use, and the participants' interpretations of the reality and the representations influence the way they personally re-index those elements (as per [Mai 2001](#)). Practically all subject representations inLARPs, both environmental and cognitive, are of the predominantly content-oriented kind ([Soergel 1985](#); [Hjørland 1997](#)), as they are primarily constructed by the players in charge of them, i.e. people with no direct duty to provide easy access to them for other participants.

Therefore the inside of the magic circle is, in actuality, a pseudo-closed information system where the characters make information searches upon information sources, i.e. environmental elements and other characters. It is possible for a player (but not the character) to also access the actual documents outside the system, but this is a breach in both continuity and the illusion of the play-space. Furthermore, as many of the documents can only be accessed by the player who is handling (playing) the subject representation (character), it is not even possible for others to access those through a filter other than Control or that player.

Information seeking is a significant part of all types of role-playing games, LARPs included: *[O]ne may also note that the goals that the character and the player share require acquiring knowledge about the environment in order to achieve these goals. This information might involve relative locations of potential achievement loci, names of places or people that are themselves achievement loci, relevant abilities and how they interact with the 'realities' of the*

world of the fantasy frame, as well as other knowledge. ([Hendricks 2006](#).)

To complete tasks, the characters need information. All information behaviour that takes place during play is effectively added to the characters' personal histories, including passive encountering and even non-executed searches. Thus a kind of "commentary" of implicit subject data is added into the subject representations, eventually leading to them covering much other information besides the appropriated data from the initial extradiegetic documents. As the commentaries expand, several representations start to refer to each document, leading to the game becoming a system with multiple index entries (as per [Buckland 1991](#)). Some of these representations may be inaccurate, or may contain accurate information while distributing misleading representations of it.

Two points are fundamental to these representations. First, they are only representations. They describe and should not be confused with what they describe. A statement that the moon is made of green cheese does not cause the moon to be made of green cheese. Second, even if the description were accurate at some time, it does not follow that the accuracy will continue. ([Buckland 1991](#).)

Additionally, it is possible for players to avoid information searches completely by inventing substitute information to replace any missing information. This has the advantage of more fluid play, but may lead to several conflicting "truths" existing within the diegesis. As there may not be any way (excluding a direct override from Control successfully conveyed to every single participant) to confirm which of these truths is accurate, they may disrupt play. In a more typical information environment such issues rarely carry as much importance, and even if they do, the facts can be checked and corrected from reliable sources. In contrast, there may be no way to change the course of a LARP once, for example, the king is *known* (as opposed to *believed*, a situation that can be easily solved by defining one answer as "rumors") to be both dead and alive at the same time. This is especially disruptive in cases where information from two members of Design and/or Control comes into conflict.

Another variable that exists in someLARPs is the acceptance of mundane information sources as diegetic sources. In such a game it is, for example, possible for the characters to perform online searches. Again, those sources are appropriated into the diegesis through the characters' personas, making the results different from their real-world counterparts. Some games blur the line even further, effectively replacing the magic circle with something closer to a common interpretative frame shared by the players ([Stenros, Montola & Waern 2007](#)). As this happens, the game loses its nature as a unique information system, transforming into a variation of normal-life practices. Thus, from a LIS perspective, those so-called *pervasive games* are a different phenomenon, despite their similarity to live-action role-playing games.

Play as a search, encountering and retrieval environment

Understanding the chaotic structure of the LARP information system is only the first step towards modeling information behaviour in such environments. A second, highly significant step is a comprehension of the way information searches function, and are executed, in such an environment. While defining such activity is far beyond this article in scope (see [Harviainen 2007](#), for an initial foray into that field), it is necessary to analyse some of its key aspects here. As the level of LARP play discussed here is a form of documentary communication between active, self-aware subject representations, it shares the general traits of such communication. As Suominen ([1997](#)) notes, it is thus a semiotic process where the manifested processes follow the essential attributes of the documents (such as language), but where it is also possible that the participants intentionally use only one selective point of view for interpreting the communication. This is especially prevalent in LARP environments, due to both the magic circle

requiring constant semiotic re-signification to maintain ([Loponen & Montola 2004](#)) and the fact that the primary interpretative filters, the characters, are also the most significant parts of the documentary communication.

In LARPs, the phenomena Wilson and Walsh ([1996](#)) call "intervening variables" play a very prominent and clearly observable role. Interviews I have conducted on 31 experienced LARPer in 2006-2007 about their information behaviour for my forthcoming doctoral dissertation show highly differing preferences about information sources and personal characteristics (in the LIS use of the term). Players and their characters are also affected by social/interpersonal barriers (out- and inside the diegesis, respectively), sometimes to the extent where an out-of-game social barrier will prevent otherwise logical in-game behaviour.

Two of the barriers have already been the subject of some research in LARP studies: Geographic barriers, especially the distance to Control and certain key characters, manifests as a part of what Fatland ([2005](#)) calls the "Fog of LARP", the impossibility of Design and Control to maintain complete control or even oversight over all aspects of the game. Likewise the effect of time on play behaviour, including information, is very strong. In what Faaborg ([2005](#)) calls the "game over factor", many players start ignoring diegetic logic as the LARP nears its end, i.e. change one or more of their risk/reward priorities ([Wilson & Walsh 1996](#)). Real-world cultural barriers, in contrast, seem to have next to no effect on information behaviour during play ([Harviainen 2007](#)), but within the diegesis - as the impact of characters' cultures - cultural variables are just as active or inactive as they would be for similar people in normal life. And, as noted above, variables of information source access and reliability play a very prominent part in the in-game behaviour.

The significant presence of information behaviour during play is one of the essential factors setting LARPs apart from other complex forms of pretence play such as psychodrama, re-enactment or sexual roleplay. This ties in with the narrative matrix of the LARP: even in a very elementary game, the contact of characters and information sources (in character form or not) is what changes the play from pretence activity to LARP. To take a very basic example, in Raasted & Andersen's ([2004](#)) introductory LARP for children the activity is transformed from walking around with boffer swords to an actual story by the participants getting conflicting information from two wizards played by adults.

For functional LARP play, all four of the information acquisition methods delineated by Wilson and Walsh ([1996](#)) are necessary: passive attention, passive search, active search and ongoing search. They represent significant parts of player interaction. Sufficient passive attention and passive searches have been shown to increase the amount of playable material to all players ([Harviainen 2007](#)), leading to improved communication and eventually a move towards autopoiesis within the system. The two active forms are not by themselves enough.

Information behaviour in LARPs is also influenced by participant experiences. Knowledge of useful play (including information seeking) patterns translates from one game to the next. The application of such patterns depends on game considerations such as genre. The same goes for the way players learn to re-signify the game environment through experience and customs while avoiding sign-pattern dissonance (for the essential traits of re-signification zones, see [Deleuze & Guattari 1988](#)). Analysed as a whole, LARPs thus form a (group of) knowledge domain(s), and exemplify the connection between information and semiotic interpretation Brier ([2004](#)) calls "cybersemiotics". To study that level of connections is, however, beyond the scope of this article.

Regardless of the seeking orientation of a LARPer, functional play is a pleasure-giving form of activity ([Harviainen 2007](#)). For this to happen, however, the player's own needs have to be answered and a suitable level of illusory otherness must be sustained. As information seeking, in the form of goals, quests and/or character interaction form a significant part of the first criterion, the process of information seeking itself in LARP environments often becomes autotelic, i.e. a self-rewarding type of activity, even when it does not lead to actual searching.

However, if the game environment, fabula and/or character-based barriers conflict with the participant's information seeking capabilities or mental state (as per [Ingwersen & Järvelin 2005](#)), the play becomes dysfunctional and no longer gives him or her pleasure. This in turn could potentially cause a cascade effect where too much of player-to-player/character-to-character support in the system breaks down and completely ruins the game, so it is in the interests of satisfied participants to try and support the information seeking of everyone else in addition to the maintenance of the illusory reality ([Pohjola 2004](#)). System integrity is thus preserved by player intent to enjoy the game.

Conclusion

It is possible to model live-action role-playing environments as information systems and analyse their components as parts of such a system. This is significant because such environments contain highly visible and occasionally even unique information elements and variables that make it possible to use LARPs to test theories on social information systems and information behaviour.

The game environment, being illusorily separated from the mundane reality, contains only representations of pre-prepared documents, while socially restricting or prohibiting access to the documents themselves. Therefore in such a system it is possible for information to mutate, both intentionally and unintentionally, in a way that makes even re-encounters with the same subject representations highly novel experiences.

As information behaviour in such an environment is pleasurable, participants actively encourage it and create more connections between the subject representations, thus making the LARP/system a self-organizing one. At the same time, however, play does not stagnate because most of the subject representations are in a cognitive form, as characters, and have sufficient reasons to occasionally withhold or distort the information they represent.

This article presents the key information traits of LARPs as systems, enabling further research into actual information behaviour in such environments.

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A Hermeneutical Approach to Role-Playing Analysis

Popular Abstract - This is an article about viewing role-playing games and role-playing game theory from a hermeneutical standpoint. In other words, it presents one view on how a role-playing situation can be seen as a set of texts. That view also includes the idea of not only analyzing those texts, but also addressing the way game participants interpret those texts. On the side of role-playing theory, this article uses material from various schools of thought, from the post-Forge community to Nordic larp theory.

On the side of hermeneutics, emphasis is on Paul Ricoeur's idea of meaningful actions as texts. Those are the texts that people performing or observing that activity appropriate and interpret. The result of this article is one potential bridge between various schools of thought on looking at role-playing, including a translation platform capable of enabling the move of theories and research results from one role-playing culture to the next.

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ABSTRACT

This article introduces a way of viewing role-playing games and role-playing game theory from a hermeneutical standpoint. It presents the necessary basics of analyzing role-playing phenomena and processes as a set of texts. On the side of role-playing theory, this article uses material from various schools of thought, from the post-Forge community to Nordic larp theory. On the side of hermeneutics, emphasis is on Paul Ricoeur's idea of analyzing meaningful actions as texts that are then appropriated by people performing or observing that activity. The result is one potential bridge between various schools of thought on looking at role-playing, including a translation platform capable of enabling the move of theories and research results from one role-playing culture to the next.

1. INTRODUCTION

The study of role-playing is currently at a problematic stage: It has reached a basic level of academic acceptance, but exists in a state of chaos. The three main reasons for the situation are the lack of general, shared research guidelines, the corruption of discourse tools, and subjective bias

on the field concerning both practitioners and outsiders studying role-playing.

The purpose of this article is to suggest one answer for the first problem and to bring attention to the second. The current situation can be likened to that of early analysis of cinematography: the subject itself is seen more often as a collection of pre-existing methodology and art forms, not as a separate phenomenon connected to those elements. (For more on this analogy, see Laws 1995.) This means that role-playing is currently studied as a semi-valid subject by experts of the connected fields, such as game studies, drama or text analysis, with the methods and perceptual limits of those fields. It is essential to note the progress that has been made by this set of approaches, but even more imperative to recognize the need to move beyond that level.

As one solution, I propose the construction and delineation of a core system of hermeneutics, an adapted version of traditional hermeneutics, for the purpose of further analysis of role-playing. "Hermeneutics" is the art of interpretation. In its most limited form, it is used as a reference to textual analysis of sacred scripture, but is more commonly seen as a general word for textual

interpretation (Palmer 1969). A few scholars have opted to extend this frame to include phenomenology, or even occasionally to refer solely to religious phenomenology (Phillips 2001). I have chosen to use the widest interpretative frame, the one covering text analysis, phenomenology and sociological aspects. Essentially, it is the reduction of an event or an experience into a text, the interpretation (or meaning) of which is then studied through text and symbol analysis.

What makes religious hermeneutics an especially suitable choice as a basis for more diverse forms of role-playing studies is the fact that it is one of the very few academic disciplines that deals with the entirety of the field on at least some levels. It covers things such as analysis of textual material and the study of personal, hard-to-communicate experiences without seeing them as a problem that needs to be corrected.

Before discussing the hermeneutical adaptations needed to studying role-playing phenomena, though, a brief look at the key phenomena themselves is necessary.

2. DEFINING ROLE-PLAYING GAMES IN GENERAL

For the sake of practicality, it is possible to categorize the basic premises of role-playing game analysis into three general types. There is an observable correlation between these approaches and the gaming types from which they originate, as well as with the types of role-playing preferences defined by John Kim and Ron Edwards (Kim 1998 and Edwards 2001) as Gamists, Narrativists and Simulationists (or GNS, as a collective term).

Definitions based on other forms of game analysis, especially that of digital games, focus on the elements of challenge and struggle that are to be overcome by the player in order to succeed in the game. By these definitions, role-playing games do not necessarily qualify as "games" because they lack a winning condition, or are classified as "limit case" games (Salen & Zimmerman 2004, Heliö 2004), despite containing game-like competitive elements.

Narration-oriented theory favors the storytelling aspect, usually paying special attention to game elements that support or hinder narrative and intrigue, such as systems (including, but not limited to, rules) and a game's internal and

external time-structure. This also includes analysis of role-playing games as performance, storytelling and/or discourse, such as Lancaster 1999 and Mackay 2001.

The Process Model of Role-playing defines the phenomenon as "any act in which an imaginary reality is concurrently created, added to and observed, in such a manner that these component acts feed each other" (Mäkelä et al. 2005). The Manifesto of the Turku School (Pohjola 1999) uses the words "immersion ... to an outside consciousness ("a character") and interacting with its surroundings." These exemplify a game presence-based idea.¹

Merely by looking at these outlines, it is quite easy to predict what the corresponding theories based on these particular premises will look like. This is a key point where the predisposition of role-playing analysts is at its most obvious. Therefore, in the interests of analytic objectivity, any definition of role-playing should also be seen as a conclusion of the respective author or as an analytic base assumption, not only as a discourse tool without bias.²

Most of the role-playing theory presented in this paper draws from the two major schools of thought on non-digital role-playing. The so-called Nordic larp theory circle, which, as the name implies, deals mostly with live-action role-playing, is the first one. It has an approach that fuses arts and academic research, often in an incompatible manner. The second one was originally centered on The Forge, a U.S. based community built around the works of Ron Edwards and with a favoritism (but not bias) towards tabletop-centric theory, especially design (as opposed to speculative theory). Since a restructuring of the site towards an even stronger emphasis on game design in December 2005, much of the theory-related discussions originating there have moved on to a loose community of blogs and small websites. Many of the theorists are still the same, as is the terminology they use. They are therefore still usually referred to as Forge-based, whether they agree on this view or not (for more on Forge theory, see Boss 2008).

For the purposes of presentation, this article uses a combination of the general elements of role-playing definitions and Baker's so-called Lumpley Principle ("system (including but not limited to

¹ Pohjola has later revised his position, and this out-dated view is here solely for exemplary purposes, not as a representation of Pohjola's current position (Pohjola 2004).

² Heliö 2004 offers a comprehensive look at differing forms of role-playing game definitions, and should provide a good starting point for those interested in pursuing this issue further.

“the rules”) is defined as the means by which the group agrees to imagined elements during play”, (2002), and treats role-playing as a process based on a social contract (as per Huizinga 1939 and Goffman 1961) where people create and modify a joint transitional reality through the use of agreed-upon tools. This social contract is constructed and enforced similarly to other social contracts, meaning that it is rarely made explicit (see Montola 2005), and is enforced only by social pressure.

“[I]n agreeing to draw up the contract, the people seem to possess already that which the contract was supposed to create. Further, the very notion of a contract presupposes an agreement about its sense. We can see that it is not the contract which makes possible that agreement, but an agreement in understanding which makes contracts possible. And that agreement is not based on a contract, since it is not an agreement which people decide to come to. Rather, it is an agreement which shows itself in their common reactions.” (Phillips 2001)

A factor affecting all basic interpretation on role-playing analysis is the formation of normative role-playing paradigms. They are local cultural preferences on what is to be considered as valid or good role-playing, as the basic requirements of role-playing or as valid study of role-playing. A paradigm can be just the size of a single playing group, or cover several countries. Role-playing theories are seldom directly applicable over paradigm lines, and require more adaptation the further the differences between paradigms are. What must be recognized, though, is that when a theory does not seem at all functional in a different paradigm, this may be due to the prejudices inherent to that receiving paradigm, faults in the theory, or a combination of both.

For example, any attempt to directly apply Edwards’ and Kim’s GNS-categories on a Nordic experientialist larp is impossible, due to that paradigm considering competitive play problem behavior rather than good role-playing. In essence, one part of the model would not be observable at all at play, whether it existed or not. Extrapolating from this that the model could not possibly be accurate on, say, some types of tabletop role-play would nevertheless be a glaring error of judgment and an act of prejudice. A similar case is Nephew’s (2003) view on role-playing as a manifestation of male sexual fantasies, which, while possibly accurate on North-American males, is quite incompatible with the fact that in some Nordic areas female larpers are a clear majority (Fatland

2005a). Yet another illuminating example can be seen by comparing the larp descriptions of Koljonen (2004) and Tan (2003).

One special case of paradigm is what I call the “anti-intellectualist movement on role-playing”. It is a loose, completely informal international school of thought that emphasizes the “simple fun” aspect of role-playing – adventuring, killing monsters, looting treasure and so on. (For an example, see Vuorela 2003-.) Its members’ reception of any role-playing theory, especially of the non-design kind, is generally very negative.

One’s native playing paradigm thus usually forms the interpretative basis, resulting in a biased

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analysis of both role-playing and role-playing theory. This, however, can be at least partially bypassed through the use of hermeneutical methods.

3. BASIC HERMENEUTIC ADAPTATIONS FOR ROLE-PLAYING ANALYSIS

“The evolution of author from distinct to aggregate has encompassed not only fiction writers and the original creators of the RPG genre, but also subsequent designers who borrow from material from each other, the editors and publishers of these games, the hobby’s fan community, GMs and players who reinterpret texts for their own purposes, and the social environment in which they are created. In this way it becomes apparent that the roleplaying experience is inherently the result of multiple subjectivities, breaking the illusion of a purely objective meaning.” (Nephew 2003)

In trying to understand a subject of study, be it text or a phenomenon, we are already using a set of pre-understandings. We are aware of some of those. Others are sub-conscious. Both nevertheless affect our understanding of the subject at hand, leading to a predilection towards an interpretation closer to those expectations than the subject would actually warrant. One of the key ideas of hermeneutics is the deconstruction and illustration of such pre-understandings, leading into either a

more objective state of interpretation, or a clarity of the true meaning, of what is being studied.

We do, however, simultaneously need the pre-understandings, as they are what gives us the initial approaches we need to start interpreting. So what happens is not the direct abolishment of prejudices, but rather a refinement and relinquishing of them as needed, the closer we get to our subject of analysis. This phenomenon, combined with the need to understand a whole in context to its parts, and parts of a whole in context to that whole, is called the Hermeneutical Circle. (Jeanrond 1997)

What opposes the process is the need of an interpreter to hang on to his previous beliefs, to defend his own particular interpretation. This is usually caused by ideological reasons, but in the case of role-playing analysis, a secondary, nearly as important cause is a phenomenon I call "theory canonization". Theory canonization happens when a singular interpretation gains a position of dominance within a gaming paradigm. It is a predilection to use the discourse tools of that dominant interpretative frame to explain and appraise new games and new theoretical material, both from within the native paradigm and coming from outsiders. It is initially born as a beneficial effect, allowing the translation of concepts between paradigms into a more easily understood form.

Yet build-up of using only the terminology of one paradigm eventually starts imposing the dominant theory's parameters on the process of interpretation, leading to appraisal on the basis of how well the new material fits to the dominant ("canonized") model. A curious part of this is that the phenomenon mostly affects people who produce material ancillary or complementary to the dominant theory. The authors of the dominant theories themselves are usually more resistant to this pattern of thought, but are naturally affected by what they see as criticism of their own work, which in turn reinforces the effect. This is most easily visible, in relatively mild form, in the forum archives of the Forge³, but the phenomenon exists in all game analysis communities. The process is not a prejudice, and should be seen as an unintentional corruption of discourse tools instead. The risk of misinterpretation escalates further when material created using one paradigm's corrupted tools is analyzed with those of another.⁴

³ www.indie-rpgs.com

⁴ A good example of the first level of this transformation can be found by analyzing Lehrich 2004. Another effective example is the thread "Something I cooked up, a model if you like" on the Forge (<http://www.indie-rpgs.com/viewtopic.php?t=9690&start=0>). For criticism within and on the Nordic sphere of theory, see Harviainen 2004.

The pre-understanding affects not only reception but also the presentation of findings, up to and including the language used. Assessing the scope of this problem in the study of role-playing is problematic in itself, since there's a significant risk of ending up in ad hominem criticism, and certainly even higher risk that even constructive commentary is interpreted as an ad hominem attack. A further obstacle is created by the "mandatory respect of others' viewpoints" policies of U.S.-based forums, as well as the art studies – based approaches of many Nordic theories. Both of these lead to any questioning of interpretative motives being seen as a breach of the code of conduct and/or a personal attack.

All findings, potential theory and new methods must therefore be either acknowledged as having a limited view by their authors themselves or presented in such a manner that all possible interpretations are taken into account. The first option can be accomplished by statements such as "this model is designed using tabletop role-playing material, and has not been tested on other platforms". The system presented here is intended as a tool enabling the addressing of the latter.

From a hermeneutic perspective, role-playing games consist of the intentional evocation of artificial experiences through the use of fictional characters as masks/identities/personas (for more on the play-theory ideas this view is based upon, see Huizinga 1939). The evocation is autotelic by nature, i.e. enjoyment-creating by itself – as long as the game is good, at least (Harviainen 2006). In addition, through their experientiality and autotelicity role-playing games convey new information and create new correspondences between existing social and mental connections. Role-playing is a form of heuristic fiction. It is a metamorphosis that creates simultaneously a selection of characters/figures and a transformation into a new state of temporary "true" being. In that new state, everything follows an internal (diegetic, i.e. "true within the context of the story") system where everything works directly upon indexical and symbolic concepts (as per Lojonen & Montola 2004), transforming basic representations into a fantasy reality. (For variables on what types of realities are constructed and how, see Montola 2003).

The only level of in-game interpretation is that of *imaginatio*, which works on similarity. There is no need for *intellectio*, thought based on sameness (as per Ricoeur 1975). Essentially, role-playing functions by participants imagining things in a reasonably compatible manner (Montola 2003). Within the *diegesis* there may of course be elements that in some sense require the player's or character's *intellectio*, such as objectives or puzzles, but the lack of precisely defined elements means that those too belong, in this case, rather to the realm of *imaginatio*. In this sense, the Process Model's definition of the totality of the event field in a role-playing game as a "Shared Space of Imagining" is actually a very correct term (Mäkelä, et al. 2005).

From a hermeneutic perspective, role-playing games consist of the intentional evocation of artificial experiences through the use of fictional characters as masks/ identities/personas.

In this, role-playing follows Gadamer's theory on play (Gadamer 1972). The core nature of the gaming experience is still different, even when the outward forms are the same. A similar border can be drawn on other connections as well, which in turn gives us an apophatic ("what it is not") definition of the field we are studying. These affirmations through negation have been, and will be, subjected to heavy debate, as their criteria may vary from person to person. For example, the question on whether role-playing is a form of art or has the potential for being art has more to do with each commentator's own concepts for what constitutes art than with any intrinsic trait of the activity of role-playing (Mackay 2001). In this, the debate very much resembles the one that was had about a very similar phenomenon, *avant-garde* performance / concept art of groups such as the Fluxus movement and the no-audience Activities in the 1960's (Kaprow 1966, Kirby 1987 and Harviainen 2008). Again, these factors constitute a part of the general pre-understanding.

In extremely simple apophatic terms, ones that are undergoing constant criticism (also from the author of this article), role-playing in its live form is not "proper" theatre because there is no audience (as per Kirby 1987; see also Flood 2006). Nor is it

psychodrama, as it lacks a narrative matrix directly tied to a desired function (Flood 2006; Sonesson 2000).⁵ In no platform is it normally traditional gaming, as there is no winning condition included, even though some players may perceive it to contain one (Salen & Zimmerman 2004, Heliö 2004 and Edwards 2003). The one exception to this exists in the form of certain intentionally competitive games, a phenomenon thoroughly described by Tan (2003). There is a conscious, pre-planned structure that differentiates it from child's play, despite potentially sharing similar concepts of space and methods of arbitration. (See also Morton 2006 for further debate on defining role-playing on these terms.)

Role-playing may resemble certain rituals very closely (Lehrich 2004), but is again a separate phenomenon by virtue of it not having "unyieldable material" (such as Articles of Faith) that must at all times be taken into account. What also separates it is that it in many cases only provides liminoid, but not truly liminal, experiences. It removes the participants to a different temporary reality, but usually not completely. The liminoidity is in the case of role-playing games nevertheless far closer in nature to actual ritual liminality than it is to "common" liminoid phenomena such as following a football match (Lieberoth & Harviainen 2008). Thus, in some sense, it could just as well be described as a low-intensity liminal experience, if one wants to follow another set of ritual theory terminology. It takes place in a state continuous with mundane reality, but separated from it.

There is a strongly interpretative, semiotic and textual side to all role-playing games, yet to treat a role-playing situation solely as a singular text removes a part of the game experience from the equation. (For more on the question of reduction into text and the subsequent loss of experiential elements, see Aarseth 1997.) And role-playing is never a state of pure imagining, because the player is always connected simultaneously to both the *diegesis* and the real world. Contrary arguments by players who support a divisive character view (Harviainen 2006) exist, but no data has been provided in support of them. On some levels the player is purely imagining, on others completely in the real world. And this is the key to approaching role-playing as a whole from a hermeneutic perspective: the reduction into text can be made, by

⁵ Sonesson's text is very superficial and somewhat prejudiced on the scope and history of role-playing, but is nevertheless a useful tool on differentiating the limit-case activities with which (especially live-action) role-playing is often compared.

understanding that there is more than one text to reduce to.

Given the dual level of mental presence in a role-playing game, it is not possible to apply the normal methods of either hermeneutics or phenomenology on that experience. The role-playing Dasein (a person's summary existence in the historical continuity) is on several levels an artificial one, and therefore looks as if it has to be analyzed in context to the diegetic reality. Likewise, diegetic elements, or ephemera in Edwards' terminology (2004), seem to make complete sense only when interpreted through the diegetic whole. It would thus be very tempting to apply Durkheim's (1895) idea of social things only being possible to explain through other social things. Were all role-players totally immersive and using solely the divisive character state (i.e. totally committed to their fictional personas) while in-game, this would apply. However, as several theorists have suspected, and occasionally shown (Harviainen 2006), all are not. As player motivations of various kinds, as well as their relationship to ephemera, form another important part of the pre-understanding, some discussion of them is necessary here.

For example, according to Edwards (2001-, based on Kim 1998), players can be classified according to their Creative Agendas (CA) as Gamist, Narrativist or Simulationist, with each of these types having a favored form of playing that gives them the most enjoyment. The CAs consist of several levels of motivation, but focus mainly on the in-game expectations of the players.

In general, role-playing game motives can be further divided into three categories. External participant motivations (EPM, "why do I play") contain reasons such as having fun, escapism and social contact. Internal participant motivations (IPM, "what do I want to experience in the game") may be both diegetic and non-diegetic motives, such as conflict, drama, sense of triumph. And Character Motivations (CM), which include every desire a character has, are completely diegetic (Harviainen 2005). In these terms, Edwards' Creative Agendas represent IPM that are affected by EPM concerns and manifest through both CM and arbitration on the collective diegesis. On the interaction of these intents are built the interpretative frames and overall narrative choices that the game participants make. Platform changes affect the player/CA relationship – a player who is always highly gamist in any tabletop or online role-playing game can nevertheless be a simulationist in a larp environment. Reasons for

this potential change arise from both local game paradigms and the intrinsic game presence differences of the platforms themselves.

A parallel system to deconstructing role-playing into exogenous (player-brought), endogenous (inherent to game) and diegetic (in-game) goals also exists (for this division system, see Montola 2005). As the motivator system concentrates on the types of goals while the e/e/d system concentrates on the origin points of goals, and as both systems are fully compatible and may produce synergetic results, I have noted both factors at points of analysis where they coincide.

The completely exogenous EPM factors are the primary framework of Fine's interpretation of role-playing (Fine 1983). They exist on a social, real-world level. In contrast to them, the completely artificial CM factors are fully diegetic. A borderline exists somewhere on the point of IPM factors, which are partially or fully exogenous. Their effects are nevertheless always articulated into the diegesis in peridiegetic discourse, i.e. spoken as external descriptions that create or alter diegetic elements and events.

There is a strongly interpretative, semiotic and textual side to all role-playing games, yet to treat a role-playing situation solely as a singular text removes a part of the game experience from the equation."

It is, however, quite obvious that a degree of peridiegetic manipulation (i.e. manipulation reaching from a frame of play outside the diegesis into that diegesis) exists. Outside influences intrude on play, and vice versa. The exogenous EPM expectations and at least partially non-diegetic IPM expectations of players intrude on narration, and on the endogenous motives defined above as diegetic IPM and CM. In this regard, they indeed form Agendas, as Edwards has observed. These agendas affect the in-game choices, both narrative and character, and distort the theoretically diegetic logic. Thus it is possible for ephemera to make sense on a purely diegetic level (an example of this would be a joke the characters would get but the players would not.), peridiegetically (as tools of external descriptions that create or alter diegetic elements and events) or purely non-diegetically. The last of these three types, it must be noted, contains both "bad

playing” in the sense of actions that a player likes but make no sense in the game’s continuity, as well as the addition of seemingly illogical ephemera in the interests of enhancing the game. Thus it should not be discounted, as it too is occasionally a proper, beneficial form of playing.

Ephemera cannot therefore be reliably analyzed in a vacuum, or on purely diegetic or non-diegetic grounds. It is possible to treat them that way in the context of certain kinds of role-playing studies, such as when making a reading of a game session or studying the game as a singular narrative. (Kellomäki 2003 is a good example of this method.) In those cases, this is a valid approach, but must be acknowledged as not telling the whole truth. In relation to this, it is also worth noting that post-game reports by players have a tendency to eventually transmute into dominantly diegesis-based reasoning, even if this were not actually the truth. A player-competitive choice may later on be explained as “logical for the character”, regardless of whether it actually was, for example. In hindsight most actions are reported as having been influenced by in-game reasons only. This is in no way contradictory with the idea of also emphasizing the “everyone should have fun” aspect of games, and perceptions on what the “best way to play” is are usually a mixture of these criteria. Digital role-playing games are an exception to this rule. They are often directly opposite to it, in fact: most actions are stated as originating because of meta-level concerns (see Yee 2006 for details).

Within the game’s internal reality, ephemera must always make sense. Within, and only within, the configurational properties of the artificial diegetic reality which they belong to do they function perfectly. In other words, for the characters the ephemera are always real and always follow the natural laws of their reality. Taken out of that context, ephemera lose their inherent perfection and must be treated as analogies, often dysfunctional ones. When introduced into a diegesis for purely external reasons, ephemera may not be diegetically logical, but are nevertheless a working – or at least tolerable – part of the continuity. If they are not, the game breaks, and an arbitration process is undergone to solve the problem.

The complexity of analytic permutations in role-playing is vast, yet very simple. Through one reductionist approach, game elements can be confined to a single level of actuation for the purposes of study. This is what has often actually been done in role-playing studies thus far, but

mainly without acknowledging the fact. The next step is to relinquish the absurd idea of being able to directly extrapolate from one game platform to the next, from diegetic level to another or from one game element to others. Larp and online role-playing, for instance, may share many traits, but they are not identical experiences. By analyzing their inherent texts, however, we can see where the play-experiences differ (as opposed to the easily observable physical differences of the mediums). Without accepting existing limitations, even useful, parametric research is rendered invalid – not in content, but at the point of reception. When a researcher acknowledges the limits and deals with them accordingly, he is then able to draw in factors from other actuation levels (for an exemplary example of such work, see Faaborg 2005).

A completely different, highly profitable line of research is the analysis of role-playing games as a form of other phenomena. While seemingly contradictory to the apophatic approach described above, it is actually complementary. Through looking at role-playing games as text, ritual, game or theatre, it is possible to see where they differ from their counterparts, and where they are identical. This is the process used in most of current-day role-playing analysis. It is partially caused by the different and often almost incompatible academic and scientific backgrounds of the analysts, and partially due to the simple fact that in a field with no analytic tradition of its own, the best methods are usually found in the fields it overlaps. Through the use of hermeneutics, even these methods can be combined with apophatic and reductionist approaches.

There is one common risk in using the non-apophatic approach: exclusion by definition, which is another type of discourse tool corruption. By defining that role-playing is something, researchers may close their results off from being compatible with others (Harviainen 2008). For example, there is a strong difference between an analysis saying “role-playing is performance” and analyzing role-playing “as a performance. The latter can be combined with other approaches, the former solely either approved or refuted.

4. REDUCTION BY LAYERS

The second reductionist approach seeks to treat role-playing games according to Ricoeur’s idea of “meaningful action as text”, due to the similarity of Ricoeur’s idea of “appropriation” and the interpretative system used in role-playing. A form of activity is treated as if it were a metaphor-filled

story, which the performers and observers of that activity then interpret from their own perspective.

“My claim is that action itself, action as meaningful, may become an object of science, without losing its character of meaningfulness, through a kind of objectification similar to the fixation which occurs in writing. By this objectification, action is no longer a transaction to which the discourse of action would still belong. It constitutes a delineated pattern which has to be interpreted according to its inner connections. This objectification is made possible by some inner traits of the action which are similar to the structure of the speech-act and which make doing a kind of utterance. In the same way as the fixation by writing is made possible by a dialectic of intentional exteriorisation immanent to the speech-act itself, a similar dialectic within the process of transaction prepares the detachment of the meaning of the action from the event of the action.” (Ricoeur 1981)

To that text we then pose Ricoeur’s “properly hermeneutical question”: “what does the text say to me and what do I say to the text”. This is done from both the perspective of the analyst and the perspective of game participants.

As a role-playing game exists on several layers at once, all layers must be deconstructed if one wants to find a holistic interpretation of a gaming experience. For this we need both hermeneutic tools and knowledge of the things briefly discussed in the preceding chapters. Through knowing how a diegesis is constructed and how a player potentially perceives it, we can transfigure both the diegesis and the perception into texts. Essentially this means “backtracking” them to a base set of texts that has never actually existed! Yet by creating these artificial “originals”, we can see the interpretative processes at work in a game.

Furthermore, by understanding which parts of these processes other role-playing theories assess, and to which parts we can apply theories from other fields, we have access to the tools earlier research has created and the ability to use them as synergic parts of the holistic analysis. Or, as an equally valuable option, the wisdom to see how to concentrate on analyzing just one or two layers without drawing too far-reaching generalizations from that analysis.

Each layer has some key traits that need to be addressed in a hermeneutical context. Counting inward, the layers discussed here are: 1. the

completely exogenous level where participants’ social interaction and external motivators (EPM) exist; 2. the level of exogenous internal motivators (IPM) and meta-game dialogue, 3. the level of subjective diegeses and their interplay, and finally 4. the world the characters live in. Note that this categorization has been selected for typological reasons only, and is based on motivator theory (as per Harviainen, 2005) with some extensions being influenced by Kellomäki’s (2003) four layers. This is due to levels such as rules not being assessable by themselves as text, meaning they are subsumed into other categories so that they can exist in an interpretative context. In contrast, Fine (1983) uses a system of three frames, while Mackay (2001) uses five. Fine’s and Mackay’s categorizations, rather than the one here, may actually be more appropriate for research concentrating on a single layer of the role-playing experience. (On Fine’s frameworks’ correspondence with the e/e/d system, see Montola 2005.)

All of these layers (and many other potential ones), regardless of definition systems, normally exist simultaneously in a game. Game breaks are moments when activity on certain levels is temporarily frozen so that participants can concentrate on discussing events more thoroughly on a level closer to the real world. The layers always freeze in order, starting from the world of the characters and proceeding to the level needed. A break in all layers means the game has been completely suspended or ended.

The basic building blocks of the layers are discourse and imagination. The former produces material for the latter and dictates the ways in which it changes. The discourse itself is fleeting, but it creates ongoing texts that create the whole role-playing experience. It is realized as event but understood as meaning (Ricoeur 1981). Thus each temporary social frame (as per Goffman 1974) in a role-playing game can essentially be read as a layer of text.

On the first level, all activity happens in the real world. Players are motivated by real-world concerns only, and their presence in the world’s continuity (Dasein) is subject to normal rules. Ethical choices are made from a real-world perspective. On this layer, the text exists in the interplay between participant choices, as expressed by their motives. The diegesis does not exist on this level at all, but may be discussed in general terms nevertheless.

On the second level, meta-dialogue about the game appears. For much role-playing analysis, it is this

level that is considered the most important. The meta-dialogue is formed of the events on the diegetic level, IPM factors the participants bring with them (including their Creative Agendas, genre conventions, etc.) and semi-random interruptions coming from the first (social) layer. This is the level of the structure of the game, and that is its primary text. The participants interpret the interplay and use it as a basis for the construction of their subjective diegeses. On this level, choices take on narrative qualities inspired by fabula (story seeds, as per Fatland 2005b) and ethical views become relativist, adaptive to the needs of the game. Pre-understanding about the game's style and conventions becomes manifest, and is openly discussed. On this level players are in connection to the diegesis, but their discourse takes place outside it.

The third level consists of IPM factors being transformed into character motivations (CM), the actualization of fabula and ephemera, and the interaction between the way players imagine the transitional space. It is also the level on which the players' views intermingle through intericonicity and create a roughly equifinal whole. ("Every participants' mental image of the sword is sufficiently similar", as per Adelsten 2002 and Lojonen & Montola 2004). Each subjective diegesis is a text by itself, built according to personal preferences, platform requirements and narrative needs. Much of what was discussed in the previous chapters is aimed at understanding what happens on this level. Players build the texts (analogous to but not the same as their subjective diegeses) they work with through those methods. Note that all this is still only a "text" as per the confines of "meaningful action as text", even if recorded. Depending on the character relationship of the particular players, their primary Dasein is either the artificial based on the assumed collective diegesis, or a mixture of their real continuity presence and the artificial one.

The second and third layers are about role-players appropriating material that the other participants introduce to the game, and then applying it to the present game situation. An element of distanciation transfigures the material into the players' own when it is processed in between appropriation and application.

"[I]nterpretation 'brings together', 'equalises', renders 'contemporary and similar', thus genuinely making one's own what was initially alien." (Ricoeur 1981)

Therefore a game participant does not actually understand the complete meaning of the material, but rather transforms it into his own interpretation, in which form it is injected back into the diegesis and/or meta-game – and then possibly appropriated by the others again, creating a feedback cycle.

The fourth level is the world in which the characters "actually exist". It is the only layer that would be real for them, and in which events would proceed in an order and manner completely logical within the diegetic frame. The players may speak of this level, but they never actually come in contact with it. It is a theoretical construct that does not actually even exist, but it must nevertheless be treated as "real" for the purposes of analyzing the game as a whole.

Within the fourth layer, the characters have a Dasein that is completely artificial yet diegetically logical, and all ethical choices are based on diegetic reasons. This level is pure diegesis. It is also a pure, singular text – one story – and can thus be subjected to all traditional literary analysis. In other words, the diegetic events that are never truly reachable by game participants or analysts, elements that would be real to the characters, can theoretically be reduced into a singular story consisting of the personal stories of each character. This so-called Lehrsikovian reduction takes the events of the game and treats them as if they were something that was intended to happen – the events are handled as if they were meant to form a pre-written story (corresponding with the concept of Chance in art, as per Kaprow 1966). Those events of that one story (or each one of the characters' stories, for that matter, should those be chosen) could then be analyzed like any other story, and be subjected to the methods of story-theorists like Auerbach, Bettelheim or Campbell, in order to determine the influences that created it. While the story is not truly accessible, reliable approximations of that story can nevertheless be constructed by game participants for this purpose, or for the purpose of entertainment (Lehrsikov 2007).

Though the fourth layer may contain observable properties from player motivations, genre conventions, etc., those elements are simply "that which happened" from the perspective of the characters. The characters experience things from levels one to three, but only as they extend to the fourth layer (game systems as natural laws of the universe, or luck, etc.)

So on one hand, phenomenological analysis of the diegetic world is impossible, but on the other hand the phenomena in it can be fixed into a singular factual nature, if the players all agree upon them on the second layer. Everything happening in the fourth layer is an emergent property of the three other layers, a phenomenon that makes adapting hermeneutics to analyzing role-playing diegesis itself easy.

“[W]hat must be interpreted in a text is a proposed world which I could inhabit and wherein I could project one of my ownmost possibilities. That is what I call the world of the text, the world proper to this unique text.” (Ricoeur 1981)

Following this template, an immersive player empathizes so strongly with her image of the fourth layer that she suppresses her awareness of the other layers. In reality, however, her primary “self” is on the third layer and is affected by meta-level concerns. The fourth layer is never reached by participants during the game. It is an idealization. In contrast, a competitive player’s primary activity layer is the first or the second, depending on whether he prefers triumphs over other players or over in-game obstacles created by the game master. Highly story-oriented players mostly favor the second and third layers, the former providing the necessary narrative clues and the latter being the place where those are actualized. In these terms, the turn-of-the-millennium Nordic experientialist ideal means that players are expected to see their characters as filters through which they experience the third layer and have that experience reflected all the way to the first layer.

For hermeneutic game analysis, all this means that each game has a number of sets of texts and their corresponding interpretations, in the example case of this article four sets. By knowing those origin points and end results, the gaming process itself can be treated as interpretation done by the participants, and analyzed as such. This reveals to us how a player experiences her game and what elements affected that experiencing process, the personal hermeneutic circle the player used for the duration of the game. That part can be subjected to all normal analytical methods, and will produce a reliable picture of what happened during a game on all levels. Furthermore, it will lead to an understanding of the underlying matrix of the role-playing process, and the recognition of dependent variables its structure is based upon – including, but not limited to, social, cultural and language influences that affect all ritual activities. (For more on dependent variables, see Goodman 1988, and

for role-playing as ritual, see Lehrich 2004 and Lieberoth & Harviainen 2008.) By nature the texts role-playing deals with are not autonomous and can thus provide a way to analyze their basis.

“To understand an author better than he understood himself is to unfold the revelatory power implicit in his discourse, beyond the limited horizon of his own existential situation.” (Ricoeur 1981)

From the perspective of traditional hermeneutics all this is of course problematic. The base text is not truly accessible and the interpretations will be subjective and incomplete if and when they are explicated to a researcher. That, however, is an unavoidable trait of all academic interpretation. Analyzing role-playing in this manner does provide a positive contribution to hermeneutics, though: by refining this approach, it will eventually be possible to use it to conduct test-runs into methodology. Role-playing provides a way to know to a greater than normal extent the text and the interpretation, the available information at play, as long as the fabula are observed in advance and ephemera introduced in a controlled manner (Harviainen 2007). Therefore it can be used to measure whether certain analytic forms reveal traits that are known to exist, something that is usually impossible in relation to a static text. In using hermeneutics to analyze role-playing, one should always adhere to Gadamer’s validity principle on hermeneutics: if you can apply the theory to the subject at hand, you will have to call it valid until you are proven otherwise (Gadamer 1972, adapted here from Adelsten’s (2002) application of the principle to studying visual arts).

Overcoming the problems of the first part of pre-understanding, that of seeing role-playing games as something or other in advance, is relatively easy. The second part, the ability to assimilate the work done on the field by others without defaulting to one’s own work as the primary measuring stick, that is the true testing point of whether role-playing studies can rise to an academic level. Until that point of interpretative understanding is reached, all studies on role-playing are just personal opinions of their authors, existing in vacuums. They may be correct beyond their bounds, but there is absolutely no way of knowing for sure.

That an individual theorist’s apparently successful work can be traced back to his or her theories is good, but not enough without the potential for further adaptation to other paradigms and/or platforms. Good examples of such single-platform

vectors can be observed in the correlation between Edwards' theories and the games he has published, and in the theories and game descriptions present in the Nordic larp yearbooks. Valid models and findings that cannot cross cultural barriers are not valid research on role-playing itself, they are valid research on a particular type or way of role-playing.

This is where the hermeneutic circle comes in again: as noted, pre-understanding is needed for the interpretation to begin. The trick to doing the work completely is in knowing how the pre-understanding limits one's work, and making the correct extrapolations thereof. Research on small points of the gaming experience are not only welcome, they're absolutely necessary for the wider work. They are the steps the road to understanding the complexity of the phenomenon are based upon – so long as those steps are not inflated into walls obstructing further progress.

Thus the need to seek ways to translate findings, theories and models into forms in which they can be compared and possibly combined, exists. The hermeneutic approach will not solve the problem, but it will allow a deeper comprehension of how the patterns interlink. In many cases it is not a research tool, but rather a complementary tool – showing for example how the frames of play documented by Fine, Kellomäki and Mackay form and function as personal texts, thus making them truly compatible with what has been said about player preferences. Without that understanding, regardless of from which methodology it comes, they are just descriptions of play behavior without any deeper meaning.

5. CONCLUSION

This article has presented a view of role-playing games as a set of interactive texts interconnected with frames, the interpretation of which is in itself enjoyable to the game participants. The interpretation takes place in a particularly strong liminoid state resembling a ritual, or a ritual state. Some of the discourse layers are imaginary, others are solidly grounded on real-world issues. A game's structure is built from the interaction of the participants' interpretations and the arbitration of conflicts the differing interpretations cause.

As a whole, a role-playing event is an interactive text in which the current situational context – including both the diegetic and the exogenous situation in their entirety – creates the primary frame in which the interpretation process takes place. In essence, the game is a convergent

medium, a focal point of shared interpretations done for the sake of mutual enjoyment.

Participants inject elements into the diegesis based on their non-diegetic desires, and reap medial, autotelic benefits if they do it well.

These texts and the participants' interpretations can be used as a basis for analyzing role-playing as if it were a special form of metaphoric reading. For the analysis to be possible, the processes through which role-players interpret the game texts must be

In essence, the game is a convergent medium, a focal point of shared interpretations done for the sake of mutual enjoyment.

understood. The same goes for the analytic tools currently in use. When that understanding is reached, it is possible to also translate other research on role-playing into a semiohermeneutic form through which a new potential for combining seemingly incompatible findings and theories becomes available. In my opinion this is the closest we can get to understanding role-players' actual experiences – at least until scientifically valid clinical psychological tests can be made. And even then, this approach will have provided data that can be used to know what to look for.

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Abstract

During the last 5 years, the similarity between role-playing games and rituals has been mentioned in numerous articles and online discussions. This article examines that connection by using data gathered over several decades in library and information science, studies of religion, and the cognitive sciences. The authors place particular emphasis on the similarity between social information phenomena present in both ritual and pretence, and the way those affect cognition—the seemingly “magical” interface that makes shared experiences possible. The authors show the implications of that pattern to the design of games and discuss its uses and limitations in games and experiences created for educational purposes.

Keywords

cognition, information behavior, information environments, social interface, role-play, pervasive games, learning games, rituals

In this article, we illustrate and explain the paradoxical nature of alternate reality, pervasive, and pretence games (PGs), as they hover at the brink of reality. An information-based view allows us to analyze how participants collectively seek to make sense of and interact with such ambiguous play situations—be they spontaneous games or meticulously tailored experiences meant to facilitate learning. In addition to insights from information science, we borrow analytical tools from cognitive theories of religious rituals.

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Games are interesting because we—the participants and spectators—choose to look at them in a special light. We create a special frame of mind, where particular things are important. A football crossing a line is not remotely exciting unless you know that this will score the home-team another point. Likewise, pixels moving on a screen are barely entertaining, unless you are a cat or accept them as an orc which can be gutted for loot and experience points. In other words, games rely on highly specific information to describe significant events and offer participants opportunities to interact with the game space. In this way, game participation depends on the information environments and social contracts—that is implicit consensual agreements between participants stating their shared interpretation and interest.¹ As such contracts regulate factors ranging from shared intentionality to how the activity can be safely and honorably played out, it is imperative to communicate their core principles sufficiently to all participants (Salen & Zimmerman, 2004). Otherwise, not everyone would be able to enjoy the new challenges posed by the shared game.

This is commonly achieved through the creation of fixed interfaces like sports fields, game boards, and computer game screens. As seen in children's pretence and religious rituals, however, information environments can also be created on a social level, delimiting game spaces (as per Aarseth, 2001; Letcher, 2001) in the middle of everyday life. Such magic circles turn the meaning, significance, and relevance of small things upside down for a select group of participants (Huizinga, 1939). This poses a challenge to our contemporary science of (mainly digital) games, occupied as it is with fixed and measurable interfaces.

Like rituals, PGs—games based on the idea of an altered or fictional reality—take place in settings that are isolated by physical and social means, creating temporary “tribal” zones (TTZ; Letcher, 2001). Certain barriers and cognitive authorities hold the shared game reality in check, as people are expected not to access information from the outside. Cognitive and psychological changes during the activity may be profound but rarely last afterwards, unless properly anchored by social or symbolic means that reach beyond the play situation. Cognitive theories on how rituals enhance cultural adherence help us answer the question of how experiences like educational role-play (e.g., Henriksen, 2009) can sway attitudes and beliefs, and how this may be applied in game design.

Finally, viewing socially created information environments as a form of game interface offers library and information science an extraordinary look at the significance of highly controlled information environments to participant cognition (as per Ingwersen & Järvelin, 2005).

The main question we will ask is, how can PGs with their immaterial interfaces engage people in the way that they do, and how might this carry over to life outside the games? To answer, we turn to the connection between games and rituals, which is particularly visible in alternate reality games (ARGs), pervasive games, and live-action role-play (LARP). We aim to lay a theoretical groundwork for future empirical research. Our task is therefore to identify the significant commonalities and differences between game and ritual, and from there, the social information effects at play in play.

Pervasive Games—At the Brink of Reality

In 1939, Johan Huizinga suggested that games and rituals are fundamentally alike. This link can be hard to sell, as little resemblance exists between a Lutheran mass and consecutive nights of HALO in a dorm room. The discussion was given new life in 2004, when Ericsson (2004) and Lehrich (2004) suggested a deeper connection between rituals and role-play, an idea that was picked up by other researchers (see Bowman, 2010, for a good example). However, none delved beyond the most obvious similarities. We attribute this to a lack of well-defined exploratory platforms in their studies and attempt to narrow down the analysis, by committing to cognitive and informational aspects alone.

LARP is a form of structured drama play based on character immersion and pre-planned plots that the characters live out. It first emerged from medieval reenactment and table-top role-playing games (Morton, 2007) but has come a long way since. AsLARPs are usually limited to closed settings, pervasive games and the digitally mediated ARGs intentionally blur the line between game and life (see Montola, Stenros, & Waern, 2009, for extensive discussion on both). ARGs are games in which a narrative element, such as a fictional storyline with featured puzzles, is played along with one's normal life. Pervasive games, in turn, are games that blend in with ordinary life and are not bound by traditional limits such as a fixed place or time of play, knowing who is a game participant or what is or is not a part of the game. Examples of the former include *THE BEAST* (2001) and of the latter the two Swedish PROSOPOPEIAS. Together, these game genres can be viewed as highly institutionalized versions of adult pretence play. Let us refer to them as PGs for short, underscoring their paradoxical proximity and distance to everyday life. P stands simultaneously for "proximity", "pretence," and "pervasive".

Live role-play is usually limited to closed locations and requires a high level of cognitive engagement to keep players immersed in the fictive reality. Pervasive games, in turn, can be widely distributed across time and places, and may accommodate a potentially infinite number of casual participants. The forms are not exclusive—a pervasive game can also be a LARP, for instance. They can be viewed on a shared continuum, including sibling phenomena like children's pretence play (see Figure 1).

Apart from formal similarities, adult PGs also have cognitive features in common with children's pretence play and, as we will suggest later, even religious rituals. For instance, LARPs often redefine identity (Harviainen, 2006), turning you into an orc, a house into a city, or a toy knife into a real one. ARGs and some pervasive games, in turn, add new significance or content into everyday events, even if the participants' identity stays the same. The participants manage this through the ongoing social negotiation, for instance, by cementing the meaning of pretence elements or introducing new ideas along the way (Harviainen, 2007a; Lieberoth, 2007). Contrary to children's pretence play, however, PGs institutionalize their social contracts through preexistent expectations, rules, and formal boundaries (Lieberoth, 2008). They usually rely on some sort of authority to mediate the game—for instance, a game master who writes the characters gives instructions and/or introduces plot devices.

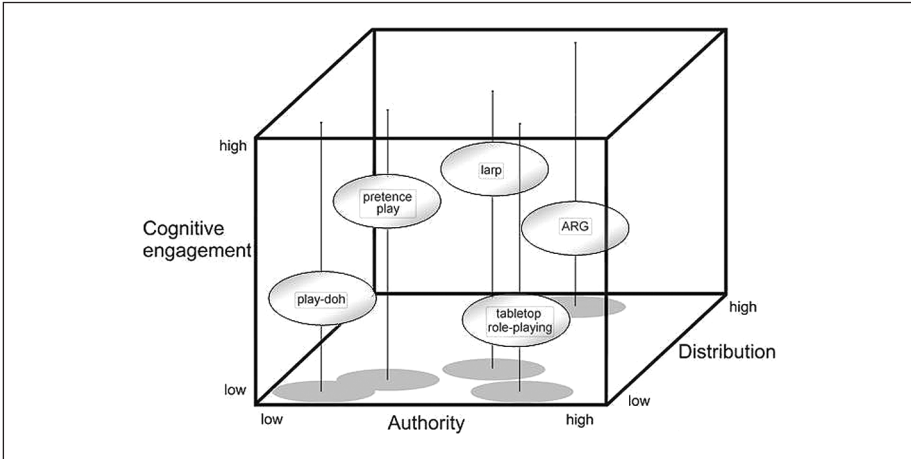


Figure 1. Continuum of different pretence games and other games as functions of authoritative constraint, cognitive engagement, and distribution across time and place

In learning games, the balance between fun and reality, motivation and challenge, become a measurable didactic issue (Wilson et al., 2009), moving the phenomenon in the direction of training simulations (e.g., Hsu, 1989) but retaining ludic elements. Henriksen (2008) has, for instance, suggested that to keep social stakes high and discourage participants from dismissing the game as silly, educational games should be neither too fun nor too easy.

Ritualistic Games

Games share many structural and psychological features with ritual (i.e., Burghardt, 2005; Huizinga, 1939; Lieberoth & Harviainen, IN PRESS). We opt to focus on the social flow of information.

The emergence of bourgeois culture and later postmodern religiosity saw rituals, such as the Black Mass or spirit séances, performed purely for entertainment (Evans, 2007). Many of the “Hell-fire” clubs in 18th century Britain, for example, had a penchant for role-playing and—at least allegedly—pagan or Satanic rites (Lord, 2008). Practices such as exegetical bibliodrama (i.e., the study of Biblical passages by way of role-play) also de- and reconstruct religious rites and texts to analyze their properties outside a traditional context (Räisänen, 2008).

Play has recently been applied into religious rituals. An example of such is the development of a magical school of thought (chaos magic) that uses the temporary assumption of belief systems, also ones known to be completely fictional, as a central technique (Evans, 2007). Furthermore, the 2000’s have seen the development of PGs that use the shape of religious rituals in making their magic circle as strong as possible. Some even

include attempts at reproducing the terror of high-emotion rituals (see Stenros, Montola, Waern, & Jonsson, 2007, for examples with research data).

LARPs are a particularly good example, as many have already intentionally blurred the line between ritual and game: *A SERPENT OF ASH* (2006-2008) and *PRAYERS ON A PORCELAIN ALTAR* (2007-2008) are structured to use information barriers in a pattern similar to ritual spaces.² The European Union-funded research-project games *PROSOPOPEIA BARDO 1: DÄR VI FÖLL* (2005) and *PROSOPOPEIA BARDO 2: MOMENTUM* (2006) mixed ritual elements with pervasive game play to intensify the game experience.³ Similarly, the Danish LARP *PERSONA* (2005) deliberately staged rites of passage where participants literally changed masks. The designers even based the overall game structure on van Gennep's (1909) three stages of ritual separation, transition, and (re)incorporation (Hansen & Krone, 2006). Such PG projects have demonstrated that the applications of the information restrictions traditionally inherent to religious ceremony work quite well in a game context. The similarities, however, need not be this explicit. Do similar social information effects take place in all PGs and rituals? We believe so.

The Challenge of Immaterial Boundaries

Information interaction is commonly analyzed in terms of the affordances and constraints created by a particular interface (Norman, 1993), such as a computer game screen or a sports-arena. In the social worlds of rituals and PGs, however, the technology is more open ended and the range of playing fields potentially infinite. This makes analysis of how social circumstances influence situational cognition a fruitful approach, as immaterial boundaries are created mainly through social contracts between participants.

Situational boundaries can be difficult to distinguish when pretence activities take place outside a well-defined playing field. Letcher (2001) called this a *TTZ*: a "bubble" of temporary space imposed on a real place (as per Aarseth, 2001; Apter, 1991).⁴ While still in temporal continuity with reality, activities within a *TTZ* are experienced as isolated. This means that a social information barrier (as per Wilson & Walsh, 1996) delimits a narrowly shared understanding of the situation⁵; it establishes what Bateson (1955/2000) calls a *cognitive frame*. Instead of a fixed interface, social sensibilities serve to define the *TTZ*, attract attention, and present participants with interaction opportunities. In the following sections, we explain how.

Reasons for participating in rituals and games range from momentary excitement to obligation and the enjoyment of social occasions. The cocreation of fiction can be a pleasurable and motivating experience (Apter, 1991), but the object of interaction is not key here. Social pleasure can come from a sense of belonging (Turner, 1969), shared experiences (including ordeals), or even a feeling of shared secrets (Galanter, 1999; Harviainen, 2006). The promise of such rewards may turn the maintenance of an otherwise meaningless or unpleasant experience (such as a scary initiation rite or a discomfiting, yet interesting, LARP) into a kind of pleasure in itself. In anthropology, the feeling of *communitas* has been described as a shared experience of profound

engagement and equality (Turner, 1969), which furthers belief in the superhuman efficacy of rituals (Lawson & McCauley, 1990). One core feature of participation in cultural spectacles is the social signaling of commitment (Bulbulia, 2008), which may also be duplicated by games (Pohjola, 2004). This is very visible in football hooliganism, where individual identity is momentarily reduced to the team a person is rooting for, anchored in the progress of the game below.

What makes football hooliganism unsettling is the fact that it sometimes spills beyond the confines of the arena and may color participants' interpretation of things in real life. Although most games stay within closed limits, some PGs also carry their magic circles into the real world, to produce what Jane McGonigal (2003) eloquently called the "Pinocchio Effect"—the little game that wants to be real. By deliberately mixing game thoughts and game actions with nongame reality, everything feels like part of pervasive games and ARGs, if the players opt to sublimate them as the primary frame of interpretation (i.e., Bateson, 1955/2000; Goffman, 1974).

In the collective framework, players assume that their peers retain a similar in-game attitude (Rakoczy, 2007). Unsuccessful performance of social participation can disrupt the experience, producing what might, with a courteous nod to McGonigal, be called the "Emperor's New Clothes Effect": a moment where social and individual immersion breaks down because participants are not completely engaged in the game and also realize that neither are their peers. Incomplete performances due to lack of skill, information, motivation, or action affordances can therefore be very disruptive. The effect is particularly visible in some role-playing traditions (see Pohjola, 2004, for an example), where the direct experience of identifying with the character is a major goal. Luckily, however annoying disruptions may be, players are usually able to skip back into the right frame of mind with minimal effort (Harviainen, 2006). This is contrary to rituals, where participation must come with a potential social cost, to signal real commitment on the part of adherents (Alcorta & Sosis, 2005; Bulbulia, 2008). The risk posed by the Emperor's New Clothes Effect is inherent to reliance on social and cognitive boundaries instead of fixed interfaces but rarely of catastrophic consequence.

A social information environment attunes multiple imaginations to the same objects, as participants picture something that is "not really there," or envision new, situationally relevant affordances to things already existing within the environment. Frame-relevant elements such as artifacts, actions, narrations, verbal negotiations, and instructions are introduced to serve as *anchors* for attention (Mithen, 1998). They help control the flow of imaginings over a prolonged period of time. A study conducted with adult role-players (Lieberoth, 2007), for instance, showed how details in personal experiences differed but were continually adapted through verbal negotiation and adherence to cognitive authority (see below). This adaptation maintained a shared frame, inviting to further play (see Brenne, 2005, on LARP; Schick, 2008, on educational role-play; and Stenros, 2008, on pervasive play). This is also seen in religious rituals, where central superhuman forces may be present only in the mind's eye or highly symbolic anchors such as statuary (McCauley & Lawson, 2002).

A consistent information environment can thus both shape unfolding actions into a narrative unity (Lieberoth, 2007; Wilson, 1977) and invite participants to search for their own personal meaning within that particular framework (Whitehouse, 1996).

Information and Cognition in Games

While a player is aware of the real world during a PG, the local information environment determines what parts of the real world are allowed to affect his senses. From these bits of information, he pieces together a whole picture of the situation, supplemented by active information appropriation when needed (Todd, 1999).

From an informational point of view, three key features make such a separation possible: resignification of elements within the situation, increased attention to shared intentionality, and the fact that during such activities, access to information outside of the activity is limited. The key to our analysis is therefore the effect of social interfaces on *information behavior*: the interaction of user with information environment in the social context (Grešková, 2006).

Many physical environments are designed to constrain and enhance information, for example, games being played in nonnegotiable sports arenas (Lave, 1988). Such fixed interfaces supply obvious cognitive anchors for shared intentionality (e.g., all spectators and players keeping their eye on a ball). Mobile technologies have recently also begun to support distributed games, breaking down the need for temporal and spatial proximity between players, moving the socially shared anchors onto the information superhighway. Social computer play has thus become less situated over the last 10 years and can now support more flexible structures than traditional games. Such games merge social and technological information environments.

Formal Resemblances and Differences Between Games and Rituals

Actions, topographical features, physical artifacts, social roles, and other elements of the situation are socially redefined in games and rituals (Crookall, Oxford, & Saunders 1987; Harviainen, 2006). This constitutes a shared information environment. A prime example is children's pretence play, where a banana may become a gun or a phone. This is done on the basis of either prior knowledge or explanations gained during the activity itself (Lawson & McCauley, 1990; Loponen & Montola, 2004). For example, realizing that the consecrated wine in a Roman Catholic communion is supposed to be the blood of Christ is not possible without knowledge of Catholic dogma. To comprehend and be able to fully participate in a ritual, participants need to understand its reference to an underlying belief system. Otherwise, the ceremonial actions are at worst perceived as meaningless (Staal, 1979) or taken at face value (i.e., the wine is understood as a refreshment).

Both modern sports and religious rituals are taken seriously due to contracts of shared intentionality. In anthropological thought, ritual situations are traditionally described as *liminal* (van Gennep, 1909), denoting their removal from everyday reality. Although removed, they are still in continuity with mundane life and have the capacity to facilitate social and cognitive changes (e.g., marriage and other life transitions; the transmission of secret knowledge). Accordingly, we find it fruitful to refer to social situations with high levels of shared engagement, which also challenge existing attitudes as liminal.

In this typology, sports are defined as *liminoid* as they represent a step beyond the mundane but lack transformational power (Ericsson, 2004; Turner, 1982). Rather than working toward a perceived practical goal, as do ritual actions, sports and games instead require a shared *lusory attitude*, where participants accept voluntary obstacles (e.g., rules, goals, and skill challenges) to make an activity enjoyable in itself (Apter, 1991; Suits, 1978): A ball entering a goal outside of a match is insignificant, but during a game it is extremely important.

Many types and variations of ritual exist; however, like games, they constitute an obviously distinct class of behavior (Lieberoth & Harviainen, IN PRESS). Some are highly personal, unique, and involving, whereas others are formalistic, repetitive, and do not require much engagement. All, however, seem to increase participants' motivation, information, and momentary credulity toward frame-relevant elements in some way.

To address the differences, McCauley and Lawson (2002) suggested variable dimensions of arousal and frequency. Whitehouse (1996), in turn, envisioned two distinct modes of religiosity, where rituals are either "doctrinal" or "imagistic"—that is either affirming, low-impact, and frequent (e.g., the Eucharist at Sunday Mass), or rare, emotionally powerful, and life-changing, sometimes called *rites of terror* (e.g., tribal initiation). A very similar range exists in PGs, on frequency and intensity (see Montola et al., 2009, for examples). Both theories assume that ritual systems survive in culture by transmitting themselves as vessels for information through effective memory imprints.

In rituals, ordinary actions can become magical through supernatural intermediaries (e.g., Lawson & McCauley, 1990; Sørensen, 2006). In a like fashion, in PGs, actions, objects, and persons may be assigned momentary play roles and play functions (Burghardt, 2005; Lopenen & Montola, 2004; Rakoczy, 2007). These transformations and substitutions are easily understood by all involved and may symbolically enable liminal changes (e.g., the washing during a baptism makes a child pure), serving as long-term anchors for shared understanding.

TTZs, regardless of whether they are created for rituals or for fun, depend on shared information. Liminality and lusory, frequency and arousal, are all essentially secondary properties. They define the type of ritual or pretence and create a sense of significance, but the process itself rests on another—perhaps deeper level: the social information environment created between participants.

PGs and Rituals Create Similar Information Environments

An information environment is defined by physical and social features that influence the availability of information and attitudes to available inputs (Wilson & Walsh, 1996). When the Greek mystery cults led blindfolded initiates into dark cellars under superhuman pretexts, they had great control over expectations and perceptual inputs. They were thus able to create vivid and emotionally tantalizing imageries of the underworld using very simple means (Martin, IN PRESS). Rituals form a good basis for understanding the socially constrained information environments seen in PGs.

The most efficient information constraints simply keep information to a minimum, placing some inputs in a privileged position. Physically segregating the situation or numbing the senses through blindfolds, drugs, deafening drums, and similar means can forcefully filter outside information away. Another common technique is occupying participants' working memory with a variety of ongoing cognitive tasks (e.g., reciting complex prayers or mantras; Galanter, 1999).

The similarities between PGs and rituals are clearer on a social level, as ritual information environments are usually constituted by a body of peers. They all serve as sources of information, through their actions and ability to share knowledge, just like other players in a massively multiplayer online role-playing game or fellow spectators at a sporting event. These sources, however, work within restrictions.

In addition to possible physical constraints, participants isolate their information environment through social contracts of interest, creating a high level of attention to the experiences of others (i.e., Rakoczy, 2007). This has been described in terms of LARP interimmersion (Pohjola, 2004), representational negotiation (Lieberoth, 2007, 2008), and religious *communitas* (Turner, 1969). The social group is not only granted an informational function but also invested with cognitive and emotional salience.

In such socially constructed information environments, *cognitive authority* (the framing of some people, or predetermined sets of ideas, as more reliable sources of information than others) becomes central. This type of authority is a matter of degree, and it is always relative to a sphere of interest (Wilson, 1983). The role often coincides with that of a referee or ritual expert but is not necessarily based on actual expertise. A cognitive authority's comments are treated as if they were knowledge, not just information, and serve as public anchors for shared interpretation.

Through these social information effects, the magic circle surrounding a TTZ acts as a barrier. It not only lessens the likelihood of accessing or encountering information from outside but also affects any information that crosses it. It makes information either fit within the frame or disqualifies it before it can properly enter. In this, both ritual and pretence play situations are an excellent example on how Shannon's (Shannon & Weaver, 1949) theory on signal and distortion also functions in social environments: Stimuli are either accepted in a frame-relevant form or not at all. This is consistent with the concept of cognitive dissonance, derived from Festinger's (1957) famous study of a high-involvement alien-contact cult. The cult's adherents would accept a thinly varnished repair of their threatened worldview after an absent apocalypse, rather than

suffer the emotional distress of having their personal investments in the movement rendered futile. Information harmful to the experience never truly settles within a magic circle but may disrupt its boundaries slightly or destabilize it in the long term.

Shared understandings are often mediated by a *directive source*, such as a game master (Harviainen, 2007a), in a manner similar to leaders of charismatic cults (Galanter, 1999; the game master's power, however, is less pervasive). This special form of cognitive authority is given the right to overwrite any other information source, including preconceived and even physically anchored knowledge. Directive sources typically supply guidance, making the activity progress seamlessly. In children's pretence play, authority is a little more fluent, as content can be negotiated by anyone. Social status often nevertheless gives some participants more reign than others (Lieberoth, 2008).

In a traditional religious environment, the directive source is a conduit for the social authority invested in the congregation as a whole and can even convey the will of supernatural forces (e.g., through divination) or declare the transformative effects of ritual actions. To use our earlier example, the celebrant at a Roman Catholic mass confirms that the communal wine is now indeed also physically the blood of Christ, despite its taste and other chemical properties. This is possible because a directive source—in this case, Catholic dogma accepted by the believers and supported by the actions of the priest—invests the ceremonial form with the power to enact change. In the same way, when a game master in a LARP says that a building is on fire, within the TTZ's reality it really is aflame (Harviainen, 2007a). Although the credulity of the participants is not as strong in such a case, the social contract of the game effectively forces them to act as if it were.

A magic circle with the power to act as an information barrier is thus based on a combination of three factors: the participants' conception of what objects and information elements are situationally relevant (as per Bartlett, 1932; Wilson, 1973), their shared wish to preserve the TTZ (Fine, 1983; Letcher, 2001), and the attribution of cognitive authority to certain information sources (Galanter, 1999; Wilson, 1983).⁶

Making Sense of Games

The need for a shared understanding in the TTZ requires small changes in attitude as well as the acquisition of new information. This process functions smoothly because people tend to familiarize themselves with a subject by inserting and appending small bits of information, rather than changing major bodies of knowledge (Todd, 1999). This fits our active view of cognition and reflects Dewey's early notion that "an organism does not react to a stimulus, but acts to incorporate it" (cited in Fingelkurts & Fingelkurts, 2004, p. 850).

Change processes can be directly controlled in information environments where cues are restricted and strategically applied by the authorities (Harviainen, 2007a). A typical progression is from seeking "a complete picture of things" to seeking "a

perspective or position” (Todd, 1999). “Things,” in this case, are restricted to the game- or ritual-frame at hand. A typical way of making more sense of rituals or new games is thus the acquisition of bits and pieces of information during the activity, appended with direct questions/searches (e.g., from peers, tacit knowledge, or a manual) when necessary. This minimizes potential disturbances to the activity at hand and thus the social risks associated with causing such disturbances.⁷ Under ritual circumstances, the supernatural can also be accessed directly as a potential information source (Kari, 2001). In PGs, a continuum from game masters (e.g., *A SERPENT OF ASH*) to fixed technological interfaces (e.g., *THE BEAST*, 2001) fills the function, which means that significant variability in direct access exists.

Furthermore, the information environments of TTZs are not created from scratch, and even new computer games presuppose some knowledge of the real world on which they are based. As Ingwersen and Järvelin (2005) noted, information behaviors are influenced by long-term exposure to prevailing paradigms of belief and tradition. Participants bring these influences and values into the magic circle but suspend some of them to fit the fictional reality. This is the transformative information effect of liminality in action and exemplifies Brookes’ (1980) Fundamental Equation of Information Science on a social and situational level: What people know is changed by how they selectively take in information. Information is not simply added as new knowledge. It is appropriated so that it fits with the person’s expectations and emotional values (Modell, 2003). For a believer within a liminal environment, this creates a feedback loop where the available information supports the ritual—or game—experience. That, in turn, makes the participant more likely to get involved with the activity, appropriate information from within, and act as an information source for others in a manner that supports it. The tension created by the suppression of some knowledge brought into the TTZ—required by the social contract of a PG (Montola et al., 2009)—may either strengthen the sense of liminality for a participant or severely disrupt it, depending on personal disposition (Galanter, 1999).

New pieces of knowledge may work smoothly within the TTZ but are usually subject to reevaluation once people return to the real world. In cases of games, they are simply dropped. In liminal rituals, they are likely to remain, as supernatural elements are taken seriously in the host culture. They are also often anchored (Mithen, 1998) through stable elements such as artifacts (e.g., a wedding ring), the peer group (e.g., other players), or an ongoing need for active commitment (e.g., a series of subsequent ritual offerings thanking the spirits for a successful transition). This reevaluation poses a challenge to the design of educational games, as those do not normally have a host culture to anchor them the way a religious community does. Should the social contract be sufficiently strong and conducive to learning, however, players may themselves create the necessary anchors (Henriksen, 2009). As such self-initiated anchoring already takes place in similar religious and magical contexts (Sørensen, 2006), we believe that a game with the right type of build-in social contract is very likely to accomplish similar results.

Engaging the Mind

Apart from controlling information and influencing appropriation into knowledge, rituals and games often mobilize emotions. This creates special cognitive circumstances and makes information cognitively and socially sticky—like certain ideas and images that just seem to stay with us, and beg gossip around the campfire or water cooler. This effect has been the focus of teachers, advertisers, and politicians for almost a century (Gladwell, 2000; Heath & Heath, 2007) but seems to come natural to art and religion (Boyer, 2001).

One premise of classic library and information science is that users are usually rational agents who are fairly clear about what information they search for, once they have an inkling of what they might need (Kuhlthau, 2004). Imagistic rituals turn this premise on its head, by creating situations that beg a search for meaning but refuse to supply the needed information directly (Whitehouse, 1996). They therefore prolong the initial “anomalous state of knowledge” (ASK)—the uncertainty from which information seeking progresses (as per Belkin, Oddy, & Brooks, 1982). Indeed, unexpectedness and emotions are keys to making information stick in any case (Heath & Heath, 2007).

By creating distressing situations, restricting action opportunities, overloading working memory, and dealing with matters of great cultural importance, imagistic rituals undermine calm, reflected information seeking. In stressful situations, information appropriation becomes more erratic, as novelty becomes distressing (Wilson & Walsh, 1996), the scope of cognition narrows to few working-memory items (Wickens & Hollands, 1999), and secondary process thoughts are usually eliminated from consciousness. Reliance on immediate sources, supported by emotional salience, including feelings of trust and belonging, increases. Such reliance even extends to shared symbols and narratives, which are usually already present in the foreground of rituals and games. Such experiences feed the magic circle and the sense of liminality, and may be the main attraction of ritual-like designs in learning games and leisure PGs.

As culturally constructed spaces of action and sociality, rituals thus not only call attention to but also emotionally sublimate certain aspects of reality. They bestow added salience on “sacred” objects, stories, and people as sources of information. At the same time, by reducing secondary process thought, arousal can suspend the protective quality of a frame, making trauma seem more immediate than the situation actually warrants (Apter, 1991). It has also been experimentally documented that, like any computer-interface, high-emotion communications work best when presented with clear-cut invitations to action (Lewenthal, Singer, & Jones, 1965). High emotional salience coupled with consistent information and interaction opportunities may thus “suck us in” to the magic circle and probably facilitate the transfer of information from the TTZ into real life.

This is why the most ritual-like PGs, such as *MOMENTUM*, resemble rituals of the imagistic type. In them, liminality is more visible, as game breaks are rarer and the game structure itself contains ritualistic elements, up to and including genuine fear. Observed more closely, however, more doctrinal rituals too find their counterpart, in

long-term role-playing campaigns. In those, players enforce their vision of an imposed world, and gain pleasure and affirmation by repeated low-key exposure to the game world and its community of players. In such games, just as in dogmatic rituals, the ASK state is not prolonged. Instead, the game rite offers a repetition of what is already known, combined with new elements, which are easily appendable because they are presented in the immediate company of old information (as per Todd, 1999). Although extremely significant in both religion and game contexts, such repetition rarely carries the immediate impact of imagistic rites or imagistic-style LARPs.

Without a hint of emotional investment, phenomena like horror games and action sports would not be as alluring, and ritual participants would be less open to liminal change. Nor would these events be pleasant without a clear-cut strategy for dealing with those emotions—either through personal engagement or by proxy (e.g., identification with a fictive hero, special ritual agents, and scapegoating). The creation of arousing information environments generates a thirst for meaning and action opportunities, which well-made rituals or PGs can readily supply through their design.

Readdressing the Challenge of Immaterial Boundaries

With the combined knowledge of PGs, rituals, and their information effects, we readdress the primary research question in another fashion: What seemingly magical interface found in PGs creates shared information environments without the aid of any fixed interfaces? How does this create socially and cognitively sticky information? And how can this be translated into better game designs for fun or for serious purposes?

To sum up, activities within a liminal frame can easily refer to everyday reality, but the link is strained if games require the use of an artificial platform (e.g., a first-person shooter) or if they deal with highly peculiar content. High likeness to everyday frames facilitates easy transfer of elements between game and reality. It can, however, also weaken the stickiness of tailored experiences, by blending too much with the buzz of everyday experience. What makes liminality special is the shared separation from everyday rules and realities, and the feeling of personal change. *THE BEAST* (2001), like other pervasive games, was played in continuation with mundane life. By replacing a complete magic circle with a shared interpretative frame and lust for exploration, it reached for a level where everything was potentially a part of the game (as per Harviainen, 2007a).

Here we see how much rituals and games have in common. They share a willingness to leave reality behind but keep relevant links open. The participant needs to be different from his everyday self but also the same. A fine line emerges via social and cognitive information barriers inherent to the magic circle, supported by emotional arousal, social attunement, and more conventional means of affecting information. A temporary reality emerges, with its own rules and truths.

Therefore, from an information perspective, PGs and rituals are practically identical. Similarly, a charismatic cult, if analyzed as an information phenomenon, establishes a constant state of ritual liminality for the believers, in a manner similar to that used in pervasive games such as *PROSOPOPEIA BARDO 2: MOMENTUM* (2006).

That state, however, cannot survive indefinitely, due to its reliance on effective information barriers and a clear, singular authority that is threatened by any significant change (Galanter, 1999). This observation of limits is also consistent with Lifton's (1961) findings on Chinese thought reform: cognitive changes rarely persist if they are not constantly supported by the social environment. Rituals and games remain stable because their TTZs are generally designed to exist for only a limited time, and they do not attempt to prolong their participants' ASK states indefinitely.

Our combination of approaches thus points to an equation where information relevant to the frame is enhanced and becomes sticky (as per Heath & Heath, 2007, or for a cultural approach Boyer, 2001) due to a posy of information factors: the structure of the situation (in the case of PGs, usually social negotiation) and the expectations, stories, and prior knowledge carried into the experience. Likewise, significant is the way these stimulate our inherent tendencies to search for meaning through local information, parse reality into frames to avoid overloading working-memory, and adhere to social norms. Together, they create socially generated information environments, which in their totality are easier to accept than the information presented on its own. The effects are powerful but, just like fixed interfaces, they hold only momentary sway over the minds of participants and spectators.

Implications and Application

So, with our newfound knowledge of information environments and liminal states, should games deliberately be made to resemble rituals? Would this enhance fun, engagement, or the practical usefulness of games for purposes like education? Or are the phenomena described in the previous sections merely circumstantial resemblances of interest to ivory-tower academics only?

We believe that the overlaps between ritual and PGs hint at a distinct design advantage at the level of information. Experiences from ludology show how shared engagement can be simultaneously playful and serious (e.g., Apter, 1991; Huizinga, 1939), and distributed across space and time (Montola et al., 2009). Contemporary theories on religion (Lawson & McCauley, 1990; Whitehouse 1996) offer a glimpse at the cognitive processes that create engaging mental magics and make items stick in people's minds.

For games designed to enhance learning or alter attitudes, the implications of this combination are clear: As studies of rituals, cults, and thought reform have shown, shared liminal experiences have a strong impact on participants during the activity but that impact rapidly dwindles when they leave the tailored situation behind (Lifton, 1961). This means that under most circumstances, games creating a strong sense of liminality can be used to motivate momentary viewpoints and experiences, but they will rarely generate significant cognitive changes in the long term (Lieberoth & Harviainen, IN PRESS). Rather, they may aid the appending of local information (Henriksen, 2009). They may also, with reference to Whitehouse's modes theory of ritual, serve as autobiographical anchors for retrieval of autobiographical memories

(i.e., Addis, Wong, & Schacter, 2006), which may serve as gateways to tacit knowledge acquired during the experience.

Tailored game situations are very good at shaping engagement and information flow, but if they are to achieve a resemblance to the transformative power of rituals, the key is not to be found in structural likeness. It will be found in how experiences make people search for information, which can take root in minds and daily social practices alike (i.e., Henriksen, 2008). That simulations and LARPs can teach practical and social skills has been known for a long time (for very good examples of the range, see Balzer, 2009; Hsu, 1989), as has that these skills may sometimes enable long-term changes as they are processed. This, however, is not the same thing as enacting a true transformation through a simulation or a LARP.

Games may be applied in social change processes because they can generate motivated information searches, along with strategic feedback, in a highly controlled environment. Drastic alterations of preexisting attitudes or knowledge structures, however, are not an expectable outcome. It is unlikely that a game would succeed where even rigorous regimental thought control does not (Galanter, 1999; Lifton, 1961). For changes to persist, cognitive and physical anchors, such as imposed routines, achievable commitments, salient autobiographical memories, the presence of the peer group or physical monuments to the shared experience, must be transferred into everyday practice. They serve to reactualize not only new knowledge but also the social information phenomena shared during the experience. This same conclusion has been reported on educational role-playing by researchers such as Henriksen (2008). It also fits with Pitkänen's (2008) findings on teaching historical empathy through LARPs, Balzer's (2009) observations on the effects of an imposed temporary reality on learning new skills and social competencies in LARP, and the documented effects of the political propaganda LARP SYSTEM DANMARC (2005).⁸

Just like games do not feature certain experience-intensifying traits of rituals, they do not contain all their restrictions either. As seen in pervasive games, tailored experiences do not require prior belief in epistemic relevance and need not be confined to an isolated time or location. Because of this relative freedom, they can distribute the traits of liminal information environments into everyday practices, possibly even creating enough ongoing engagement to ensure sensible memory consolidation and transfer beyond the limited experiences set by fixed-interface games. Educators have always appreciated the need for reflection and transfer into real practice. With these design considerations in mind, well-designed games can become anchors for prolonged social learning processes.

With this knowledge of rituals and PGs, game creators have an opportunity to reach beyond the traditional limitations of play and learning. The game does not need to end, and the social group can become a part of an ongoing information environment for this purpose. PGs can transcend the narrow confines of fixed game situations, but they still need skilled game programmers to make information environments and the magical interface come alive.

Conclusions

The information environments that feed PGs pervade all levels of social reality—up to and including the political and educational. In games and rituals, we see microscopic versions of the social and institutional information constraints influencing public opinion. They affect participants because the socially accepted liminal setting enhances some information sources while blocking others.

The “magical” interface of rites and PGs rises from these social information properties. Knowingly or not, the designers of such events manipulate those properties, creating various sorts of tools and constraints. In rites of terror and strongly emotional PGs, the uncertainty of participants (their ASK state) is intentionally prolonged, making the participants highly reliant on information sources and authorities present in the activity at hand.

The magical interface works through a feedback loop, which starts with the social contract to engage with the TTZ and to keep it isolated. Social and physical information constraints can keep external information from getting through, or sometimes strengthen it, in cases where it supports the emerging shared experience. Encountered stimuli must be perceived as situationally relevant to be noted at all. Stimuli that are not received because people are focused on other things cannot play a role in the information environment. And once information is received, it must settle within the shared experience. If social, cultural, or psychological factors reject information as invalid, it may visit the information environment briefly but will then be dismissed.

The special social contracts surrounding rituals and PGs establish meaning and relevance criteria. This creates a barrier to the outside world, telling us that “what happens in the woods stays in the woods.” The formal delimitation is supported by special acts and goals within the activity, which separate it from everyday experience. These factors, when combined, enable the emergence of cognitive frames that invite players to perceive a more malleable reality beyond everyday practice. Participants may be aware of real life as well but make sense of the primary, liminal framework because of the invitation to share a fantasy.

These phenomena may apply to other games as well, but the lack of a fixed interface in PGs is what makes them particularly similar to rituals. The social contracts on which games and rituals are based may differ, with one being built on faith or social obligations and the other on lusory intent, but the activity itself is highly alike—especially at the level of information properties. PGs, furthermore, require the same sort of anchoring as rituals do, to make their content cognitively “sticky,” that is, able to persist outside the game environment.

This article is a start. By looking at the connection to rituals, it aims to show how certain game processes function, processes the understanding of which is vital for the creation of more effective PGs and training simulations. Further testing is certainly required, to understand the nature of the underlying social contracts, to identify the specific tools and factors affecting information behavior in TTZs, and to improve the anchoring of things learned during play. The next step could be designing learning

games with this theory in mind, to generate sets of quantitative data, which can then be tested using more conventional methods.

From an information point of view, it appears that rituals and PGs are facets of one singular phenomenon. Understanding one therefore also extends our knowledge of the other. As game designers and researchers, we may thus in turn implement liminality for our own sinister purposes.

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Notes

1. "Information," for the purposes of this article, is defined as the potential message content in any piece of data, ranging from verbal statements to physical objects. It is selectively ignored or appropriated into knowledge structures by persons seeking or encountering it. "Information environment" is a definition used in library and information science to denote the sum of situational and/or local factors that affect the seeking, searching, appropriation, distribution, and use of information by people or systems in that particular situation and/or location (Ingwersen & Järvelin, 2005).
2. For a design report on A SERPENT OF ASH, including debriefing and evaluation of the initial run, see Harviainen, 2007b.
3. Both PROSOPOPEIA games have been extensively documented and analyzed by the organizing project. For examples, see Stenros (2008) and Stenros, Montola, Waern, and Jonsson (2007).
4. Letcher's temporary tribal zone (TTZ) is an academic version of Peter Lamborn Wilson's (1991) concept of temporary autonomous zone (TAZ), supported by field research. It is also fully compatible with Aarseth's (2001) idea of imposed space, widely used in game studies beyond its origins in the study of digital games.
5. Note that we are primarily using Bateson's (1955/2000) concept of frames in this article, not Goffman's (1974) version, which is far more familiar to game studies scholars. The former includes the concept of mental representations, whereas the latter deals with social and situational cues.
6. For excellent examples on how this triad functions as a whole, see Galanter's (1999) descriptions on boundary control in various new religious movements.

7. This is a good example of how the “berrypicking” method described by Bates (1989) also works for passive searching and not just retrieval of documents. For the significance of berrypicking in a liminal context, see Lieberoth and Harviainen, IN PRESS.
8. Opus, 2005, is a documentary film describing the design, implementation, and participant reception of SYSTEM DANMARC (2005), a 3-day propaganda LARP about homeless people in Danish society.

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Sadomasochist Role-Playing as Live-Action Role-Playing: A Trait-Descriptive Analysis

Popular Abstract - This article describes sadomasochist role-playing which is physically performed by its participants. All sadomasochist activities have a role-playing component to them. It is a form of role-playing where people consensually take on dominant and submissive roles, for the purpose of inflicting things such as pain and humiliation, in order to create pleasure for all participants. In some cases, participants agree to emphasize those roles, or make them fetishistically attractive, by adding complexity and definitions to them, and then act them out in semi-scripted fantasy scenes. This paper examines that activity, commonly called "sadomasochistic role-play", as opposed to the more generic "sadomasochism" of which it is only one facet.

Furthermore, the article compares this form of play with live-action role-playing (larp). Its main emphasis is on the question of how closely related the two activities are. To determine this, the article examines sadomasochist role-playing as being potentially a game, the question of its goal-orientation and the issue of whether or not it contains a character in the sense of a live-action role-playing character. Based on this process, it comes to the conclusion that sadomasochist role-playing is not a separate type of role-playing, but rather one kind of live-action role-playing.

As its theoretical framework, this text utilizes studies done on both live-action role-playing games and on sadomasochist role-playing. Reliable material on the latter being quite limited, descriptions have been gathered from both academic works and practical manuals. The data gained from these is further supported by interviews of practitioners with personal experience in playing sadomasochist fantasy scenes. This article has two key purposes: The research of a relatively understudied form of role-playing, and the building of bridges from that to live-action role-playing research.

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ABSTRACT

This article describes sadomasochist role-playing in which the participants are physically present and perform their actions. All sadomasochist activities have a role-playing component to them. It is a form of role-playing where people consensually take on dominant and submissive roles, for the purpose of inflicting things such as pain and humiliation, in order to create pleasure for all participants. This article examines cases where participants agree to emphasize those roles, or make them fetishistically attractive, by adding complexity and definitions to them. They then act out their characters' actions in semi-scripted fantasy scenes. This paper examines that activity, defined as "sadomasochistic role-play".

Furthermore, the article compares this form of play with live-action role-playing (larp), fantasy play which also contains characters and physical actions. Main emphasis is on the question of how closely related these two activities – both easily recognizable as pretence play – actually are. To determine this, the article examines sadomasochist role-playing by analyzing its key traits as role-play. These include it being potentially a game, the question of its goal-orientation and the issue of whether or not it contains a character in the sense of a live-action role-playing character. Based on this process, it comes to the conclusion that sadomasochist role-playing is not a separate type of role-playing, but rather one kind of live-action role-playing with a particular, distinctive framing.

As its theoretical framework, this text utilizes studies done on both live-action role-playing games and on sadomasochist role-playing. Reliable material on the latter being quite limited, descriptions have been gathered from both academic works and from practical manuals. The manuals have been chosen from amongst those most quoted and considered reliable in academic works on sadomasochism. The data gained from these is further supported by the author's interviews of practitioners with personal experience in sadomasochist role-playing. This article has two key purposes: The research of a relatively understudied form of role-playing, and the building of bridges from that to live-action role-playing research.

1. INTRODUCTION

Sexual role-playing exists in various forms. It has been so far researched very rarely, and mostly just from a quantitative perspective, as a side note in studies concentrating more on other sexual behaviors. It is commonly believed that people play pretence games such as "plumber and housewife" in their homes, or "man picking up a prostitute" at bars, as a form of sexual play. Yet not a single research paper on this phenomenon seems to exist.¹ A likely reason is that it has been ignored as an "insignificant factor of foreplay" by sexologists conducting surveys, and thus never included in the questionnaires (Moser, personal discourse, 2009). Sadomasochist role-playing (much, but not all, of which counts as sexual role-play; Newmahr 2010), however, is a different case: It has been documented to some extent, and its central forms (including the popularity of those forms) are known well beyond anecdotal levels of evidence.²

In this article, I will examine sadomasochist role-playing in which the participants perform their actions for real (as opposed to using just verbal descriptions of them), as a form of role-playing. I will compare it to live-action role-playing (larp), a type of role-playing game where players adopt the part of fictional characters and physically act out their actions (see Brenne 2005 for an example). As

my tool, I use systematic trait analysis – a type of hermeneutic deconstruction – on already existing studies of both, supplemented with interview material (see Harviainen 2008 on using hermeneutics for the study of role-play, and Mäyrä 2009 on hermeneutics in game studies). This is a formalist, technical study, deconstructing and discussing traits and structure, as the meaning given to the activity is well beyond the scope of this article (see Newmahr 2011 for more on the significance of sadomasochist role-play to its practitioners), as are individual descriptions of sadomasochist role-playing scenes.

According to a widely (see Weinberg 2006 for details) accepted definition of sadomasochism – also called by various names such as BDSM and Leathersex, depending on connotation and practitioner identity³ – coined by Weinberg, Williams and Moser (1984), there are five key components to it. Not all of them need to be present in order for an activity to constitute sadomasochism, but they are often found together. These are:

1. **The appearance of dominance and submission;** the appearance of rule by one partner over the other.
2. **Role playing.**
3. **Consensuality,** that is, voluntary agreement to enter into the interaction.
4. **Mutual definition,** i.e., a shared understanding that the activities constitute SM or some similar term.
5. **A sexual context,** though the concept that SM is always sexual is not shared by all participants.

The dominant partner in a sadomasochistic event (often called a "scene" or "session") is generally referred to as the "top", and the submissive partner as a "bottom" (Weinberg 2006). Other concepts also exist, depending on local and personal preferences, some of them common (such as "Master" or "slave"), others quite obscure (Rinella 2006). The playing of roles has a central part in sadomasochistic activities, as also the first criterion

¹ This observation is based on the author's extensive database, sexological journal, and online searches for such between 2006-2010. It has further been confirmed as likely by sex researchers Elina Haavio-Mannila (personal correspondence, 2007), Osmo Kontula (personal correspondence, 2007), and Charles Moser (personal discourse, 2009). If such studies do exist, they appear to be extremely obscure and difficult to find.

² A second well-documented but contested example of physical sexual role-playing exists, in the form of paraphrased "gender roles" adopted by homosexual individuals. The study of those, however, is beyond the limits of this article.

³ Even though some communities prefer different terminology, I will use sadomasochism and BDSM (an abbreviation of Bondage & Discipline, Dominance & Submission, and SadoMasochism) as an interchangeable umbrella concept here, denoting activities as defined by Weinberg, Williams & Moser 1984.

ties into role-playing (Siegel 1995). The whole activity can be perceived in some cases as an escape from normal gender roles, to various degrees (Nordling et al. 2006).

Since Gebhard (1969), many researchers have seen BDSM as a social activity (see Weinberg 1978 and 2006 for detailed literature surveys), which rises as an emergent property from the possibility of experiencing some pain as pleasurable (*algolagnia*). According to Gebhard, and expanding on him Weinberg & Kamel (1995), especially societies with both strong power hierarchies and a chance for mobility in such hierarchies give rise to this social sadomasochism, i.e. the ability and propensity to enjoy sexual scenes with a strong, yet consensual power dialectic. This means that according to these researchers there is a pretence play component to sadomasochism. (Studies which concentrate on psychophysiological reactions have a tendency to skip any analysis of roles played beyond the dominant/submissive dichotomy as insignificant; see Sagarin et al. 2009 for an example).

Furthermore, Mains' (1984) ethnography of gay male sadomasochists introduced a view of BDSM activities as "ritual psychodrama". Gebhard (1969), Deleuze (1967) and Weinberg (1978) also note that BDSM play is a fantasy activity, set in a temporary fictional world, and contains theatrical elements, yet is not theater. These observations, in addition to the playing of very obvious roles, raise the question of the extent of the similarities with larping.

2. THE BASICS OF BDSM ROLE-PLAY

Sadomasochist role-playing, like role-playing in general, can take place in any interaction environment, including subtle interactions in everyday life, not visible to outsiders (Dancer et al. 2006). Online BDSM role-playing has a lot in common with traditional tabletop role-playing games (Cross & Matheson 2006), and virtual environments such as Second Life have given rise to sadomasochist role-playing communities within them (see Sixma 2008 for an excellent example).

Physical BDSM role-play has several natural-seeming siblings, from re-enactment to psychodrama, but its closest correspondences are with larp. This is because at its core, sadomasochism, like larp, contains its own narrativity (Siegel 1995). The narrativity rises as an emergent property from pre-seeded potential, and thus very closely follows the outlines set by

Fatland (2005) for larp narratives. It contains a "script" only in the sense of sexual scripts, guidelines on the level of general scene and behavior, as opposed to the rather precise activity defined by formulas such as a theatrical script (Alison et al. 2001). And a template-like script is not necessary for the activity, simply a common element (Weinberg 1978).

Sadomasochist role-playing, like role-playing in general, can take place in any interaction environment, including subtle interactions in everyday life, not visible to outsiders.

The types of scenarios that can be played are as unlimited as in other pretence activities, but quite naturally tend to gravitate towards situations with a strong power dialectic. For example, the Wikipedia entry for "Sexual roleplay" lists the following examples:

1. **Age-play** – where one player takes the role of an adult and the other a child.
2. **Animal-play** – where the bottom is treated as a non-human animal such as a dog or pony.
3. **Master-slave** – where the submissive is treated as the property of the master/mistress.
4. **Torturer/Captive prisoner** – where the top is a captor who abuses the bottom.
5. **Caught and punished** – where the bottom is "caught" doing something wrong.
6. **Authority figure/Misbehaving Adult** – where an authority figure threatens the bottom with exposure of a secret.
7. **Gender-play** – where one or more players take on roles of the opposite sex.
8. **Goddess worship** – where a woman is seen as a pagan deity.
9. **Hospital fantasies** – involving doctors, nurses and patients.
10. **Uniform fetish** – the female dresses as a submissive schoolgirl, cheerleader, French maid, waitress, and so forth, while the dominant male plays an authority figure (parent, teacher, coach, etc.).
11. **Rape fantasy or a ravishment** – where one player feigns being coerced into an unwelcome sex act.

12. **Owner/Inanimate object** – such as the bottom being human furniture.

While not an academically reliable reference in any way, the existence of such lists points towards a community acceptance of such activities' existence (this particular list appears to actually be a summary of activities described in Brame, Brame & Jacobs 1997). Sandnabba, Santtila & Nordling (1999) had the following categories of role-play in their survey on self-identified sadomasochists:

1. Master/Madame – Slave
2. Uniform scenes
3. Teacher – Student
4. Execution scenes
5. Hospital scenes
6. Rape scenes

Such scenes can be played as separate power-exchange encounters ("sessions"), as a series of those, or as a full-time system. In a single session, the participants create a fictional scene, where the dominant partner is given the permission to subject the submissive partner to activities such as humiliation or the induction of pain. Both take on character roles which either emphasize this power exchange, offer fetishistic pleasure, or do both (Mains 1984). For example, one partner becomes a Roman patrician and the other her slave. After the session has ended, the normal everyday power dynamic between the participants – which may or may not be equal – is restored.

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In a series, the participants continue a previously played fantasy, often playing the same roles as before. It fits certain types of role-play better than others. Examples of this type of role-play include recurring age-play scenarios, developmental themes, and sadomasochist role-playing based on suitably themed works of fiction, such as the works of John Norman (e.g. 1967) or Jacqueline Carey (e.g. 2001).

"In our role-play, my partner was a young student boy and I an experienced older prostitute

(in real life I was four years younger than he). The young boy was insecure when he first arrived as a customer to the prostitute, an adult woman. She helped him relax, touched and undressed him, and taught him to pleasure her, with the determinate skill of an older woman. On his next visit, the boy was far more self-assured already.

We played variations of this for about a year. As time went by, the roles slowly changed and grew, so that the young man grew up into a determined man, a customer who wanted "his money's worth" from the whore, and used her to fulfill his own needs. If she resisted something, such as tried to refuse anal sex, he could use violence (agreed-upon, consensual, such as twisting an arm behind the back) to take her the way he wanted.

We played a lot with this theme of "one is inexperienced, the other one very experienced". the characters and roles changed, sometimes we were a schoolgirl and her teacher, sometimes a youth camper and a camp counselor, but for some reason the game of prostitute and client was such that we returned to it over and over. We did not discuss the play outside of the sessions, they simply moved forward on their own, guided by very subtle hints and tones." (Sara)⁴

Full-time sadomasochist relationships (often called "24/7") are based on a total power exchange (TPE), instead of the temporary power exchange of the other types. The classical example of this, contracts including, can be found in Leopold von Sacher-Masoch's *Venus in Furs* (*Venus im Pelz*, 1870). In such relationships, the submissive partner gives a part of the control of his or her own life to the

⁴ Interviews translated from Finnish by author. The names of the interviewees have been changed.

dominant partner. This can include elements such as financial control in addition to the power to inflict pain, humiliation, etc. (Dancer et al. 2006). The continual nature of a TPE makes it very unlikely that the partners engage in very obvious role-playing (except possibly in smaller scenarios played within the TPE). There is, however, a subtle pervasive role-playing aspect present: The consensual nature of the TPE contract means that the participants are constantly role-playing the parts of a slave and an owner (or their equivalents), regardless of where they are.

“I have the permission to hurt and fuck her against her will, whenever I feel like it, as long as I stay within the limits we have agreed upon in advance. At work, she wears an ankle bracelet which reminds her that she is mine at all times.”

“I really like it that he forces me to do things even when I am not aroused, for that act in itself arouses me. When I am not in his presence, I am still constantly aware of the fact that I am his willing slave.” (Martin & Maria)

The continuity types of sadomasochistic role-playing are very much those of larp, ranging from the one-shot session to the campaign (a set of scenes set in the same continuity) and pervasive play (in the case of a TPE exchange). As Montola, Stenros & Waern (2009) note on the connection:

A typical play session takes place within a carefully established magic circle with, for example, a dominatrix and a slave. It has a clear beginning, a clear end and a safe word. If this consensual power exchange is extended into ordinary life, this kind of (sexual) play becomes pervasive play, moving beyond sexual

encounters.

These are pretence activities which run the same range of frequencies as larps, even though the number of participants is usually much smaller.⁵ Likewise, frequency cannot be compared, as no reliable data exists on how often the “average” sadomasochist participates in role-playing. Moser and Levitt (1987) and Nordling et al. (2006) do provide some data on what percentage of self-identified BDSM practitioners has tried such scenarios, but that is insufficient for any comparison.

Based on the small amount of research done on BDSM role-play so far (presented in the references of this paper), is known that people *do* play out fantasy scenes with fictional or semi-fictional roles. The roles in those cases are mostly just subsets of the dominant/submissive dichotomy, i.e. social roles comparable more to the social roles in multi-player online role-playing games than to larp characters. The role depth (i.e. the depth to which the player immerses into character) may of course vary, just as in online role-playing (see Copier 2007 for an example on comparable variance). Sadomasochism is innately theatrical, contractual and ritualistic (Deleuze 1967), as is larp. Furthermore, it is rather obvious that a *sufficiently complex* BDSM role-play scenario – with complex characters, plots and a credible fictional reality – would be indistinguishable from a larp. Where, then, is the defining limit between the two?

3. NOT A GAME

While BDSM role-playing is not defined as a game (or a sport) by its participants, it does fit the definitions of such activities. It in many ways exemplifies Suits' (1978) definition of a game, being a rule-bound activity, where efficiency is hampered by a selection of limitations taken on for the purpose of increasing the rewards of said activity.⁶ The role-play itself is also such a rewarding limitation, as is the potential use of tools (or words) to inflict only certain kinds of pleasurable pain. The point is not to just hurt the submissive participant, but to hurt that participant in a very particular, consensual way. The initiatory basis may be in the participants' algolagnic urges, but the execution of

⁵ The number of people present in a given scenario may vary greatly – and many people at a BDSM event may hold individual role-plays within the same space. Furthermore, larger-scale events such as “Prison Camps” may be just as large (20-100 participants) as a larp. Little data on those beyond advertisements exist, however, but the author has personally witnessed several. BDSM events reaching the scale of a German or British “Fest” larp such as Conquest of Mythodea (nearly 7000 players; www.live-adventure.de) are so far unheard of, outside of movies and literature.

⁶ It also fits very well Suits' (1978) assertion that “non-standard” sexual practices (e.g. satisfying sexual acts that do not contain an orgasm) may actually be considered games.

the activity is that of structured play.

Sadomasochist role-play also matches very closely the definition of role-playing games as limit-case games (i.e. gaming activities that can be framed as containing or not containing a quantifiable outcome) suggested by Salen & Zimmerman (2004). One could argue that the pleasure-seeking inherent in the activity would make it more goal-oriented than a larp, but that part can be equated with the way people tend to larp for fun (Harviainen 2006). Likewise, a pre-lusory goal (i.e. one existing outside the fictional reality of the play) such as orgasm, total exhaustion and/or crying can just as well be equated with the resolvable goals of an educational larp or a training simulation, up to and including the question whether those were a side effect or the actual purpose of the activity (as per Henriksen 2009).

BDSM role-play has rules, ranging from safe words to agreed-upon conventions (Moser & Madeson 1996), making it fit with Montola's (2008) definition of role-playing:

- 1) Role-playing is an interactive process of defining and re-defining the state, properties and contents of an imaginary game world.
- 2) The power to define the game world is allocated to participants of the game. The participants recognize the existence of this power hierarchy.
- 3) Player-participants define the game world through personified character constructs, conforming to the state, properties and contents of the game world.

[...]

- i) Typically the decisive power to define the decisions made by a free-willed character construct is given to the player of the character.
- ii) The decisive defining power that is not restricted by character constructs is often given to people

participating in game master roles.

- iii) The defining process is often governed by a quantitative game ruleset.
- iv) The information regarding the state of the game world is often disseminated hierarchically, in a fashion corresponding with the power structure of the game.

It even has a game master of sorts: The dominant partner has a scripting power very close to that of a run-time game master (i.e. a person constantly monitoring and possibly altering the game situation), and uses it in interaction with a player, the submissive (Moser & Madeson 1996). It is also possible for the submissive to control the situation (Sagarin et al. 2009). While not a very highly evolved game master function, it is nevertheless extremely similar to the active game mastering described by Lancaster (1999).

It is possible to meta-play around the edge of the rules and control systems, but to break them is to break the social contract of the activity and thus to ruin it. This, too, is a classic sign of an activity's nature as a game (Suits 1978). Followed and accepted, a suitable set of constitutive rules increases immersion (Balzer 2010).

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A sadomasochist role-play scenario contains a similar set of frames and a system of keying (Weinberg 1978) as do larps (see Balzer 2009 and Brenne 2005 for examples). The participants seek to concentrate on the fantasy frame, but are also aware of the rule-frame (containing limits and safe-words) and the real-world frame. Likewise, 24/7 BDSM is frame-wise (Dancer et al. 2006) identical to pervasive larps (see Stenros 2008 for comparison).

4 A LACK OF CHARACTER?

BDSM scenario participants tend to focus on a facet of their own person rather than a complete fictional character, even if they have one. This is sometimes even seen as preferable, by persons who think it shows that a BDSM practitioner is made of "sturdier stuff" than most people, as he gives free reign to his inner demons in a controlled setting (Miller & Devon 1988). This cathartic self-analysis, however, has been contested by Baumeister (1988), Siegel (1995) and Nordling et al. (2006), who claim that at the core, the whole activity is an escapist fantasy from either social role pressure and rules, gender roles, or both. Regardless of the veracity of those not necessarily incompatible claims, the debate itself is highly reminiscent of the question of possible escapism in larps (see Harviainen 2006 for details), i.e. currently on the level of anecdotal evidence and debate on what exactly constitutes escapism.

While the characters of scenario participants may be indeed facets of the player more than full-fledged characters per se, the situation is not different from a larp. There may be a tendency to favor more holistic characters in live-action role-playing, yet as Hakkarainen & Stenros (2003) and Harviainen (2006) have noted, not all larpers necessarily play using a character-immersive approach. It therefore appears that no real distinction can be made on the basis of character depth, as both types of role-playing contain the potential for any character depth.

Physically performed sadomasochist role-playing actually uses less representation than many larps, due to the essentiality of the what-you-see-is-what-you-get approach to the situation. It can therefore be argued that as a play environment, BDSM role-play is actually more conducive to immersion than an average larp. Furthermore, the shared goals and raw physicality of sadomasochist role-playing makes it highly suitable for fostering inter-immersion, i.e. the feedback cycle where each participant's immersion enhances that of others (as per Pohjola 2004).

5. GOAL-ORIENTATION

"SM roles are varied and complex, offering different things to different people, but the goals are the same: an intense sexual experience, fun, emotional release, catharsis." (Moser & Madeson 1996)

One of the key traits where the activities seem to differ is goal-orientation. Sexual role-playing is performed for the purpose of sexual pleasure, a goal existing also outside of the fantasy (Mains 1984), whereas a larp may not have any clear goals. The distinction vanishes, if examined from a broader perspective. While larps in many cases may not have such explicit goals, they contain multiple smaller ones, and participants enter them to fulfill goals of their own (Salen & Zimmerman 2004). Also, the play itself in both of them may be the main purpose for some participants: The playing of a certain role in a larp can be a goal in itself, or fulfill a fetishistic function in sexual role-play (Gebhard 1969), making such play a self-rewarding (autotelic) activity.

Sexual role-playing is performed for the purpose of sexual pleasure, a goal existing also outside of the fantasy, whereas a larp may not have any clear goals.

Larps, as a generic category, are also no strangers to goal-orientation. Educational larps actually exemplify it. In them, the character is a tool for learning through play (Henriksen 2009). This is an obvious pre-lusory goal (as per Suits 1978).

6. ADVANCE(D) STAGING

The staging of a sadomasochist scenario is not that different from a larp, either. They may or may not need paraphernalia and/or pre-planning, depending on concept and individual taste (Wiseman 1996). And formal pre-scripting may or may not be necessary (Weinberg 1978). Due to the focus of BDSM role-play, the scenario concepts tend to be rather simple, being very specific and limited to the central theme. The scenarios do not therefore develop as randomly as larps do, as they are bound by a central concept that needs to be followed.

Their external parameters are very much alike, though. Both use upkeying (in the manner described by Brenne 2005 and Stenros 2008, based on Goffman 1974) to initiate the action. In sadomasochist role-plays, the start-up may differ heavily, depending on type of scene and the participants' preferences. For example, Wiseman (1996) suggests both starting and ending with the dominant's question about the submissive's willingness to take up the role of the bottom and to

leave it, respectively. In contrast, Mains (1984) describes how some leathermen with both dominant and submissive inclinations may begin their scenes by wrestling, and the winner gets to be the top. The range of options is particularly important in cases where sadomasochism is practiced in otherwise equal relationships, as the submissive may need to transmit signs of his or her willingness to be dominated to the dominant partner (Kamel & Weinberg 1995).

In a TPE situation, the constant pretence is typically kept active by small symbolic anchors, such as a slave collar worn at home and a necklace symbolizing it outside of privacy (Dancer et al. 2006). Similar practices are used in pervasive larp, to allow players to recognize one another (Montola, Stenros & Waern 2009). Symbols of the same type are also visibly worn by submissives at fetish events, to denote varieties of relationship status (Moser 1998).

The sphere of activity, i.e. the magic circle of play, itself in a sadomasochist role-playing scene is similar to that of larp. Their information environment is identical on all counts (as per Harviainen 2007): The illusion is preserved through a social contract, which both prevents the intrusion of distracting information into the session and makes the participants more dependant on each other in cases of information gaps. The illusion is furthermore sustained through semiotic re-signification, in accordance of the pattern outlined by Loponen & Montola (2004). And as Sebeok (1994) notes, fetishism actually eases re-signification: Items and/or behaviors enhancing sexual pleasure for a person are more easily re-signified by that person into objects of particular importance within the scene.

In a BDSM role-playing scene, the potential for reaching a ritual-like liminality is always present. In other words, the play can create a temporary imposed reality of its own, not just a fantasy (Brodsky 1993; Mains 1984). Larps have the same innate potential (Lieberoth & Harviainen, forthcoming)

7. DISCUSSION

This examination of traits leaves only two significantly distinguishing factors between the two sorts of physical role-playing. The first of these is ideology: Larpers may not want to be associated with “perverts”, nor participants of what they see as “adult role-play” (in both senses of the phrase)

with something possibly considered juvenile. This is normal for any activity that carries a social stigma (Goffman 1968). Furthermore, some people want to keep sexual elements out of larp, so as to offer players maximal protection from potential trauma, and thus resist any connections between the two (see Borina & Martins 2009 for an example).

The second factor, the fundamental difference, is the basic framing of the activities. Larp is framed as a larp, a game played for the purpose of experiencing things such as fun or something interesting (Brenne 2005). Sadomasochist role-play is framed as a sadomasochistic activity, a sexual activity, performed for the purpose of sexual pleasure (Nordling et al. 2006). This is particularly significant, because whereas a larp stands as its own event, sadomasochist role-playing is a part of a larger activity, namely sadomasochism (Mains 1984). Performed on its own, a sadomasochist role-playing session would appear to outsiders to be both a larp and a BDSM role-play. This is because, in my opinion and in the light of this analysis, they are at the core the same thing.

It is, nevertheless, reasonable to also delve further into the differences. Why would sadomasochist role-play not be larping? And how do so-called *extreme* larps differ from BDSM role-play? In the author’s view, the key – if it at all exists – lies in the aforementioned framing: Sadomasochist role-play takes place in a context of its own, as a larping facet of an activity which is not akin to a larp. It is done in a larp-like segment of something much wider. It would therefore not be unreasonable to claim that this lack of a defining structure related to the activity itself (in the manner of “larp” and “larping” being related) makes it essentially a different phenomenon.

Performed on its own, a sadomasochist role-playing session would appear to outsiders to be both a larp and a BDSM role-play.

As for extreme larps there are similarities, but also a set of frame-related differences. Tobias Wrigstad’s *GR* (described and analyzed in Montola 2010), for instance, simulates rape. It is not a rape fantasy play. This is a crucial difference, as the latter is a form of consensual transgressive gratification, the former a consensual depiction of non-consensual

violence (as per Zurbriggen & Yost 2004). The social contracts of those two simulations is fundamentally dissimilar, and altering the purpose of GR towards gratification would make it a different, less extreme scenario. GR furthermore uses rules of no touching, making it much closer to non-physical role-play than to the physical sadomasochist scenes analyzed in this paper.

Certain larps, such as the *PehmoYdin* series (described in Harviainen 2011) and *Blue Threads: The Seventh Circle* (Olmstead-Dean et al. 2010), in turn, were larps using elements from sadomasochism, not sadomasochist role-playing. The difference in their case is that their BDSM activities were game-internal, and even though they contained things that count as sadomasochistic, those took place between in-game characters. The primary fantasy frame was that of the game, not that of BDSM. They were fictional realities, within which existed sadomasochism, also in its non-role-playing aspects. It is important to note, however, that these examples do not preclude the aforementioned possibility of a sadomasochist role-playing scenario being simultaneously also a larp in any way.

8. CONCLUSION: NOT JUST SIMILAR

Geoff Mains (1984) wrote of BDSM role-play:

Role play is undertaken because people enjoy it. Submission is voluntary with full awareness of it taking place. The adoption of distinctive roles is restricted to specific situations, and between specific individuals. Often, the individuals are flexible in their choice. Role play is at least in part a form of conscious auto-drama.

Physically performed sadomasochist role-playing is, in effect, indistinguishable from larping by its traits alone. For every variable, there appears to be a similar variable on the other side of the fence. The sole significant difference is the particular framing of sadomasochist role-playing as a part of other activities, i.e. sadomasochism, a field containing much more than just role-play. While there is no game master per se, the dominant's role includes a game master function. Both activities run the same gamut of potential character depth and immersion possibilities.

A sufficiently complex BDSM role-play, such as a hypothetical days-long prison camp where each participant has his or her own continual character and the play-space has an illusion of new reality, contains a definite magic circle of game play and is obviously also a larp. Any less thoroughly scripted sadomasochist role-playing session is still just that, very much like a low-preparation larp.

Sadomasochist role-playing is not just a sibling to larp, another part of a group of activities categorized under "pretence play". It is essentially the same activity, performed with a different sort of social framing. When we speak of physically performed sadomasochist role-play, we are actually speaking of larping done with BDSM elements in it, for the purpose of (often sexual) satisfaction.

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The Larping that is not Larp

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Keywords

Bibliodrama, Chaos Magic, Live-Action Role-Playing, Re-Enactment, Sadomasochism

Through systematic analysis - deconstructive referencing - this article discusses the role-playing component of four forms of role-play considered siblings to larp. By doing so, it shows that larping exists in areas which are not larp, and that there is a need to start differentiating between 'larping', the act of physically playing a character, and 'larp', one of the best-known framings in which larping takes place. The role-playing parts of historical re-enactment, sadomasochism, bibliodrama and even post-modern magic are all examples of larping that is not normally seen as such, just similar to it. In all of them, people physically play fictional personas within fictional or temporarily altered realities. They do this in a manner identical to the larping done in larps. The activity context of each, however, is very different from larps. By examining such forms of larping, it is possible to understand much more of the activity itself, as well as the significance of the larping part to the various fields where it is practiced.

This article uses systematic analysis to show that the concept of “larping”, as we traditionally use it, is sorely limited. In reality, larping encompasses many of the so-called “sibling” activities as well. Through four widely documented examples, this paper examines whether larping actually takes place in contexts that are not larp. In doing so, it continues the vein of analyzing larp and its cousins, discussed before by researchers such as Morton (2007) and Ericsson (2004).

A key distinction in this article is that it treats *larp* as the singular event or series, which in turn contains the activity of *larping*. As will be shown, the two are not the same. Therefore, while this paper argues that certain other pretence activities may actually be larping in other guises, it does not say that they are larps. This is crucial: Two things set larp apart from the likes of sadomasochist role-playing, role-played military training exercises and bibliodrama.

Firstly, their framing is very different: Larp is an activity unto itself whereas the others are construed as role-played facets of other activities (see Harviainen, forthcoming, and Newmahr, in press, for examples). The second one, discussed below, is their different types of magic circle - the invisible border temporarily separating such activities from mundane reality (as per Huizinga, 1939 and Salen & Zimmerman, 2003). Larps rely on a non-porous magic circle (Harviainen & Lieberoth, forthcoming), the others on an intentionally perforated one.

This article approaches its subject through systematic analysis, the hermeneutic research methodology in which documents and sources (typically ideological or phenomenographical works) are deconstructed for their data content (see Harviainen, 2009, on applying hermeneutics to role-playing analysis). The documents in this case are empirical works on, and guidebooks to, the example sibling activities, as well as on larps and larping.

In systematic analysis, one takes the documented properties (or opinions) of a subject, in this case the supposed larping-like elements of certain other activities, and analytically condenses those in order to find their essence.

These parts are then compared to one another, in order to create a holistic understanding of the subject. The core essence of the method lies in systemic immanence, i.e. in that the subject document is analyzed through itself, not with external tools..

As the base material here consists of guidebooks and empirical works, it is possible to say something about the phenomenon of larping itself through them. The key problem with such an approach is that it deals with secondary empirics, analyzing the reports and opinions of others: This means that, for example, systematic analysis of Bowman (2010) does not truly provide information re-enactment as larp, but rather “Bowman’s view of re-enactment as larp” (as per Jolkkonen, 2007).

This problem can, however, be bypassed by the aforementioned combination of several targets of study, which moves the method towards structural analysis. Taken together, they form a critical mass of opinions on a subject, acceptable as sufficiently credible.

The purpose of this analysis is to show that despite possible claims to the contrary, larping is not limited to larps, and activities the practitioners of which deny a connection to larping actually are sometimes just that. This means that the study of larping has to expand its perspective when it speaks of the activity, or to discursively limit its subject to the larping done in larps.

In order to truly understand larping, we need to repeatedly ask ourselves what exactly is, or is not, larping - even though a precise definition may not be actually possible. Examining the borderlines between larping and activities similar to it, as well as larps and other physical role-playing environments, increases the general knowledge necessary for a more precise understanding of what the phenomenon contains.

1 Key criteria for what constitutes larping

As Morton (2007) has very clearly demonstrated, precisely defining larps and larping is extremely hard, and has more to do with ideologies of exclusion than anything else. Yet in discussing the limits of the phenomenon, some parameters are necessary. This paper uses three criteria as the mandatory core of the activity, all three of which need to be present for something to constitute larping:

- ◆ Role-playing in which a character, not just a social role, is played.
- ◆ The activity takes place in a fictional reality shared with others. Breaking that fictional reality is seen as a breach in the play itself.
- ◆ The physical presence of at least some of the players as their characters.

Note that there is no “game” or “scenario” component. The activity and its framed environment are, as noted above, two different things. Furthermore, these criteria are themselves, naturally, under debate. For example, Montola (2009) describes role-playing as:

- 1) Role-playing is an interactive process of defining and re-defining the state, properties and contents of an imaginary game world.
- 2) The power to define the game world is allocated to participants of the game. The participants recognize the existence of this power hierarchy.
- 3) Player-participants define the game world through personified character constructs, conforming to the state, properties and contents of the game world.

(Montola, 2009, pp. 23-24.)

and Drachen & Hitchens (2009) a role-playing game as containing:

1. Game World
2. Participants
3. Characters
4. Game Master
5. Interaction
6. Narrative

In the case examples presented below, it is easy to see that while other factors get stretched to various directions in them, the presence of a character which the player physically portrays (or, possibly, immerses into; see Harviainen 2006 for variables) remains constant. Should there be no character to play, the role-playing component is immediately lost. Likewise, if the role is just a social one (say, “healer”, as documented by Copier, 2007, in online role-playing games) instead of a sufficiently complete character (“Moninga, the priestess, who acts as the healer of the group”), the nature of the activity changes to something else (as per Drachen & Hitchens, 2009).

2 Character complexity, integrity and fictional worlds

That clause of “sufficiently complete” is of utmost importance here. A person with just a name change is not role-playing, but as soon as he uses that different name as a basis for an activity choice - any activity choice of any depth - the lines blur. As Harviainen (2006) has documented, players may have extremely dissimilar relationships between their everyday persona and the fictional one.

Some seek to “become” the character as much as possible, some treat it as a social identity similar to the way a “home” self may be different from a “workplace” self. And some either blend the two, or appear to have them as “interlaced wholes”. The relationship is not stable, and players experience “bleed”, a leakage of information and emotions between the character and the player, to either direction (Montola, 2010).

A sufficiently complete character is therefore a fictional construct of sorts - summable as a *persona who could get by in the fictional environment on its own, were it somehow torn apart from the player.*

As for the fictional reality or world, the situation is likewise complex. Such a world may be a totally new one, a fictional space imposed upon a real place (as per Aarseth, 2000). It may, however, just as well be an altered or augmented version of the real world, as in the case of larps played amidst an unknowing public (Montola, Stenros & Waern, 2009).

The temporary reality is created through shared discourse (Ilieva, 2010), making it a re-signification zone where participants are able to work on at least equifinal interpretations of both present and imagined things (Loponen & Montola, 2004). The maintenance of such symbol systems as sufficiently functioning is a validation process based on a communicated assertion of what is temporarily accepted as “true” (as per Bankov, 2009).

In Caillois’ (1961) terms, these pretence activities are all fundamentally *ilinx*, in the sense of becoming-other. Playing with challenges (*agon*), the actual acts of pretence (*mimicry*), as well as a possibly desired control over the chance (*alea*) component are tools which people combine to assume that *ilinx*, through the experiential filter of the character. The combination levels are dependant of situational variables and player preferences, and what are generally called “player types” or “playing styles”, but all factors appear to be present to some extent in the participation of actually committed players (Harviainen, 2006).

This is a significant definitive concept, because not all pretence activities constitute role-playing, and not all role-playing fits even the broadest concepts of larp. For example, certain Albanian women (so-called “sworn virgins”) live their whole lives as socially men, and are treated by others as such (Young, 2000). This, however, is framed as a part of normal life in the local culture, not a temporary step beyond the mundane, and there is no competitive component to the activity. In larping, it is key that everyone agrees early on that they’re all doing pretence play (as per Heliö, 2004), not following a temporary social systems adjustment.

Furthermore, the interpretation given to an activity may define its pretence traits: The so-called ex-gays, for instance, can be seen as either non-pretenders fighting something they define as an unwelcome addiction, similar to alcoholism, or as people role-playing heterosexual versions of themselves (see Spitzer, 2003, for a more thorough description). Given that they rely on a peer-support system interpretable as an imposed temporary reality, it would be quite easy to construct a credible case of the whole phenomenon being just a strange kind of pervasive larp (as per Montola, Stenros & Waern, 2009 and Harviainen & Lieberoth, forthcoming).

It is also essential to note that none of the connections suggested in this article is in any way a new finding per se. On the contrary, anecdotal commentary of such similarities has probably existed as long as the act of larping has been identified as a separate phenomenon. Researchers have already provided data on many of the case examples here, as well as collected histories of shared grounding (see Morton, 2007, for a key example) The purpose of this article and the case examples is to provide further grounding for such arguments, by identifying more or less obvious connection, similarity and identity factors.

3 First Case: Re-enactment

An oft-cited sibling (or, in the case of Russia, offshoot; Kann & Rozkov, 2010) of larping is historical re-enactment (see Stallone, 2007, and Morton, 2007, for examples). Simply described, re-enactment is the temporary adoption of the crafts, customs and personas of some historical period of choice, or an idealization of those (Stallone, 2007).

Popular periods include Medieval and the American Civil War era (see Lee, 2005, and Hunt, 2004, for examples). Stallone (2007) lists re-enactment and role-playing games together as facets of the same thing. Building upon this, Bowman (2010) makes an argument to treat them as the same phenomenon. Yet they are in my opinion not, as re-enactment appears to also contain elements that are not at all larping - from instructions to crafts to discourse (Vartiainen, 2010). The similarity of those activities to preparations for a larp are obvious, but their purpose is different: for re-enactment, they are a fundamental part of the activity itself, not preparation for something else.

Hunt (2004) has shown that re-enactors place great importance on the authenticity of the illusory reality where the role-play part of the activity takes place. Yet the main emphasis, to many, seems to be on camaraderie and social contacts. These, in turn, are dealt with through lessening the integrity of the characters they portray. The social contract of re-enactment permits personas that may, determined by participant preferences, be as simple as only a period-appropriate name, or as complex as a larp character played for several years. (Lee, 2005).

My own personal observation, gathered over half a decade, is that a typical re-enactment persona is treated quite similar to a character of a long-term larp campaign played mostly for fun - as a social role enabling enjoyment, with occasional forays into deeper personality issues.

This lessening of character identity towards just a social role is what, if anything, truly separates re-enactment role-play from larping, including historical re-enactment larps. The lessening, however, is not so strong as to make them distinctively different activities: Role-players in larps, too, may play with shallow characters and have purposes other than total immersion in mind (Hakkarainen & Stenros, 2003; Harviainen, 2006).

Therefore what essential difference exists is in name, framing and character depth only, all of which are questions of scales and semantics, not distinguishing factors. Of these of special significance is framing - the placement of the role-play into the role of being a part of the more holistic activity, not the end-goal in itself. To understand the importance of framing for a form of role-play, we turn to pain-as-pleasure.

4 Second Case: Sadomasochist role-playing

Another apparent sibling field, where such framing as a part of a wide variety of actions is the key, is sadomasochist role-playing (Harviainen, forthcoming). It too takes place as part of a larger framework, i.e. sadomasochism¹. Role-play is a crucial part of most (but not all) sadomasochist encounters, also called “scenes” (Weinberg, Williams & Moser, 1984). That it takes place in a fictional reality has been noted by several scholars, such as Deleuze (1967), Gebhard (1969) and Weinberg (1978). Mains (1984) considers such scenes to be “ritual psychodrama”.

In sadomasochist scenarios, the participants take on roles appropriate to the scene’s fantasy framework, such as temporarily becoming a military officer and a captured spy in a fictional context of World War II. This is done for the purpose of seeking mutual pleasure through the scene, a pleasure which appropriate role-play heightens².

¹ This sub-chapter is based on Harviainen (forthcoming). For the reason of brevity, “sadomasochism” is used as an umbrella concept here, counting inside it activities the practitioners may themselves call with a different name, such as “BDSM” or “leather” (Mains, 1984).

The duration of play in such scenes can range from brief to constant (“24/7”, Dancer et al., 2006), but a strong, if sometimes subtle, role-playing component is nevertheless always present (Harviainen, forthcoming).

Sadomasochist role-play is heavily rule-bound, making it very game-like (as per Suits, 1978). In this way, sadomasochist scenarios are similar to (usually very tiny) larps. There is also a game-master function of sorts (see Harviainen, forthcoming, for details) as either the dominant (overtly) or the submissive partner (covertly, “topping from bottom”) defines what is acceptable and expected play (Moser & Madeson, 1996).

Yet sadomasochist role-play, too, is but one - if significant - facet of a larger group of activities, as mentioned above (Mains, 1984). The context defines whether a pain or humiliation-containing activity within it is pleasurable or not (Ellis, 1903), and many types of sadomasochist play may well be experienced without characters, with the participants holding just social roles related to a situational or constant power exchange or dialectic (Harviainen, forthcoming). In some sadomasochist communities, role-playing beyond the basic dominant/submissive power exchange may even be a rare phenomenon (Newmahr, in press).

Several larps have also included sadomasochism as a central theme, but as Harviainen (forthcoming) notes, in those games the primary frame of reference was that of a larp, with the sadomasochist activity (both role-playing and non) then being performed inside the fiction of the games.

5 Third Case: Bibliodrama

Whereas sadomasochist roleplay is viscerally escapist in tone, if not always purpose, others use role-play for analytic clarity. Bibliodrama, the interpretation of literary - usually biblical - passages through role-play is an offshoot of the psychodrama (a method of psychotherapy which uses dramatization, role playing and dramatic self-presentation to analyze one’s actions and life situations) developed by Moreno (1953).

2 Whether such pleasure is of a sexual nature or not is under constant debate (see Newmahr, 2010 for examples). For the purposes of this article, I consider it too to generally be a kind of ilinx (in the abovementioned sense of becoming-other; Caillois, 1961).

It is intended to create a connection between the biblical tradition and the experience of participants (Martin, 2001). It is also one of the most obvious siblings of larping, to the point where it is rather easy to see that there is no real difference beyond framing: Bibliodrama discusses its subject through the use of a staged scene, where people play characters, not just roles, and the event is treated as if it were a separate, temporary reality of its own (Räisänen, 2008).

As a form of larping, bibliodrama can be seen as closest to play in educational larps (or even as being de facto educational larp with just a different name) where the presence of the game master / teacher / expert facilitator is strong and the narratives are geared towards didactic purposes (as per Henriksen, 2004, 2009). It is furthermore quite close to jeepform, the mixed-method approach for creating story-intense games (see Wrigstad, 2008, for details) - itself, too, a descendant of sorts of both larp and Moreno's psychodrama. These are connections that bear further research, because several countries, such as Finland and Sweden, also have a history of larps organized by church groups.

6 Fourth Case: Post-modern magic

Religion and larp share more than one connection, however. One such instance is post-modern magic - magical schools of thought built on the idea that what matters for magical results is individual belief, not following age-old traditions (Woodman, 2003; Evans, 2007)³.

Post-modern magic includes several techniques where a god-like being - a possibly imagined one (as per Sherwin, 2005) - is invoked to become the magician's personality. This is typically done as a three-way process, by invoking said deity in the third, then second, then first person, until one "becomes" that deity (Hine, 1999). Effectively, the magician pretends to be the deity until a (supposed) possession is reached. This taking on of a role/character is identical to the way some players take on their larp characters, up to and including immersing into them (as per Harviainen, 2006). Similar role-taking may also take place in more traditional forms of magic.

³ The key concept in post-modern magic is the idea that various belief systems can create magical results, and that all such systems - religious or magical - contain fictional (or at least unverifiable) material. Therefore, according to post-modern magicians, even a fictional belief system should be able to create similar results, as long as the magician believes it to be true during the ritual. For what counts as post-modern magic, see Evans (2007).

For example, voodoo documentedly contains the same phenomenon, excluding the idea of practitioners accepting the deity as possibly fictional (Lovell, 2002).

Practitioners such as chaos magicians furthermore discuss certain kinds of magic as acting through the idea of a virtual world where change is possible (Dukes, 2001), and following loosely pre-planned paths in order to secure success in one's activities (Hine, 1999). Performing a chaos magic ritual is dependant on a 'temporary, yet total belief, in a belief system presumed to bring forth the desired result.' (Evans, 2007). Hine (1999) further notes, just as Mains (1984) mentioned of sadomasochism, that the rituals of a chaos magician heavily resemble psychodrama. When they also include the aforementioned role-taking, they are very much like highly formalistic larps: The magicians pretend to be other persons or entities, inside a delineated, specially prepared pretence space suitable for that role-play, a space which is temporarily superimposed upon a real place. Questions of magic's veracity aside, there is form-wise nothing that separates a chaos magic invocation ritual from a larp.

The invocations of post-modern magic - be it chaos or other (see Grant, 1992, for a non-chaote example) - appear to be constructed around the exactly same elements as larps are, just with a different twist. One would furthermore do them injustice, if one would disregard the playful attitude within their approach (Harviainen & Lieberoth, forthcoming), which further brings them close to larp in both form and spirit, if not function. Given that such phenomena exist also in more traditional forms of magic (Sørensen, 2006), we once more reach a point where larping appears to have brought forth a socio-cognitive mechanism which is elsewhere often ignored as just a part of being human.

Ana-Maria Rizzuto (1991), building upon Winnicott (1971), has suggested that pretence lies at the root of all human religious behavior. According to Rizzuto, the play-space a child constructs first by imposing fictions on a blanket corner grows into representations of superhuman entities, negotiated into formal imagined representation through contact with other people.

7 Discussion

Walton (1990) has argued a similar root for representative arts. This points towards there being a shared mechanism of some kind in both pretence and belief - both being “acting as if” (as per McCauley & Lawson, 2002), in contrast to visible and tangible reality. This is a mechanism absolutely necessary for what we call larping (for more on these connections, see Lieberoth & Harviainen, forthcoming).

Numerous other case examples exist, some closer to larping than others: Medical, military, negotiation and rescue training exercises, psychodrama, and so on (see Morton, 2007 and Crookall, Oxford & Saunders, 1987). Even at a glance, the similarity to children’s pretence is rather obvious, a connection which has been explored by researchers such as Lieberoth (2008) and Roggli (2008). Likewise, at least some overlap and shared techniques exist between larping and various forms of improvisational and experimental theatre (Flood, 2006, Morton, 2007, Harviainen, 2008).

In the case of each sibling activity to larps and larping, certain distinguishing factors can be noted. What especially stands out is that their magic circles appear, from a gaming perspective, to be intentionally “flawed”. This is because the forms of larping activity which take place in other contexts are meant to cause bleed - they are played as a part of something bigger, and are not the end-all of said activity even during play. Their interaction structure (as per Gade, 2003) is different from larps.

This goes well beyond the goal-orientation of educational or political larps: The re-enactor, the sadomasochist and the bibliodrama participant know they are doing formalized role-play, and not seeking total immersion. Their magic circles stay broken or porous, as things such as meta-level concerns, physical pain or intentional during-play reflection need to get through - as opposed to the information-blocking power of a larp’s or religious ritual’s magic circle (Harviainen & Lieberoth, forthcoming).

A post-modern magician, in turn, works with a more pronounced dual cognition, choosing to believe in a possibly fictional identity and reality interpretation while also maintaining their own (Evans, 2007).

All four activities' character-participant relations variables fit easily within the different ways of playing characters in larps (as per Harviainen, 2006) and the dual-role requirement of role-playing (Lukka, 2011). It should furthermore be noted that a participant may treat the framings of such activities as "larps" even if that is not the case for others who are present. For instance, nothing prevents a re-enactor from secretly considering the Medieval feast a larp, but for it to be collectively treated as a larp (or become a de facto larp) requires community acceptance (as per Heliö, 2004).

Larp contexts, too, may have different framings for their larping. As Bruun (2011) shows, pre-larp workshops may contain larping done not for itself, but as practice and pre-construction for an upcoming larp. This is a clear example of larping that breaks the immediate larp frame, yet is done in a larp context. It may well be that larp-centered larping is not as unique a phenomenon as it at first glance appears.

The analysis of role-playing is already being distinguished from the analysis of role-playing games (Arjoranta, in review; see Drachen & Hitchens, 2009, and Montola, 2009, for examples). Identifying larping and larp as interconnected, yet actually separate things is a logical next step. Larps require larping in order to exist, but larping does not always require larps.

8 Conclusions

There is a need for a new perspective on larping, that of separating the activity from its framing. The two are not the same. Larping exists in various other activities besides larps. The confusion between the two has been the reason why research so far has been concentrating on similarities and not identity.

By analyzing the properties and function of the role-play component in sibling activities, we can gain new insight into what exactly larping is, where it possibly originates and, especially, how much more we could actually do with it.

Larping encompasses character-based play within fictional realities, in many environments and contexts besides just larps. In many of them - including our case examples of re-enactment, bibliodrama, sadomasochism and pretence-based magic - it takes place as a part of something wider. This is very different from larps, where larping usually is the whole of the activity.

By separating the study of larping and the study of larps, when necessary, it is possible to focus on facets of play, facets of the play environment, and facets of the play context. This permits more efficient application of ideas from one type of larping into others, and new design in play environments.

By giving up the unity of larp and larping, we gain a new unity of larping as a phenomenon far wider than thought before.

This calls for new approaches for study. Not only is it necessary to research the limits of larping when it is set inside varying framings, but also what makes each of these contexts special. This is particularly true of larping done in larps: It is not sufficient to just take larp as the baseline, as the done-for-itself framing of larping. We must understand what, if anything, makes it unique, and what to consider larping done during pre-larp workshops. We need to know where the lines between things such as educational larp and educational role-play in other contexts, or re-enactment larps and re-enactment, are - if such lines do exist.

After looking for siblings, it is now time to also look at all the differences more closely. By doing so, we will learn more about both larp and larping.

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Abstract

This article examines the information environment of ritual-like games. Using tools from library and information science and the cognitive study of religion, it shows that certain key phenomena in games can be modeled as patterns of information and thus examined to a deeper level than before. This is of particular use to game scholars wishing to understand the intricacies of the play experience and to educational simulation/game researchers wanting to develop more efficient role-play based learning. Of particular significance to these so-called liminal games is boundary control, a system of maintaining the necessary fictional reality within the magic circle. Its maintenance results from a shared need to preserve the game-reality intact, an understanding of what is relevant to play, and a heightened reliance on information sources within the game-space. Continual boundary control makes the play function as a self-referential system, where the activity becomes rewarding and meaningful to the players because of the very limitations it contains. This condition, along with the manipulation of uncertainty about information needs during play, is then used to explain processes that take place while being engrossed in/absorbed by playing a ritualistic game as well as in game-based learning in liminal environments.

Keywords

anomalous state of knowledge, boundary control, cognitive authority, information needs, learning games, liminality, live-action role-playing, magic circle, player cognition, rituals, role-play

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This article discusses the study of ritualistic games, particularly pretense games, through their underlying information properties.¹ In order to understand the play experience in ritualistic games and phenomena resulting from it—such as game-based learning—it is necessary to comprehend their roots and fundamental prerequisites. This article examines those roots and prerequisites, by looking at how ritualistic actions alter the information behavior of their participants, what measures are used by players to maintain their illusion of a fictional reality, and how game designers manipulate the information needs of the players in order to either foster stronger play experiences or facilitate game-based learning. It also discusses the ways in which such elements can be observed and possibly even measured.

In games, players assume roles. Games rely on the immersive principle of taking the player “inside” a nonfictional or fictional (new) world, a space temporarily imposed upon reality (as per Aarseth, 2001; Balzer, 2009). In role-playing games, this process is often accentuated, due to more complex fiction and holistic character roles that go way beyond just the social positions of other types of games. Central to preserving the virtual world is boundary control, the system by which participants avoid disturbances to their play from the outside world. Role interpretation, boundary control, and the designer’s/game facilitator’s manipulation of players’ information uncertainty and needs affect the way in which participants experience such games. They also impact on learning: Too much engrossment may make players ignore any educational content of such games. As Klabbers (2009) notes, high engrossment is normally solely an advantage because when the players are completely absorbed by playing an educational game, they are actively engaged in a learning process conveyed through the game, continuously constructing and reconstructing their “embodied schemas” (perception-action repertoires). They utilize the educational content to its full potential. In ritualistic circumstances, however, the situation changes. This is because, as documented by Whitehouse (1995), when ritualistic actions are of a highly engaging and rare-enough type, their memory-imprint mechanisms and their moral character change: Instead of the generalized schemas of semantic memory, the events are recorded as the unique schemas of episodic memory (see also McCauley & Lawson, 2002). Engrossment-related factors should thus be taken into account when researching or designing ritualistic game experiences.

In 2004, live-action role-playing designer Martin Ericsson and religion scholar Christopher I. Leirich wrote articles tentatively connecting role-playing and rituals, something for which Huizinga (1939) had already laid the grounds. Over the years, several researchers have used that idea (see Christensen, 2006, and Bowman, 2010, for examples), but have not examined it further. This article is a trait-descriptive contribution to that line of research, continuing the work of two earlier articles, which assessed the information-environmental links between ritual and pretence play (Harviainen & Lieberoth, in press; Lieberoth & Harviainen, in press). Given its strong connections to both player cognition and information phenomena, this article follows the pattern of the holistic cognitive paradigm of library and information science (for a summary of this conceptual grounding, see Grešková, 2006).

Ritualistic games share with rituals the quality of liminality, a temporary move into a zone where normal rules may not apply for a while. This, along with uncertainty about information needs regarding the strange situation, creates tension, as it may not be possible to make sense of what is happening without breaking the rules of the activity or its illusory new reality. Studying the game's boundary control and the heightened reliance on information sources within the game's internal fiction is a fruitful avenue for both game scholars and designers interested in game characteristics and game-internal behavior. Both points of view intend to keep the illusion of magic during game-play intact. The game-internal information sources are either extrapolations (subject representations) of the game-external reference materials (Harviainen, 2007), direct references to resource sets (Klabbers, 2009), or added fiction created by the participants (Harviainen, 2007). Knowing how to manipulate such processes opens up new possibilities for enhancing game-based learning or highly engaging play with certain types of games, through an understanding of the way in which memory imprints may differ in intense play, how subject representations get constructed from the source material, and how players preserve the illusion of the way the game-fiction can be altered for various benefits.

Liminality and Information

Starting from Van Gennep (1909), religious and magical rituals have been called *liminal* spaces. They are a step outside mundane reality, yet exist in continuity with it, and have the capacity to facilitate significant social and cognitive changes, such as life transitions and the transmission of secret knowledge. In liminal spaces, normal systems of logic or ethics may not apply, as they are replaced by temporary new ones pertaining to the ritual at hand. An example of this is tribal rites of passage, where the initiates may be seriously harmed by their elders, who would normally face severe penalties for such violence. To enter the sacred chamber is to step into a world of new rules. As Huizinga (1939) suggests, ritual and play seem to share a common origin and properties, being both part of the play element of culture. Through analysis of their information traits, they have been shown to be facets of the same phenomenon or at the very least to be using the same mechanics for influencing participant cognition (Harviainen & Lieberoth, in press; Lieberoth & Harviainen, in press). In liminal games, *lusory attitude* (the willingness to accept the limitations of game-play in order to make it more rewarding; Suits, 1978) takes the place of faith as one motivation to participate. This effectively means that many of the tools used to examine the ritual process also allow us to understand the way certain games work.

The special social contracts surrounding rituals and [pretense and/or pervasive games] establish meaning and relevance-criteria. This creates a barrier to the outside world, telling us that "what happens in the woods stays in the woods." The formal delimitation is supported by special acts and goals within the activity, which separate it from everyday experience. These factors, when combined,

enable the emergence of cognitive frames that invite players to perceive a more malleable reality beyond everyday practice. Participants may be aware of real life as well, but make sense of the primary, liminal framework because of the invitation to share a fantasy. (Harviainen & Lieberoth, in press)

Not all games are liminal. A chess match may create significant engrossment, but does not take the participants to a new reality the way a live-action or massive online role-playing game does. Chess may come close nevertheless, especially at intense high-level games where the atmosphere is similar to a football match and the game arena itself becomes an extended space with its own rules. Games that are liminal, or at least approach liminality—being thus liminoid, as Turner (1982) puts it—can be analyzed as information systems.² In practical terms, this shows the underlying patterns of information manipulation that enable player engrossment and the illusion of fictional reality. Addressing the players' cognitive state itself is, however, beyond the scope of this article. The liminality of a game is built upon a combination of factors. The game environment becomes a resignification zone (as per Deleuze & Guattari, 1980), in which elements are given a new, in this case ludic, meaning. Within it is a recursive set of signs pointing to other signs, unto infinity. A definite point exists, however, where the chain of references is altered, and that is the key level of interest for game researchers. This is the level of socially agreed-upon rules. Liminality is always based on social contracts, open or implicit, that delimit the space of activity (for games, see Salen & Zimmerman, 2004). Sign meanings arise from minds and bodies first as personal signification spheres (Brier, 2008), but communicable sign systems are constructed by way of shared discourse, which requires a community to create and support it (Bankov, 2008). A temporary reality relies on such sign systems for its existence. Due to this, the contracts function as a set of (possibly nonexplicated) rules indicating what may and may not be done within the magic circle of play or ritual (as per Huizinga 1939; Salen & Zimmerman, 2004). This creates both certainty and uncertainty for the participants not in charge of the activity: They know they are taking part in a rite or a game, but do not know what to expect from it. The need for constant resignification and environmental observation strengthens the uncertainty. Liminal games, like rituals, prolong the anomalous state of knowledge (*ASK*; Belkin, Oddy, & Brooks, 1982), the situation where a person knows that he needs more information, but does not know exactly what kind of information. As uncertainty increases, the participants' focus is more easily fixed on certain sources that offer clarity of purposes and needs. These sources include peer groups, cognitive authorities, and diegetic (within-game-reality) goals—that is, things that are inside the shared temporary reality. In addition, the possibility of accessing outside sources exists, but that is often considered a breach of game etiquette, possibly even cheating (Harviainen, 2006). The liminal space needs to stay relatively isolated or at least to project the illusion of being isolated (Harviainen & Lieberoth, in press). This is where boundary control, the social protection system for the shared experience, comes in.

Boundary Control

Similarities between play and rituals roughly centre around 1.) action context or sequence, 2.) exaggeration, repetition and other structural modifications, 3.) psychological or communicative motifs, rather than immediate practical ones, 4.) a special “zone” for action and understanding. We have shown that this is particularly important at the level of frame-preserving interaction and information effects. For instance, changed actions call attention to themselves as frame-relevant, and give participants an opportunity to take part in the information flow, even without full insight into meaning and efficacy. (Lieberoth & Harviainen, in press)

No information environment is a social vacuum and neither do participants enter it from one. This means that each player brings to the game both his preknowledge and any prevailing paradigms, which affect his information behavior (as per Ingwersen & Järvelin, 2005), personal signification systems included (as per Brier, 2008). Without that brought-with material, the game would not function (Crookall, Oxford, & Saunders, 1987). Such paradigms include experiences with other games, group memberships, and preplay encounters with game-related material produced by others. For example, checking out the official forum of a massive multiplayer online game, and finding out that the community of people using the forum is heavily against sharing quest spoilers, is very likely to affect a new player’s information seeking, at least as far as that game is concerned. At the same time, one does not want to look like a complete novice, as inexperience can be frowned upon.³ Thus, one normal way of information seeking, that of asking directly, is socially prohibited by the community to a great extent. To solve this problem, players resort to a technique called *berrypicking* (Bates, 1989): They pick up bits and pieces from various sources, such as conversations, forums, and advice pages, instead of doing more holistic searches or readings on just one source. Unlike in similar practices, such as *cherrypicking* (the picking of what is seen as the best parts offered), *berrypicking* typically concentrates on appropriating that which is most conveniently available, which may or may not be the most informative, reliable, or accurate parts. This technique is, when necessary (in order to avoid serious game breaks, for instance), supplemented with direct questions. By the use of *berrypicking*, disturbances to the magic circle of play are kept to a minimum. This process is a part of what is called *boundary control* in the study of religion. Boundary control also exists in many other social contexts, and the term originates from systems theory. Yet it is particularly apparent in charismatic religions, due to their strong need to separate “us” from “them” (Galanter, 1999). In such cases, it refers normally to the way by which cults maintain their crucial belief in the difference between members and nonbelievers, but the same system also drives secular organizations to function as a whole—and creates engrossment at liminal play. Boundary control means that an

imposed sense of new reality—a fictional one or a reinterpreted mundane one—is consistently sustained by the participants, for all the participants. Should it fail, for one or all, belief also fails. For boundary control to be successful, a liminal activity's magic circle has to prevent unwelcome information from crossing it, either by blocking said information or by altering it to an acceptable form. The magic circle has to be nonporous (Harviainen & Lieberoth, in press). This is what sets liminal pretense games apart from their siblings such as bibliodrama, sadomasochist role-playing, and postmodern magic, which need a porous magic circle, because they have goals that exist outside of play and are thus allopoietic in nature (Harviainen, 2011a). Guided by authorities (e.g., priests, tribal elders, game masters) and sufficiently agreed-upon rules (dogma or the social contract of play, as per Harviainen & Lieberoth, in press), the participants preserve and sometimes also adjust the magic circle. Three key factors make up a group's boundary control: The aforementioned, shared social need not to disturb the illusion (Letcher, 2001), shared conceptions of what objects and information elements are situationally relevant (P. Wilson, 1973), and a heightened reliance on *cognitive authorities*—persons or groups defined as holding significant expertise on the matter at hand, regardless of whether they actually have true expertise concerning it (Galanter, 1999; P. Wilson, 1983). This is extremely significant for game-play and not just religion. Successful boundary control not only enhances engrossment, but is also fundamental for what McGonigal (2003) calls the Pinocchio Effect, “the desire for a game to be transformed into real life, or conversely, for everyday life to be transformed into a ‘real little game.’” Should the control fail, immersion is disturbed, possibly to the point of an Emperor's New Clothes effect—a situation where the participants' sense of the fictional reality stops and they also realize no one else is taking the game seriously either (Harviainen & Lieberoth, in press). To avoid this, devoted players not only support the boundary control in general, but also personally work as blunters (as per Baker, 1996), rejecting information that could damage their own game experience. As game scale grows, boundary control becomes a layered process, due to differences in player preferences. For example, the online role-playing game *The KINGDOM OF LOATHING* (2005-) gives only very limited game-mechanics information on many effects within the game itself and offers only small clues for most in-game quests. The game's official forum uses a policy of allowing the free distribution of almost all game information (including spoilers), as long as those are hidden within a (spoiler) background. In contrast to these, the game also has an official wiki, where all such elements can be freely displayed for all, and the publishers even allow the use of game interfaces, which give easy access to such information during play. It is thus up to each player to choose how much information he wants to discover by himself, whether to preserve the sense of liminality or not. The choice determines the player's participation in social contracts regarding the game, as each option represents a different relationship to game challenge and policy of information access. This is obviously very different from a live-action role-playing game (LARP) based on secrets dealt to each player, where participants are only expected to ask for extra out-of-play information in cases of omissions in the material they were given,

and where they may be physically distant from such information sources. An example of this is *PRAYERS ON A PORCELAIN ALTAR* (2007-2008), a LARP for 8 to 10 players specifically designed to function without an obvious preappointed cognitive authority of any kind. Its sole means of interaction is communication (physical and verbal), and it deals with applicants to a local theater academy who have a severe hangover and issues to solve (see Harviainen, 2011b, for details). The game master is present solely to clarify the provided material. The emergence of cognitive authorities, and the selection of who they are, takes place within the game's fictional reality, from among characters that are initially on an equal footing, as they are given no leverage as related to available in-game information.

In all 22 documented runs of *PRAYERS* emerged a clear cognitive authority, which effectively regulated the revelation of in-game secrets. At every run, that authority was at all times contested and maintained by a projection of supposed supreme expertise, matching P. Wilson's (1983) descriptions: a person considered by (many of) those present to have expertise within the given subject field, regardless of actual expertise or even competence regarding it. Typically, only those who are deemed to "know what they are talking about" become cognitive authorities. That attribution may sometimes be baseless, as people rely on things they already consider "known," simply because their chosen "authority" confirms their own expectations. As the subject field of supposed expertise, in the case of games, is temporal, cognitive authority usually dissipates at the end of play, or soon after.

What matters for a liminal game to function is that the players at least on principle share an agreement to respect the other players' interpretations of the magic circle. This may take place as either a part of following the rules of the game, or of a nonexplicit social contract regarding the game. Not to respect the magic circle is to be a cheater or a spoilsport (Suits, 1978). The differences in the systems, underlying the agreement—the information processes fueling successful play—are, however, that which is of particular interest for the study of ritual phenomena as information systems. Before examining the differences, however, a look at certain commonalities of the liminal process in general is necessary.

The Game as a Self-Referential System

In rituals and liminal games, such as role-playing games of any type, the magic circle of play functions as the border of a self-referential social system—to commit to playing will make that commitment rewarding, as the activity's positive elements intensify one another (Harviainen & Lieberoth, in press). The participants construct and continue re-reconstructing the social system (collective network) involved. They refer to themselves and fellow players as members of that system, together being in charge of framing the boundaries of their social space (Klabbers, 2009). The system is not totally self-referential, but participants act as if it were, even when subtly accessing information sources beyond it (Harviainen, 2007). Present in such environments are factors that limit possible actions and access to information: isolation through the

social contract, possible physical isolation (including online play during which access to other sites is limited), game rules, and the participants' own attitudes. These limitations function as the basis that enables the transformation into the fictional reality.

Information is not simply added as new knowledge. It is appropriated so that it fits with the person's expectations and emotional values. For a believer within a liminal environment, this creates a feedback loop where the available information supports the ritual—or game—experience. That, in turn, makes the participant more likely to get involved with the activity, appropriate information from within, and act as an information source for others in a manner that supports it. (Harviainen & Lieberoth, in press)

The fictional reality, being a resignification zone, undergoes constant redefining, most of which is subtle and takes place only inside the players' minds. Based on information gained from cognitive authorities such as peer groups and persons seen as experts, berrypicked clues, and personal preknowledge, players constantly reread, reinterpret the game environment. This uncertainty is one of the key things that keep play interesting. Which parts are resignified depends heavily on player preferences. For example, a competitive player constantly reevaluates skills and gear, while explorer types keep looking for new content to discover (Bartle, 1996; Yee, 2005). Resignification, unless taken to levels where sign-interpretation conflicts between players are inevitable, is also one of the elements sustaining the play experience. Other factors contributing to this include a sense of shared experience and community (*communitas*; Turner, 1969), the Pinocchio Effect, and the players' own levels of lusory attitude. The redefining and sustaining elements furthermore strengthen each other. This, in turn, makes it meaningful for the participants to accept the initial limitations—the hindrances, which constitute the activity within a game—in the first place (Harviainen & Lieberoth, in press). By taking part in the activity, they intensify the experience for themselves and the other participants. This leads to a stronger magic circle for all. It, in turn, again strengthens the intensity of the participant experience, as long as no serious breaks appear (minor breaks being inevitable). Successful boundary control keeps them from happening. The process is further assisted by the presence of cognitive authorities inside the magic circle, as their commitment guides that of the others.

Information and Authority

Many role-playing games, like rituals, also contain a special type of cognitive authority, a *directive information source*. Such sources are persons or groups, which are not only seen as experts, but also given the ability to overrule current representations in the game, even during play (Harviainen, 2007). They are authorities whose power extends from outside the magic to inside it, affecting it well beyond just setting systemic goals. For example, if the game master of a LARP says that a person is your character's former lover, she really is, even if this contradicts other, earlier information.

Or should the company in charge of an online game decide to implement changes to the game, they are by default allowed to do so. This power, like any other influence from cognitive authorities, can be contested, but given the authority's position, to do so is to both introduce potential game-experience breaks and to risk having to leave the game. Contesting authority may also carry out-of-play repercussions, such as failing a course (in the case of learning simulation/games) or social ostracism.

Issues of scale, time, and power-distance between cognitive authority and participants (Hofstede, 2001) complicate the contact between directive sources and players. It is significantly more difficult to call into question a change implemented by Blizzard Entertainment to WORLD OF WARCRAFT (2004-) than it is to contest the ruling of the game master in a small LARP. On the other hand, the continuity of games such as WORLD OF WARCRAFT makes it possible for communities to develop, the purpose of which is to counter unwelcome changes to the game.⁴ Tracking these ways of change resistance is a very effective tool for discovering which information elements are considered the essence of the play experience by each group. By following patterns of information seeking and use during play, one finds clear evidence of play preferences (for an example, see Harviainen, 2006). Sometimes it is also possible to discover new power structures: For example, Myers's (2008) *Twixt* experiment of playing according to rules, but against player conventions shows that cognitive authority on what is seen as "proper play" can shift away from the company in charge of a game. The tricky part is not in the following of said patterns, but in understanding how to recognize such information behavior in each game type. Yet this approach offers something well beyond simple reframing of game studies concepts as information behavior. Through deconstructing the social system within the boundaries of the magic circle into its information-process components, it is possible to actually understand *why* certain games engage the mind the way they do. After all, engrossment in an arcade game and a LARP is very different, as the former lacks certain immersive elements (such as the illusion of isolation) that are fundamental to the latter, a liminal game type. From the viewpoint of tacit understanding among the players, however, no difference at all between these forms of play may necessarily exist. Individual play preferences have a significant influence on such tacit understanding (Harviainen, 2006).

Liminal spaces not just include certain (tacit) information processes, they are liminal *because* of those very processes. While they most certainly do not account for all of liminality, these information processes are nevertheless an integral prerequisite without which the necessary cognitive changes could not function (Lieberoth & Harviainen, in press). To track those processes, to understand their variance and its impact, is to come one step closer to understanding why games affect us the way they do. Tracking them, however, requires knowledge of the scale of the phenomenon being analyzed.

Frequency, Emotional Arousal, and Involvement

The cognitive study of rituals (i.e., the study of rituals from the perspective of the cognitive, neurological, and evolutionary sciences, a part of the cognitive science of

religion; see McCauley & Lawson, 2002, for an example) speaks of two distinct types: the rare and powerful, such as a tribal initiation rite, and the frequent and repetitive, such as the Roman Catholic mass. Whitehouse (1996) calls the former *imagistic* and the latter *dogmatic* modus. McCauley and Lawson (2002), in turn, envision a scale where the former is considered low-frequency high-arousal, and the latter high-frequency low-arousal.

According to McCauley and Lawson (2002), these factors are variables: Frequency is calculated by adding up the instances of play, in either a “raw count” of actual runs or as a potential performance rate. Arousal, in turn, is analyzable through the level of sensory pageantry present, and in rituals it is usually inversely proportional to performance frequency. It is the sensation of tension, of being at the cusp of something essentially unfathomable, a neurophysiological state that functions as the mandatory prerequisite for emotional engagement and immersion in rituals and ritualistic games. Without sufficient arousal, participation in ritualistic activities is limited to social reasons. Both emotional arousal and social participation are, in turn, parts of the wider category of “involvement,” which includes all facets of attending an event the participant cares deeply about. People attend games and rituals for various reasons, but sufficient emotional arousal is required for fully enjoying the activity in question. Without it, certain key parts are not experienced.

Arousal is also accessible to some level via psychophysiological research methods (Kivikangas et al., 2010): Using currently existing technology (facial electromyography, electrodermal and cardiac activity measurement, etc.), its presence, if not precise intensity, can be noted. This does, however, limit several factors related to the boundaries of the magic circle, such as sufficient freedom of movement, meaning that the sense of liminality may be lost in such measured play. Furthermore, using such methods to study LARPs or similar phenomena is, with currently existing tools, next to impossible.

In discussing games on ritualistic terms, both variables are necessary (Harviainen & Lieberoth, in press). While rituals usually fall quite clearly in one of the two categories, liminal games contain various levels of frequency and emotional involvement. One end of the frequency scale are games of the “one-session game of narration” type (*OSGON*; Frasca, 2000), which are run once and where character death means end of game participation. One-shot LARPs exemplify that type, as do single-run training simulations. At the other end are continuous online role-playing games such as *THE KINGDOM OF LOATHING* and *WORLD OF WARCRAFT*, where events and content constantly evolve, regardless of whether a player is present or not. Between these extremes can be found games such as continual tabletop role-playing campaigns (a visible gaming counterpart to dogmatic rituals) and simulations/games that run through multiple sessions. Likewise, emotional arousal varies. At one end, *OSGON*-LARPs such as *PROSOPOPEIA BARDO 2: MOMENTUM* (2006) actually seek to emulate elements from imagistic rites (see Stenros, Montola, Waern, & Jonsson, 2007, and Stenros, 2008, for examples), and designers of massive multiplayer online games seek to produce as much arousal as possible. This is not easy, as rites of terror affect people

much more strongly than do pleasant elements (Whitehouse, 1996). Role-based learning simulations, in contrasts, may seek low arousal, so as not to disturb the educational content (Henriksen, 2008). Arousal, as a ritual variable, is not the same as engagement with the game, but the emotional sense of “being on the edge.” This is why a low-arousal game can still be highly challenging, addictive, or both. If arousal rises too high, the memory-imprint mechanisms of the activity change (Whitehouse, 1995). An optimal learning game would thus seek maximal engagement (Klabbers, 2009), but only moderate emotional arousal. The higher a liminal game’s frequency, the higher the risk that boundary leakage takes place. Given time and opportunities, some players will end up using sources outside of the play-space. At the same time, however, damage from such leakages decreases because a frequently or continually run game can mitigate any problems later on—something impossible to OSGONs. Increases in arousal, in turn, intensify the game experience. High arousal makes players more likely to skip errors and omissions in the game material, as they are highly involved in the flow of playing the game (Csikszentmihályi, 1990). It too carries a risk: A problem which does break the continuity experience will be seen as way more significant, if it happens during high-arousal play. Yet the true attraction of high arousal for game designers is simply in the fact that a positive arousal is extremely engaging and often even necessary to create immersive play (as per Douglas & Hargadon, 2001).

Handling the Player’s Anomalous State of Knowledge (ASK)

Information-wise, imagistic high-arousal rituals work by extending the ASK: Put in simple terms, they rely on keeping the participants on their proverbial toes at all times, in need of new information relating to the situation at hand, in order to make sense of it, but without enough clues as to what kind of information that should be. Essentially, they do not know how to proceed in order to “do right.” This also works for liminal games: As long as a player does not have a clear task at hand, or all of the details of a quest available beforehand, engaging surprises can be encountered. This, however, requires that the uncertainty, too, is made meaningful. Game designers utilize this fact for various ends, as do tribal elders.

By creating distressing situations, restricting action opportunities, overloading working memory, and dealing with matters of great cultural importance, imagistic rituals undermine calm, reflected information seeking. In stressful situations information appropriation becomes more erratic, as novelty becomes distressing, the scope of cognition narrows to few working-memory items, and secondary process thoughts are usually eliminated from consciousness. Reliance on immediate sources, supported by emotional salience, including feelings of trust and belonging, increases. Such reliance even extends to shared symbols and narratives, which are usually already present in the foreground of rituals and games. (Harviainen & Lieberoth, in press)

The trick for successful ASK extension is in successful boundary control: Liminality is sustained by way of making sure the players do not have a ready schema and performative scripts at hand, and have to rely on in-game sources such as cognitive authorities. This way when they encounter new material, even insignificant material, it will be engaging and possibly immersive (Balzer, 2010; Douglas & Hargadon, 2001). ASK cannot be extended indefinitely, and will at some point be replaced by a situational script. At that point, play habits change, and this will lead some players to abandon the game, while others will concentrate on other facets of it (such as grinding for gear) or seek to reacquire their ASK state. It also bears noting that some players (see Bartle, 1996, and Harviainen, 2006, for examples) are not interested in the liminal aspect of these games at all (even if they do accept their reference systems and resignification) and will because of this not enter the extended state of ASK at any point. ASK manipulation can be measured to a certain extent, by analyzing boundary control measures. The key is in how much is kept as a secret, and when: For example, PROSOPOPEIA BARDO 2: MOMENTUM aimed for a level where the players had no idea what or who exactly was part of the game. This is an obvious extension of ASK, seeking to bring the game as close as possible to an imagistic rite.⁵ Likewise, a successful marketing campaign for a new expansion of WORLD OF WARCRAFT will simultaneously generate both very clear information needs (leading to active searches for what it may include) as well as an extended ASK state, in the form of a desire to see the new content oneself.

Anomalous State of Knowledge (ASK) as a Distraction

At the same time as some liminal games seek to create imagistic experiences, a distinct group of designers is going the opposite way. In order to facilitate game-based learning of many kinds, they replace ASK manipulation with a clearly suggested certainty of needs, in accordance with Kuhlthau (2004). Learning simulations, which have a long history of utilizing role-play in a manner similar to traditional role-playing games, are evolving away from being based on a gaming approach (see Henriksen, 2009, for a thoroughly analyzed example). This is, from the ritual-theory perspective, a move toward the dogmatic modus. ASK cannot, however, be totally avoided in even highly controlled knowledge domains. It can only be minimized as much as possible (Belkin et al., 1982). Lainema (2008), for instance, recommends that the play environment of business simulations be transparent and the influence of the organizer be lessened, both of which are definite examples of working toward reduced ASK while retaining all of the potential liminality of such play. The same principle applies to educational role-play, as such changes facilitate a smoother recognition of information needs, also those not directly related to the goals of the game.

Schick (2008), however, well notes that such moves, if too drastic, may result in players breaking the game frame, that is, dropping out of character and ruining the illusion of liminality. Given that, as Balzer (2011) observes, the illusion and

immersive play appear to be necessary prerequisites for a role-playing scenario's didactic use; such breaks can mean that next to nothing, from the perspective of the intended outside goal, is learned. An excellent example of this can be found from Laakso (2004), who studied trainee UN military observers partaking in simulations with role-play in them: One interviewee clearly states that as soon as he realized the organizers had designated a correct solution to each scenario, he dropped all attempts at role-playing and situational immersion, and instead concentrated on just finding the option predefined as the right one. This, naturally, stands in contradiction to everything a training simulation or game is supposed to accomplish on the educational level. Hyltoft (2010), in his analysis of a Danish boarding school, which teaches solely by way of role-playing, suggests that a balance between learning and entertaining can be maintained, as long as the fun part does not make the game any less challenging. This is important because while entertainment is only one incentive for play, the sense of not enjoying a game can turn the participant hostile toward the intended learning goals or make the game and its contents seem like a pointless waste of time (Lappi, 2011).

From this perspective, the division set by K. A. Wilson et al. (2009) between fantasy and representation as affecting learning appears to be faulty, in the case of liminal games. Such a scale does exist, but it is between levels of engrossment and immersion—players need to be sufficiently aroused and set apart from reality for immersion to emerge, but not so much as to ignore the intended learning content. What matters for this is not the level of representative content within the magic circle (except for personal preferences and the subject matter being taught, naturally), but rather the strength and maintenance of that circle, that is, boundary control. That, in turn, arises from the interplay between form, content, and context, which define meaningful play (Klabbers, 2009), and make respecting the imaginary magic circle something the players want to support.

In externally directed (allotelic) rigid-rule games, the game organizer is in primary charge of boundary control measures (Klabbers, 2009, p. 12). In more free-form games, such as LARPs, the players do most of the control, as a key part of their own reason for playing, the illusory reality, depends upon it (Harviainen & Lieberoth, in press). This is a difference that has to be observed when designing such artifacts, as they require completely different support systems.

Furthermore, the acquired information needs to be anchored, or it will be lost when taken out of the magic circle (Lieberoth & Harviainen, in press). Debriefings are a start, but they are not sufficient alone. Retaining skills directly related to one's work is easy, but more holistic changes require a community that reinforces them. Such anchors—whether they are group meetings, documents, or other phenomena or objects—are again a measurable, visible part of the information environment.

For the design of liminal simulation/games for learning, these factors mean that it is necessary to look beyond didactic issues when implementing structural choices, such as deciding how complete an illusory reality the game will use. As Henriksen (2008) notes, the same thing that draws players to play the game—emotional arousal—may also adversely affect externally set learning outcomes, if taken too far. Likewise,

some powerful game experiences function through ASK extension, a state apparently nonconductive to learning and information seeking, as it is by default a state where one does not even realize information needs, let alone solutions to them.⁶ These problems increase as liminal simulations/games advance toward heightened realism, of the kind described by Klabbers (2000) as “mode III,” that is, “learning environments in which the learners are given the opportunity to interactively build their own system of resources and rules [, and which provide] conditions for the interactive self-reproduction of social systems” (p. 400). Simply reducing arousal and ASK is not the answer: As the firemen interviewed by Lloyd (2007) stated, if a training simulation is not sufficiently “real,” it is seen as just theory learning, no matter how well done it is.

A balance has to be maintained at all times between simulation/games being effective as experiences and as learning environments, especially if something beyond practical skills is being taught. The tool to achieving this is in the proper understanding of boundary control, including knowing when it is necessary to open those boundaries, or to make them porous, turning the activity into something other than liminal.

Further studying the topic is certainly necessary, as we are currently just extrapolating from case examples, and do not have a commonly shared theory for understanding game-based learning (Klabbers, 2003), let alone the impact of liminality upon it.

Discussion

One may ask, if liminal games are so close to rituals, seeming practically identical and using the same exact mechanisms, what (if anything), then, sets them apart? Leirich (2004), for instance, claims role-playing *is* ritual, but “a distinct and specific kind of ritual, one with no exact equivalent in other ritual spheres.” In Goffman’s (1955) terms, all human interaction is ritual. So, following that paradigm, liminal games indeed are without doubt rituals. From such a point of view, it does not matter that instead of a faith component, participants use a lusory attitude to make them meaningful, as long as the form and the social reasons for entering the magic circle are alike.

Analyzed from the perspective of cognitive studies of ritual, things do exist which set the phenomena somewhat apart. For instance, the cost structures (see Bulbulia, 2009, for an example of the framework) of liminal games and rituals are usually somewhat different: Both incur similar penalties for failure to participate properly (Lieberoth & Harviainen, in press), but games rarely contain any offerings to gods or their like as mandatory requirements. Then again, neither do all religious rituals.

Given that both activities have a socially cohesive function, a similar structure, and so on, one can only speak of differences based on tendencies such as “in general, liminal games tend to be less scripted in form than religious rituals.” In effect, ritualistic activities seem to exist on scales, on which in the middle are events that are obviously both game-like and “traditional rituals” (such as Mardi Gras, a black mass performed just for fun, or a wedding with many ludic elements) at the same time. The lines of departure, in turn, are defined by whatever factor is chosen as crucial, be it the amount

of belief in that which cannot be seen (“acting as if it were real”), the costs involved, or the amount of scripting.

Furthermore, if we believe Suits (1978) on games being about accepting unnecessary limitations in order to heighten pleasure through challenge, we can, however, see a crucial difference: Rituals, regardless of their type, are about efficiency and about achieving direct results that are taken outside the magic circle, even if they appear to be a very convoluted way of doing so (McCauley & Lawson, 2002). Liminal games are usually not about efficiency. Liminal learning games, however, are. As absurd as it seems, they can be considered to be inefficient for the sake of efficiency—just like rituals.

More important than such typologies, to game designers and analysts at least, is nevertheless to find out which rituals resemble which ritualistic games, in terms of frequency, emotional arousal, and information uncertainty (in the form of extended ASK). Those are the connections most useful for actual design work—educational or recreational—as well as research and should be seen as such. The ritual approach has been implemented into design already, in games such as PROSOPOPEIA BARDO 2 (see also Ericsson, 2009, for more examples). They were black-box experiments, in that their creators knew that ritual forms do work, but not the mechanisms by which they work. Given that the experiments were by all accounts high successes (see Nordgren, 2010, for an example), the question which naturally follows is, “How much further can we go, if we *do* know why and how they work?”

Researching ritualistic game attributes and variables can be done by using the tools of other game-related research: Frequency may be calculated; arousal assessed by observing sensory pageantry and player engrossment, as well as measuring them against frequency; and ASK manipulation seen by both analyzing the game-artifact’s design specs and by observing player behavior during play. All of these can furthermore be found again in player feedback, should it be looked at with a keen eye. Players who have either strongly liked or disliked a game can often be noticed reporting such things on various game-related fora.

Conclusion

This approach to the study of liminal games offers advantages that other approaches do not provide, because they concentrate primarily on structures or player experiences, while ignoring their fundamental prerequisites, described above. It reveals underlying structures and methods of control within game environments, including contested power dialectics. It also shows the roots of several game phenomena usually researched through other means, such as immersion, the Pinocchio Effect—and liminality itself. At their base is a set of information processes, which together enable their emergence, a potential of cognitive changes. The illusion of new reality needs to be kept up, and it is the presence of these information processes that does the sustaining of the magic circle: isolation from hostile information, a shared sense of what is

significant in the current situation, and heightened reliance on cognitive authorities. This knowledge makes it possible for the other research approaches to dig deeper than before. For example, it gives educational scientists some more influencing factors to consider, factors which may actually be completely independent from any didactic design choices they have made, such as the inclusion of certain tasks that are expected to appear logical within the game's reality, yet actually serve external learning goals. Likewise, it provides game studies scholars with alternative ways of explaining player-reported game experiences. Furthermore, a study of the information environment of a liminal game gives access to understanding how the game manipulates uncertainty, in the form of extending or limiting the ASK state. Researching these things is not difficult: It can be done with the same observations, forum analyses, and player interviews, as in other simulation- or game-related research. What is important, however, is that the researcher pays attention to the elements described here, that they be listed among things worth noting. They are fundamental components of the way in which magic circles function and must be recognized as such.

For liminal learning games and simulations, this means that in both designing and analyzing them and their effects on participants, attention should be paid to their boundary control measures and the way the games extend or avoid information uncertainty. This will not only make said simulation/games more effective, but also more enjoyable to participants and more effective as knowledge anchors in the long run.

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Notes

1. The question of what exactly is or constitutes “information” is a subject of ongoing discussion worthy of massive books (see Brier, 2008, for an example). For the purposes of this article, information is (as per Ingwersen & Järvelin, 2005) defined as the potential message content in any piece of data, ranging from verbal statements to physical objects. The potential is interpreted by observers as signs, turning that potential (“difference”) into actual information (Brier, 2008). The interpreted message content (information) is then selectively ignored or appropriated into knowledge structures by persons seeking or encountering it (Brookes, 1980). An “information environment,” in turn, is the sum of situational and/or local factors that affect the seeking, searching, appropriation, distribution, and use of information by people or systems in that particular situation and/or location (Ingwersen & Järvelin, 2005).
2. Defining “information system” is highly problematic in itself. As stated by Buckland (1991), “In a common, and limited, sense, the phrase *information system* is used to denote systems that retrieve potentially informative things: data, documents, objects, information-as-thing. [. . .] Alternatively, we may wish to adopt a broader view of information system where we are explicitly concerned with becoming informed, to information-as-knowledge, not merely access to information-as-thing. We could use the phrase *systems that inform* for this more ambitious sense of information system [. . .]. For this more extended task, the additional requirements for cognitive acceptability constitute a necessary expansion of the condition for success” (p. 80). For how and why LARPs are systems-that-inform, see Harviainen (2007).
3. It must be noted that, in general, a respectful request for instruction will be obliged by more experienced players (Ashton, 2009). This does not, however, alleviate the lack of trust or social stigma associated with being a newbie.
4. The number of active players is also significant here. Large groups provide anonymity and force through numbers, which can be used to fight power-distance. Sufficiently small groups, in turn, may include personal contact with directive sources, increasing both the chance for affecting that source and the risks of annoying said person(s).
5. Over its month-long single run, the game progressed from a tutorial phase to challenges and information searches, and finally to an individual new definition of reality (Jonsson, Montola, Stenros, & Boss, 2007). This is a pattern very much like that of many initiation rituals, the game masters taking the position of tribal elders.
6. As Wolfe and Crookall (1998) note, the complexity of simulation/game-based learning is such that reliably determining to which stimuli players are responding and how is extremely difficult.

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