

Studying the Field of Game Studies

A Proposal Model to Categorize Game Studies

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<p>Tiivistelmä – Abstract</p> <p>Tässä Pro gradu -tutkielmassa kartoitan pelitutkimuksen kenttää ehdottamalla mallia, jonka avulla on mahdollista kategorisoida pelitutkimuksia. Kategorisoinnin avulla voidaan saada lisää tietoa siitä, mitä pelitutkimuksen alueella tutkitaan. Mäyrän (2008) ja Juulin (2011) pelitutkimuksen kuvailujen perusteella olen rakentanut mallin, jota kutsun 3+1-malliksi.</p> <p>Ehdottomani 3+1-mallin kategorioiden mukaisesti kaikki pelitutkimukseksi luokiteltavat tutkimukset voi kategorisoida johonkin seuraavista luokista: peli, pelaaja tai konteksti, tai näiden yhdistelmiin: peli ja pelaaja, peli ja konteksti, pelaaja ja konteksti, tai kaikista kolmesta koostuvaan pelaaminen-luokkaan. Tämä Pro gradu -tutkielma tutkii 3+1-mallin käyttöä kategorisoimisessa analysoimalla 24 artikkelia, jotka on kerätty seuraavista neljästä pelitutkimuksen lehdestä: <i>Eludamos</i>, <i>Game Studies</i>, <i>Games and Culture</i> and <i>ToDIGRA</i>. Kerätyt artikkelit kategorisoidaan yllä mainittuihin luokkiin ja niiden teemat tunnistetaan eri luokissa esiintyvien teemojen analysointia varten.</p> <p>Tutkimuksessa huomataan, että 3+1-malli kaipaa pientä muokkausta, jota ehdotetaan tuloksissa. Siitä huolimatta mallin analysoinnista saadut alustavat tulokset viittaavat siihen, että mallia voi käyttää pelitutkimusten analysointiin ja pelitutkimuksen kentän hahmottamiseen, mutta sekä määrällistä että laadullista tutkimusta tulisi tehdä tarkemman varmuuden saamiseksi asiasta.</p> <p>In this Master’s thesis I discuss the existing research in the field of game studies by proposing a model that can be used in categorizing the existing studies. By categorizing the studies, the question of “What is game studies about?” can be discussed further. I have constructed a model called the 3+1 model, that builds on the divisions Mäyrä (2008) and Juul (2011) use in describing the game studies.</p> <p>According to the 3+1 model, all the studies that are game studies study either game, player, or context, or the intersections of each category that are game & player, game & context, and player & context, or the nexus of all the three, play(ing). This study tests the 3+1 model by analyzing a set of 24 articles from the following four journals: <i>Eludamos</i>, <i>Game Studies</i>, <i>Games and Culture</i> and <i>ToDIGRA</i>. The articles are categorized according the mentioned categories, and thematized in order to discuss the themes in each categories.</p> <p>In result, the 3+1 model needs some further refining which is proposed in the results. However, the preliminary results indicate that the model could be a valid tool in perceiving the field of game studies, but both the qualitative and the quantitative analysis are needed to further evaluate this.</p>	
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“Game studies is, among other things, a nexus where fruitful connections can be made between all of these approaches, and many more. It certainly never was, and never will be, a discipline or -ology, that is, a coherent domain defined by a single set of methods, empirical objects, and research questions and motivations. Instead, it should be viewed as a fuzzy set, equally hard to define as its mother object, games.”

Aarseth, (2015)

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1. Introduction

Here's a little social experiment that the reader could try: First, think about your field of study. Then, think what kind of a game-related theme there could be within your academic specialization. Next, conduct a Google search with what you just thought. Most likely you will be able to find something closely related to what you were thinking. And that, dear reader, is game studies' research. In this Master's thesis I discuss the existing research in the field of game studies by proposing a model to categorize it. Although the field is still relatively young (Mäyrä, 2008, p. 4; Williams, 2005), the amount of research in the field of game studies has multiplied during the last decade, as has the spectrum of different angles. Partly due to the amount of studies, partly because of the variety of researchers' backgrounds, it is not very straightforward to say whether some research can be labeled to game studies or not – and when it comes to individual studies, it may not even matter. But when researchers are trying to define the theoretical background used in their study, they soon encounter problems with the definition: what to count in, and what not to count? Is there a chance that someone from another field of science could contribute to my study? In addition, the new students entering the field may feel confused, mainly because of the fuzziness in different definitions of game studies (Aarseth, 2015). This study attempts to draw a picture that helps new researchers and students to get an overview of the field, and position their study in relation to the existing corpus.

Then what about that social experiment? I wanted to demonstrate with it that plenty of studies with various approaches have been done in the field of game studies. This study aims to offer a model that gives a brief, compiled review answering the question of “What is game studies about?” I have constructed a model that builds on the division that both Mäyrä (2008) presents in his book *An Introduction to Game Studies* and Juul (2011, p. 11) discusses in his book *Half-real*. I call the model I have constructed *the 3+1 model*, and with this study I will test its validity. If the preliminary results indicate that the model works as a tool to categorize the field, it could be used to examine further and depict the field of game studies. The validity of the model will be tested by analyzing a set of articles that form a research material to this study; the analysis includes a categorization according to 3+1 model sections and a thematization of articles. I will present a diagram that acts as a visualization of the model.

At this stage I will test only a relatively small set of articles, which is why a further research will be needed to evaluate the model's validity with greater accuracy. However, this study can give preliminary results that indicate if the 3+1 model could be used to categorize the field of game studies.

The research material consists of 24 articles that are gathered from four game study journals, which are the following: *Game Studies*, *Eludamos*, *Games and Culture* and *ToDIGRA*.

At first, I did not plan to categorize the field of game studies. I planned to conduct a study of people playing *Skyrim* and interpreting its narrative, since I am a Master's student in literature. However, when I tried to position that kind of study to the field of game studies, it soon became quite obvious to me that the task was impossible without taking a comprehensive look at the field in its entirety. Despite the relatively young age of the field, the amount of research is considerable. I am hoping to execute my plan of the *Skyrim* study one day, but right now the meta study of the field is more urgent. This aim has led me to make close reading, and textual and content analysis of research articles in the field of game studies, instead of, for example narratives and narration in games that would be more typical for literary scholars who study games.

What I found out at the first stage of trying to construct a theoretical background to my *Skyrim* study, was that if I had conducted it, I would have been a deviant among humanists and literature scholars in my decision not to study only narration but also the player – a field that is often reserved to social scientists (Williams, 2005). However, had I decided to proceed with the study, instead of searching a theory background from humanities, this kind of a notion could have told me that I should have looked into social sciences. This led me to think that an inclusive categorization would be beneficial not only to me, but for others as well.

We will discuss the objectives of this study later on, but what are the underlying reasons this kind of study is conducted, and why now? There are two reasons that can be identified: the first one is the young age of the field, which is why game studies is still taking shape – and thus, the amount of meta studies has been low, although there are now some very recent new studies, like *What We Know About Games* (Coavoux, Boutet, & Zabban, 2016). The second is the interdisciplinary nature of the field of game studies. The field has been seen as an infant among the scientific fields, and the relatively young age is not the only reason to this (Mäyrä, 2008, p. 4): some respected game study academics (see e.g. Aarseth, 2015; Eskelinen, 2005) have been worried about the quality of research in game studies, claiming that the whole discipline is driven by young, enthusiastic but not so experienced student researchers (just like me). The quality, or rather, the lack of it, has caused anxiety to the extent where there has been suggestions that maybe all game studies teaching in Finland could be ceased until good quality research exists (Eskelinen, 2005, pp. 70–71). However, as we will soon discuss, there are other contributors to game studies apart from the ones who have graduated with a game study degree. Koskimaa (2016) reminds that although game studies has formed its own field of study, it is very important to not to forget the researchers who submit content to game studies but have a background

or operate under some other discipline. In conclusion, the young age of the game studies field has had impact to the creation of this study, because it is the reason why there is still no single, established way of categorizing the field.

How about the second issue, the interdisciplinary nature of the field? Why can't there be a single discipline studying the field? In a sense there is now, and it is the game studies. However, the interdisciplinary nature is inevitable, when the object of study is games: the variety of existing games is vast including strategic or mathematical games, games that focus on relationship or building things, war games, sport games, educational games, etc. Hence, it is only natural that the field of sport science is interested in Wii Fit sport games and their impact on players, while anthropologists examine group behavior in online games and their communities. The research of both the anthropologists and the sport scientists thus contribute to game studies, even though they are both using their own methodologies along with other traditions originating from their background. Game studies is, at least currently, a field where multiple different disciplines contribute by conducting researches that study games, gamer culture or other game related phenomena. With this interdisciplinary background, it is evident that the field of game studies is not consistent in the sense that the researchers would share the same background and use the same methodologies, and it never will be, as these varying researches require varying methodologies and knowledge. The studies are shared in different venues and they are conducted using methodologies that researchers have learned during their own academic path: these are the reasons why it can be quite challenging to picture the field in its entirety, and in addition it can cause other issues than only the obliviousness to other disciplines.

These other issues, too, are related to varying backgrounds of researchers. Due to game studies' extremely interdisciplinary nature, it is too easy to be oblivious to the work done by researchers from other disciplines. Nevertheless, this is not the only problem that exists within the field of game studies. While the interdisciplinary feature of game studies has multiple benefits, there is always the flip side of the coin. In this case, the flip side is the fragmented nature of the field. Probably partly due to the interdisciplinary nature, the field suffers from tribalism – as Williams (2005, p. 1) writes:

Despite the relative youth of our research, we have already neatly divided ourselves along the typically divisive lines demarcated as “social science” and “humanities” and “qualitative” and “quantitative.” Many scholars have begun to find or entrench themselves in comfortable home bases that exclude and often denigrate the other camp. To continue to do so will limit our ability to learn the truths about this new and exciting medium.

However, it must be noted in this context that the borders of game studies are still vague and evolving, and some of the researchers from other fields may feel uncomfortable if their studies are labeled as

game studies (Aarseth, 2015). It is not only the game studies' researchers that create content to game studies, but instead researchers with the background in some field of science that have existed longer (e.g. linguistics) may study topics that are regarded as part of the game studies. This means that although there currently exists an academic study curriculum for game studies, the research forming game studies' corpus is from all the different fields of study. Of course, this is a matter of definition: as game studies become an established subject in universities, the situation may change. In some cases, however, the two dimensional feature may cause one wonder, if game studies should be considered as its own field at all. As Mäyrä (2008, p. 4) writes:

Game studies is a young discipline, and there are scholars who would not grant it the name of 'discipline' at all and would rather prefer to talk about a multidisciplinary research field that is focusing on games. Regardless of how we call it, game studies has reached the point where it has become established both as a field of scientific inquiry and as a branch of knowledge that is formally taught at universities.

Today, most of the “game studies” can be placed in two or more field of sciences: obviously, the other field would be game studies, but the other or others would most likely be the ones a researcher or a research team has – since only a relatively small amount of researchers have their background in game studies. To give an example, if an educational researcher studies how some word game affects the language learning skills, the study contributes to the body of knowledge of games, but also to that of learning, and linguistics. For this reason, a study like this is a game study, and simultaneously, a study of education science and linguistics. Nevertheless, this does not mean that everything that remotely relates to games could be labeled as game studies, but instead as Mäyrä (2008, p. 4) continues:

It [game studies] has its own subject of study – games and playing in their multifarious manifestations – and also its own theories, methods and terminology, which have entered into the usual process of academic application, evaluation and reformulation.

In conclusion I would like to revise shortly how we have ended up in the situation, where a categorization could benefit the field: The amount of studies that discuss games have multiplied very recently, and they are produced and published in various different venues by academics from multiple different fields. This leads to a confusing situation where the views of the nature of game studies vary, which can be a disadvantage to both the game studies field and the researchers who could benefit from broader collaboration with other fields. In addition, new students and researchers should be able to easily familiarize themselves with the previous studies and how they position in the field of game studies. This is why an inclusive categorization must be made.

There are many ways of categorizing a multidisciplinary study such as game studies is. Depending on the angle of perception, the categorization can be made by many different attributes, such as dividing the field based on the authors' background, or by the topic of the study, or by the methodology used in research. In this paper, however, the categories attempt to be inclusive, but at the same time tight enough for being able to categorize the field of game studies in a way that can give additional information. As mentioned, the categorization I will suggest in this paper is based on the division of the field of game studies in *An Introduction to Game Studies* (Mäyrä, 2008, p. 2) and, as Mäyrä also points out, the same division Juul (2011, p. 11) has discussed. Mäyrä's division of game studies is tripartite and it includes study of games, players and context of these two (Mäyrä, 2008, p. 2), while Juul (2011, p. 11) describes the field with two sections, games and players. Nevertheless, as Mäyrä explains (2008, p. 152) the discussed multidisciplinary feature of game studies with varying academic fields contributing to the field produce differing views of what the field is and how it should be seen. A consistent model covering all the branches is still missing. For this study, I have combined Mäyrä's and Juul's divisions of games, player and context and created a model that could be used to categorize the field of game studies. While the division's purpose in the mentioned sources is to give a general comprehension of the field, I attempt to categorize the field and illustrate how the different researches can be positioned in the field and how they position in relation to other game studies.

Creating a categorization is drawing borderlines: and drawing borderlines will implicitly exclude some studies. The reason why the 3+1 model is needed is not because of to be able to exclude individual studies, but rather to be able to describe the field and the different branches of it effectively, and position individual studies by categorizing them. The purpose of the 3+1 model is to serve as a tool that can be used to examine the field and help in consideration of what game studies can and do research. I think that it is important to consider questions like whether a study of digital game fan subculture or "Let's play" phenomena can be counted as part of game studies or not, even if there cannot be an unambiguous answer that would finally close the case. A perfect model is one that manages to capture all the studies that could and should be considered game studies, while it excludes the rest. However, no such a model can exist, since making a categorization is always imperfect, for it either excludes some studies that should not be excluded or creates artificial barriers between others, or the classes become so broad that they fail to sufficiently describe contents categorized under it. Not a single categorization could be perfect in its task to capture one massive discipline like game studies is in its entirety, and in addition, even if the current field could be captured, the comprehension of what game studies is and was can change over the time invalidating previous categorizations.

However, I believe that the game studies as a field of science has reached a point where we have traditions, where we have a massive amount of corpus – thus, some categorization can help in forming an image of the field and, later, discuss the studies from different angles.

1.1. Organization and Contents of Thesis

The structure of this thesis is the following: In the introduction, there is a brief look to the subject of this study. Along with it, the objectives and motivations are explained in the first chapter. By defining the objectives, specific research questions can be formulated. They are presented at the end of the first chapter. In the second chapter called Research Methods and Research Materials, the research materials are presented along with their sources as well as the methods used in this study.

The third chapter presents the 3+1 model and the reasons why a categorization is beneficial. It includes a short theory section of previous categorizations of game studies. There are not too many studies that conduct meta-categorization of the field, and that is why a traditional theory chapter is absent. Instead, the reasons to create a categorization I propose are discussed and the categories constituting the model are presented.

After that, we continue to chapter 4, which includes the analysis of the research materials. First, each article forming the research material is analyzed by categorizing and thematizing it, and then the articles are discussed category by category. Along with the analysis and model evaluation, the results are discussed and further research suggested. Finally, there is the conclusion chapter that consists of a brief review of the course of this study along with the discussion.

1.2. Objectives and Motivation

During the time I have been working on my Master's thesis, I have gotten multiple questions from my friends and relatives of how the process is going and what was the subject again. My answer is always a vague "I study game studies", but the following questions are interesting: "Oh, which game do you study?" or "So you conduct your study by... playing a game?" and "You mean video games? How do you study them?" The reactions are thought-provoking because they tell something about the nature of the concept of "game studies": it refers to studying *games*. The truth, however, and partly the reason for conducting this study is that the study of a game is not the only thing constituting the "game studies", but instead only one part of it. The 3+1 division in this paper is a hypothesis itself, presuming that game studies can be conducted by studying either 1) the player(s), 2) the game itself, or 3) the context of these two – and the *plus one* refers to playing, which is, according to my hypothesis, a nexus of these three. Some of the game studies, however, would not fit into any of these

categories as such: game studies include aspects that are partly over-lapping with more than one of the categories. In other words, one research can also be a mix of two (or, as I added the +1 category, all three) categories (Mäyrä, 2008, p. 2). For the overlapping parts, the intersections in the model (see the attached figure below) are represented in a Venn diagram in such a way that shows the connections in the field. To avoid causing confusion with category names, I use abbreviations marked in to the diagram (G, P, C, GP, GC, PC and GC) written with upper cases to discuss the category names whenever there is a chance of confusion, and the PLAY is always marked with upper cases when referring to the category.

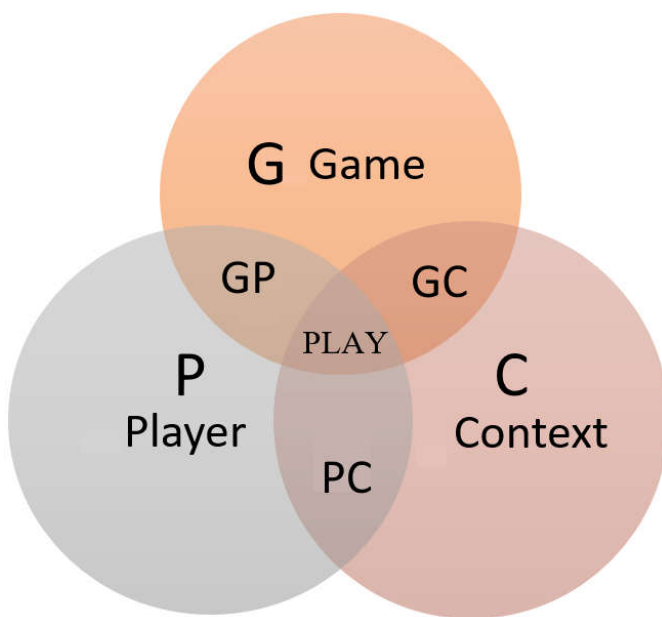


Figure 1: The 3+1 model

A question that must often be asked with this kind of work is “then what”? What does anyone benefit of the study that, in a sense, continues keywording existing studies, but does not, perhaps, do that quite as well as some existing studies do? There are also plenty of search engines that can already “categorize” studies by returning certain studies based on the keywords. Is a new meta-study still necessary?

Although I try to do more than just to offer few new keywords for studies, in a sense, categorization is indeed a way of tagging studies. These categories could be used as tags; the only important thing is to know which one to use. With this study, we are trying to examine that matter as well as to find an answer to whether this categorization can help us to instantly identify a subject of a study. While a data search is capable of analyzing and returning significantly broader result pool than this study can possibly present, with keywords it is not possible to explain explicitly how the study positions in relation to former studies and what is the main subject of study. Keywords are important in searching

certain studies and analyzing for example quantitative data, but they do not reveal the connections in between the topics: thus, studies that are keyworded with, for example, “horror game, YouTube, grounded theory” can differ from each other a lot, because the exact subject of study remain unclear. By placing the articles into the categories of 3+1 model, different kind of positions and subjects can be revealed. “Have they studied player from that point of view, too?” or “I was going to study that subject but with the focus on the game, what do they say in this play study?” are the questions I would like to be able to raise with this categorization. Again, however, I must emphasize the very limited amount of research materials I have: the best this particular study can do is to test the 3+1 model.

The field of game studies is vast, including researchers from different backgrounds, with different interests and methodological measures. Creating a model that is capable to categorize all the studies is quite a challenge, if not impossible: in addition to interdisciplinary nature of the field, topics of the study vary drastically. However, that is the exact reason why I believe that a categorization could help to form a picture of the field of game studies. At best, it can offer deeper understanding of what are the studied topics in the field of game studies as well as the related subjects of those topics, and by introducing the connections between studies, the researchers can discover studies from different fields to benefit their own work.

In addition to helping the researchers, I hope to help especially new students with their theses to figure out how their studies are positioned in the game study field. When a new study is planned, the positioning must be thought about. With this categorization it may be possible to save a good amount of new researchers’ and students’ time that would otherwise be consumed in trying to form a clear picture of the field before even starting the actual research. Game studies is still a young field of science and thus not very organized, nor so much studied as a whole. This kind of a categorization gives a general idea of what are the main areas that have been studied in the field and how each subject relates to one another. In addition, positioning one’s study helps to form a picture of the methodologies used in similar cases and broadens the understanding of how the planned study would serve the field: i.e. what is the new data it provides?

As explained, in this study I categorize different research themes identified during the analysis and attempt to map their connections by fitting them into the 3+1 model categories. Besides the categorization, the thematization can offer valuable information of how the studies that are used as research materials in this study tend to approach the field of game studies. As Williams writes (2005), there tends to be a certain tradition that social scientists approach the player while humanists have the lion’s share of studying the game and its contents. By fitting the identified themes into the 3+1 model

categories, it may be possible to draw wider conclusions of the typical approaches to the field as well as see the benefits of more collaborative research in the future.

And finally, the main reason why I think that this kind of study is so much needed: ‘Game studies’ is a macro concept, and thus of course wide and abstract. The more meta comprehension there is about the field of game studies, the easier it is to position individual studies and discuss how new study topics could be approached. There is some amount of meta comprehension already, but because of the field’s young age, there is a constant shift in the field as well. This is the reason why it is hard to comprehend the field of game studies in its entirety: However, now that the amount of corpus in the field has become significant, it is probably time to take a look to the field as a unity. While the multidisciplinary feature enriches the field, it enables a possibility of being oblivious of what other researchers with different backgrounds do. By asking a designer what game studies is about, you will get a very different answer than by asking the same from a student majoring in literature. And again, asking this question from a social scientist produces different answer than asking it from the student, that has started off recently with a game study major. Although this is quite natural and inevitable to some extent, offering a broad perspective can help to not to forget the other discipline contributors producing corpus to game studies. This study attempts to help in depicting the field by presenting a model that builds on suggestions by two of key academics (Juul, 2011; Mäyrä, 2008) in the game study field and testing it in the practice.

In addition to the aforementioned, I personally am interested in game studies and in games. This kind of a topic was not my first idea of study, but rather something I became fascinated by after trying to get a grip on what has been studied under the game study label. I think that the field could truly benefit from a categorization and, while I do not have unrealistic expectations about a Master’s thesis’ potential to form a theory for a whole discipline, I hope to open up a discussion of how the field could be best described and categorized. My own background is in humanities, and I am studying literature as a major at the Department of Art and Culture Studies, and thus I may tend to approach games as an art form and a cultural phenomenon first. I do realize, though, that there are other dimensions to them as well. As a student of humanities, qualitative research comes more easily to me, and in one sense I see that a qualitative approach to the meta game studies’ field serves other researchers as well, as this kind of a study is a new approach of meta game studies.

1.3. Research questions

Creating a categorization that manages to capture all the relevant studies while excluding others in the field of game studies can prove to be quite tricky for various reasons. The most significant reason,

though, relates to the subject of the study, games: How would it be easy to define studies on games, if even the games are not easy to define (Aarseth, 2015)? This paper will suggest a way to categorize the field and through the categorization, investigate the field in its entirety. The 24 articles of four journals (*Game Studies*, *Eludamos*, *Games and Culture*, and *ToDIGRA*) forming the research material of this study are analyzed, and as the result of the analysis, I will thematize and categorize each one of them. The categorization will be executed according to the 3+1 model categories. This stage will tell if the categorization can be applied to the articles. The next stage is to see how identified themes fit into the category they are positioned in. After the analysis, the validity of the 3+1 model will be discussed and potential problems evaluated. Analyzing how well the articles fit into the 3+1 model categories and what kind of problems are encountered during the analysis, the validity of the model can be discussed and the model can be developed further.

The research questions are the following:

1. Can all the examined research articles be categorized according to the 3+1 model?
2. How do the identified themes fit into their categories?
3. Should the model be modified further, and if so, how?

With these questions I attempt to find an answer to the question of 3+1 model's validity. The objective that is attempted to achieve with these questions is to be capable of answering to the question, if the 3+1 model can be used to perceive the field of game studies in its entirety. This question cannot be answered as such, but it must be divided in smaller fragments instead; in spite of that, I will add it here. The three questions above are designed to answer this fourth question.

4. Is the 3+1 model a valid tool to perceive the field of game studies?

I hypothesize that the field of game studies can be categorized with the 3+1 model, and, as a consequence of this, all the studies which are perceived to be "game studies" can be placed under one of the following categories: game, player, or context, or in the intersections of them: game and player, game and context, player and context, or play. This will be tested with a research material that consists of 24 research articles, published in established game studies journals (*ToDIGRA*, *Eludamos*, *Game Studies* and *Games and Culture*), presented in more detail in chapter 2.

This study includes an implicit assumption that all the chosen research articles represent game studies. The research articles are indicators that can, according to my hypothesis, prove that the model is either a valid or an invalid tool to analyze the field of game studies. Because of this hypothesis, I have chosen research material that is labeled as game studies in advance: all the research material articles

are published in game studies journals. Although the assumption is that all the examined research articles represent game studies, in the case that problems are encountered during the categorization, I will also discuss if there is a possibility that some of the articles should not be regarded as game studies. However, I have attempted to avoid this problem by choosing my research materials specifically from game studies journals. An optional approach would have been to choose research articles that could (and should) have a label of game studies, but they are published in other venues apart from the field of game studies. An example of this could be, for instance, a research article that studies teaching with serious games: it is both a study of games and an educational science study. However, by choosing journals regarded as game studies there should be no need to weigh out whether one is a game study article or not when the research materials are gathered: the preliminary assumption is that they are game studies.

2. Research Materials and Research Methods

2.1. Research Materials

In order to analyze the validity of the proposed 3+1 model, I will use a selection of game studies journals as sources of research material to the analysis. Melcer et al. (2015) have compiled a list of current core game studies journals (see the attached figure below).

Table 1. Expert generated list of core games research journals.

Journal
Computers in Entertainment (CIE)
Eludamos. Journal for Computer Game Culture (Eludamos)
Entertainment Computing
Game Studies
GAME The Italian Journal of Game Studies (G A M E)
Games and Culture (G & C)
IEEE Transactions on Computational Intelligence and AI in Games (TCIAIG)
International Computer Games Association Journal (ICGA)
International Digital Media and Arts Association (iDMAa)
International Journal of Arts and Technology (IJART)
International Journal of Computer Games Technology (IJCGT)
International Journal of Game-Based Learning (IJGBL)
International Journal of Gaming and Computer-Mediated Simulations (IJGMS)
International Journal of Role-Playing (IJRP)
International Journal of Serious Games (IJSG)
Journal of Game Design and Development Education (JGDDE)
Journal of Game Development (JOGD)
Journal of Gaming & Virtual Worlds (JGVW)
Journal of Virtual Worlds Research (JVWR)
Simulation & Gaming (S&G)
The Computer Games Journal (TCGJ)
Well Played

Figure 2: Melcer et al. (2015): Core Games Research Journals

Game Studies, *Games and Culture* and *Eludamos* that are used in this study as research material sources, are found in the Melcer et al. list. *ToDIGRA* is published by DiGRA, Digital Games Research Association, which is why it is included to this study as a research material source. While the list includes a considerable amount of journals, due to the qualitative nature and a limited scope of this thesis, also the research material has been limited to a certain extent. Four core journals are chosen: the reason to study these particular journals is soon discussed. From these journals, the first issues or

numbers of 2015 are analyzed. In case there is no issues in 2015, the latest issues will be studied. There is no particular reason to choose exactly the first issues of the year 2015, other than that I wanted to choose rather new articles. Since it is 2016 when this study is written, it is not likely that all the journals chosen to this study have had time to publish issues this year. Hence, 2015 first issues are chosen. All together the research material consists of 24 articles presented in the table below.

Table 1: The chosen research material sources and the articles to study

Magazine	Vol	Issue	Year	Title	Authors
ToDIGRA	2	1	2015	Remembering & Exhibiting Games Past: The Popular Memory Archive	Helen Stuckey, Melanie Swalwell, Angela Ndalianis, Denise de Vries
ToDIGRA	2	1	2015	Conceptualising Inspiration Networks in Game Design	Xavier Ho, Martin Tomitsch, Tomasz Bednarz
ToDIGRA	2	1	2015	“Blackout!” Unpacking the Black Box of the Game Event	Steven Conway, Andrew Trevillian
ToDIGRA	2	1	2015	Tokimeki Memorial Girl’s Side: Enacting femininity to avoid dying alone	Tina Richards
ToDIGRA	2	1	2015	Affect, Responsibility, and How Modes of Engagement Shape the Experience of Videogames	Kevin Veale
Game Studies	15	1	2015	Self-Reflexivity and Humor in Adventure Games	Krista Bonello Rutter Giappone
Game Studies	15	1	2015	The Demarcation Problem in Multiplayer Games: Boundary-Work in EVE Online’s eSport	Marcus Carter, Martin Gibbs, Michael Arnold
Game Studies	15	1	2015	Me and Lee: Identification and the Play of Attraction in The Walking Dead	Nicholas Taylor, Chris Kampe, Kristina Bell
Game Studies	15	1	2015	No Mastery Without Mystery: Dark Souls and the Ludic Sublime	Daniel Vella
Eludamos	8	1	2014	From NES-4021 to moSMB3.wmv: Speedrunning the Serial Interface	Patrick LeMieux
Eludamos	8	1	2014	“Tap, tap, flap, flap.” Ludic Seriality, Digitality, and the Finger	Till A. Heilmann
Eludamos	8	1	2014	Prolonging the Magic: The political economy of the 7th generation console game	David B. Nieborg
Eludamos	8	1	2014	Finishing the Fight, One Step at a Time: Seriality in Bungie’s Halo	Jens Bonk
Eludamos	8	1	2014	“Did you shoot the girl in the street?” – On the Digital Seriality of The Walking Dead	Maria Sulimma
Eludamos	8	1	2014	Seriality’s Ludic Promise: Film Serials and the Pre-History of Digital Gaming	Scott Higgins

Eludamos	8	1	2014	Types and Bytes. Ludic Seriality and Digital Typography	Lisa Gotto
Eludamos	8	1	2014	Digital Seriality as Structure and Process	Dominik Maeder, Daniela Wentz
Eludamos	8	1	2014	The Eternal Recurrence of All Bits: How Historicizing Video Game Series Transform Factual History into Affective Historicity	Tobias Winnerling
Eludamos	8	1	2014	Gandalf on the Death Star: Levels of Seriality between Bricks, Bits, and Blockbusters	Rikke Toft Nørgård, Claus Toft-Nielsen
Games and Culture	10	1	2015	Art Video Games: Ritual Communication of Feelings in the Digital Era	Carlos Mauricio Castaño Díaz, Worawach Tungtjicharoen
Games and Culture	10	1	2015	When Life Mattered: The Politics of the Real in Video Games' Reappropriation of History, Myth, and Ritual	Sun-ha Hong
Games and Culture	10	1	2015	User-Generated Video Gaming: Little Big Planet and Participatory Cultures in Italy	Francesca Comunello and Simone Mulargia
Games and Culture	10	1	2015	From Discussion Forum to Discursive Studio: Learning and Creativity in Design-Oriented Affinity Spaces	Vittorio Marone
Games and Culture	10	1	2015	Beyond Today's Video Game Rating Systems: A Critical Approach to PEGI and ESRB, and Proposed Improvements	Damiano Felini

ToDIGRA is an abbreviation of Transactions of the Digital Games Research Association. It is an international journal, and as discussed, Digital Games Research Association (DiGRA) publishes it. The reason to choose it in this study is because of its connection to the DiGRA as well as the members of the editorial board who are regarded as key researchers in the game studies field. *ToDIGRA* accepts submissions directed towards a specific call for papers along with the best conference papers presented in DiGRA conferences, and for that reason it is also interesting to this study. The first volume of 2015 exists and it consists of 5 articles listed in the table plus the introduction, which is not analyzed.

Game Studies is a multidisciplinary journal founded 2001, and the first academic journal dedicated to computer game studies (Aarseth, 2001). It is chosen to this study due to its fundamental impact on the game studies field. 2015 there is a fifteenth volume issue 1, which consists of introduction, four articles, two book reviews and CFP. Only the articles are chosen to this study.

Eludamos is a journal for transgressing studies of computer game and its culture (Westecott, Jahn-Sudmann, Schott, & Wagner, 2007). The advisory board as well as the editorial team consist of many

significant game study academics. The journal states in its focus and scope that it wants to “join questions about and approaches to computer games from decidedly heterogeneous scientific contexts”. It is a multidisciplinary journal that discusses the different dimensions of digital games. *Eludamos* has not published new numbers since the volume 8 in 2014, so the latest volume is chosen for this study. Volume 8 consists of 10 articles that are analyzed in this study, and the introduction, which again is left out of this study.

Games and Culture focuses on socio-cultural, political and economic dimensions of gaming. It is a journal of interactive media and gathers together many kinds of studies inviting academics, designers and developers, and researchers to submit proposals to editorial board, that consist of many key figures in game study field. For its versatility and established position in the game study field, it is one of the research material sources in this study. The first issue of 2015 has 5 articles which are all included into this study.

Despite the fact this study discusses “game studies”, all the sources focus mainly on digital games, and only occasionally publish non-digital game articles. This is not a purposely chosen feature, but rather a notion that I made only after choosing these journals. *ToDIGRA* specifies this in its name (Digital Games Research Association), and in *Game Studies* Aarseth states the computer game oriented nature of the journal in the introduction (Aarseth, 2001). *Eludamos* is named “*Eludamos. Journal for Computer Game Culture*” which of course strongly suggests that the focus is on computer game studies. Finally, *Games and Culture* is named “*Games and Culture: A Journal of Interactive Media*”. which can be interpret to exclude non-digital games like poker or Scrabble. For this analysis, the notion of digital game oriented nature is very interesting, and hopefully the analysis will be able to touch upon this issue as well. In addition, after choosing the research materials I noticed that the volumes of *ToDIGRA* and *Eludamos* are special issues, first one publishing selected articles from the DiGRA Australia conference, and the second focusing on digital seriality.

One of the most crucial questions with this kind of work is how to choose the research material. Choosing a single publication can prove problematic, even if the journal would not concentrate on some specific branch, for example into serious games. Even without any specified focus like that, there is always a chance that there are certain emphases in the articles. I would not like to create a categorization that applies perfectly to all the content in one publication, but not to anything else. Hence I have selected more than one research material source. That way, I am more likely to study journals that do not focus solely in one specific topic but rather include lots of different kind of studies. The journals that are chosen to constitute the research material are among the most prominent and established ones in the game study field. The qualitative nature of this study enables deeper

analysis than a quantitative analysis could provide. On the other hand, it also limits the amount of research materials, especially in such a study as Master's thesis is.

2.2. Research Methods

This study represents one kind of a literature review that uses qualitative study methods. After collecting the research material that consists of game study articles, the research material is read and analyzed, and then the analyzed research material will be categorized according the 3+1 model categories (game, player, context + play, and the intersections) in order to discuss the validity of the model, and thematized to identify the core of the study, as soon explained. Next, each category is discussed by taking a look to the category contents. That way, research questions can be answered.

In order to answer the research questions, I am using a term *variable*. The question of whether one article is a game, player, play or context study, or if it belongs to the intersection of some of these categories, can be answered by identifying variables in each study. These variables are the components of the study that are examined: next, I will explain how it differs from the term subject. In a study that focuses, for example, to find out how children learn mathematics through playing, the subject of study is games' ability to teach children mathematic, while the variables may be "player", "game" or "play" depending on the way the research questions are formatted: For example, in a study that ask questions like "what age group benefits most of playing games that teach mathematics" the player would be the variable, whereas if the variable was game, the study could ask questions like "what type of games are best in teaching mathematic skills" and so on. These variables must be identified in order to categorize the studies: If the identification proves problematic, I ask the question of what is the subject the study produces additional information of.

I hypothesize that the variables of the research materials fit to the categories presented in the 3+1 model. The categorization is based on the variables: for example, if one studies what *Fallout 3*'s characters' attitudes are towards so called Ghouls, humans exposed to radiation, it would be a study of relationships belonging in the G category, game – all the elements of the study including the context of study and the subject of it would situate in the game, and thus the game would be the only variable of the study. The same study, however, would belong in GP–category (the intersection of game and player), if one were to study what the character's attitudes towards ghouls are and how they impact players' attitudes towards the ghouls: in this case, the variables include a game based question of character's attitudes and a player based question of how the player is impacted by the game contents. And if the focus was on how character's attitudes towards different people shape our culture by affecting our attitudes, the study would belong in GC -category. The theme raises from the study topic

and contents, whereas the categorization is based on the variables. After reading the articles that constitute the research materials, they can be categorized by these factors and fitted into the 3+1 model categories.

While doing the analysis, I will ask the following question in relation to each article: Does this article produce new information about games? If it does, it is a study of games. Next, I will consider the view point it uses to approach the field: Does it discuss a game and its contents? Or is the focus on the player? Maybe the study is more about the context of game, player or play? The articles will be categorized depending on the study focus. In addition to that, articles will be thematized. Finding the theme of the text means capturing the very heart of the article into few words. The benefit of it is that instead of just finding the keywords or phrases that occur most often in the text, thematizing has a potential to explain briefly the implicit and explicit ideas within the text. Thematizing can find the underlying ideas which are invisible when keywording articles, if those ideas are not stated or depicted with a specific word.

Thematizing can be an effective tool to depict the categories and explain what kind of studies has been made in the field of game studies. In a sense, that matter is accounted successfully in the study “Games Research Today: Analyzing the Academic Landscape 2000-2014” (Melcer et al., 2015). With a very limited amount of research material sources that this study has, I am not hoping to identify quite so many themes. Melcer et al. (2015) are able to identify 200 keywords, which are categorized in sets of 10, as explained in the chapter 3.1 (see the attached figure of keywords below). Keywording and thematizing are not the same thing. While their co-word analysis bases on the study of multiple keywords and their relationships, the thematization in this study focuses on researching whether the game study contents can be thematized and through that, generalized in a way that is able to present the existing data, but can also be beneficial when considering how the future researches position as well.

Table 3. Major themes in games research. The cluster ID, top keywords, size (S), frequency (F), centrality (C), and density (D).

ID	10 Most Frequent Keywords	Size	F	C	D
T1	Game Design, Serious Games, Game Based Learning, Educational Games, Game Development, Motivation, Case Study, Engagement, Gamification, Collaborative Learning	38	67.74	0.947	1.138
T2	Interactive Storytelling, Interactive Narrative, Role Playing, Real World, Multiplayer Online, Massively Multiplayer, Interactive Drama, Game World, Non Player, Digital Storytelling	24	47.88	0.750	1.641
T3	Real Time, Virtual Reality, Virtual Environments, Virtual Characters, Game Engine, Motion Capture, Time Strategy, Animation, Virtual Storytelling, Computer Animation	20	51.00	0.840	1.500
T4	Virtual Worlds, Massively Multiplayer Online Games, Second Life, Online Games, Avatars, Social Interaction, Gender, Multiplayer, World of Warcraft, Ethnography	20	63.30	0.906	1.942
T5	Gameplay, User Experience, Entertainment, Player Experience, Immersion, Usability, Flow, Interface, Ludology, Game Environment	18	43.11	0.874	1.059
T6	Narrative, Art, Interactivity, Emotion, Aesthetics, Music, Agency, Interactive Art, Affective Computing, Interactive Systems	14	37.57	0.744	1.154
T7	Game Theory, Evolutionary Computation, Computational Intelligence, Genetic Algorithms, Search Problems, Standards, Optimization, Trees Mathematics, Mathematical Model, Statistics	14	45.01	0.616	4.901
T8	Augmented Reality, Mixed Reality, User Interface, Pervasive Games, Mobile Games, Magic Circle, Mobile, Ubiquitous Computing, Mobile Gaming, Location Based	13	50.23	0.757	1.321
T9	Artificial Intelligence, Decision Making, Planning, Context, Cognition, Game AI, Multi-Agent Systems, Real-Time Systems, Human Player, Measurement	12	54.75	0.821	3.515
T10	Human Computer Interaction, Digital Media, Interaction Design, New Media, Psychology, Interactive Media, Human Factors, Interface Design, Level Design, Gesture Recognition	12	42.92	0.817	1.409
T11	Simulation, Role Play, History, Experiential Learning, Cooperation, Representation, Modeling, Negotiation, Participation, Simulation Gaming	12	48.17	0.718	1.894
T12	Learning Artificial Intelligence, Training, Machine Learning, Reinforcement Learning, Learning Systems, Game Playing, Data Mining, Sport, Predictive Models, Feature Extraction	11	39.18	0.684	3.073
T13	Servers, Internet, Computer Architecture, Mobile Computing, Delay, Peer to Peer Computing, Media, Tiles, Cloud Computing, Scalability	10	31.50	0.602	3.200
T14	Learning, Education, Children, Storytelling, Creativity, Teaching, Reflection, Tangible Interfaces, Educational Technology, Survey	10	59.10	0.736	2.000
T15	Humans, Neural Networks, Software Agents, Testing, Navigation, Computer Simulation, Artificial Neural Networks, Games of Skill, Robots	9	44.56	0.549	5.861
T16	Interaction, Communication, Role Playing Games, Player Behavior, Content Creation, Personality, Fun, Multi-Touch	8	29.88	0.633	1.357
T17	Educational Institutions, Computer Aided Instruction, Software Engineering, Software, Computer Science Education, Technological Innovation	6	31.17	0.570	3.733
T18	Collaboration, Board Games, Social Networks, Multiplayer Games, Social Media	5	46.20	0.656	1.700
T19	Monte Carlo Methods, Tree Searching, Algorithm Design and Analysis, Monte Carlo Tree Search	4	38.00	0.323	16.667
T20	Computational Modeling, Visualization, Engines, Databases	4	50.00	0.515	3.667

Figure 3: Melcer et al. (2015): Identified Themes

Why to do this kind of an analysis as qualitative instead of quantitative? While this analysis could be quantitative, we cannot simply start categorizing the existing studies without testing the model first. Quantitative analysis could ask, for example, a question of how the serious games and teaching related study positions in the field according to this model, and the answer could be a pie chart including all the mentioned categories. However, before that can be done, an analysis of if the model serves its purpose must be done. The analysis of the model's validity could include mixed methods, and as a matter of fact, that would be rather an ideal way of executing this analysis: however, the extend of this study is not sufficient to produce a quantitative analysis in addition to the qualitative part. The extend of this thesis is the reason why things like the amount of studied topics won't be discussed. In addition, Melcer et al. (2015) analysis covers quite sufficiently the amount of research done in relation to game studies. The qualitative approach asks for closer, scrutinized study of each article, which is

done by analyzing the articles' themes and study subjects. The themes are added to the table along with the categorization.

As stated in the chapter of research questions, my hypothesis is that every article analyzed in this study studies player, game or context of these two, some combination of any of those, or the combination of all three, playing. If that assumption is correct, it would mean that preliminary results indicate that the model is a valid tool for categorizing the field of game studies. Although the amount of research materials is too limited for final conclusions, it will help to evaluate the model's validity and potential as an analyzing tool to the field of game studies. In case some of the articles cannot be categorized into any of the 3+1 model categories, I will discuss the possible reasons to that. The potential reasons that would cause problems with the article categorization are either the problems with a model, or with the research materials. The model can be too broad, which could cause that all the studies can be placed in one category, or it can be too narrow, which causes the exclusion of multiple articles, and there is a possibility of finding a non-game study article from some of the game studies journals. In case some of the articles cannot be fitted in to the 3+1 model categories, the next step is to evaluate whether the reason to that is in the model or if there is some other issue with the analyzed articles. In addition, there may occur surprises in the analyzed contents as well: it is possible that one or many of the journals focus on some specific topic, and in that case, one category may become over emphasized or be left without any contents. Of course, that would not be a problem if we knew that it is caused by a feature of analyzed articles. However, while it is possible that the model works as a tool to categorize the contents of the game studies even if all the articles are placed into one category by chance, there is no way to tell what causes the distortion, because we are still only testing the 3+1 model: There is always a chance that the model is designed in such a way that one category is too broad or too narrow.

If the model proves to be a valid tool to represent the field, the next step could include further research that is able to better present the different themes examined in each of the categories. In this study, the themes placed in the model categories are merely there to present how the model could finally be utilized, instead of extensively depicting the category contents. However, in this study an extensive categorization is not possible, because the extent of that kind of a study goes beyond the scale of this study. Hence, the themes serve as examples of what the categories can include, but in no way, are meant to depict the categories in their entirety.

3. The 3+1 Model: What's and Why's

While many academic papers start with summarizing possibly a long line of preceding studies, the first impression in many game study papers is that the preceding studies are missing or non-existent. Although game studies have been claimed to be a relatively young field of science (Mäyrä, 2008, p. 4; Williams, 2005), earliest studies of games and play go back to the beginning of the 20th century: these studies include historical and ethnological approaches, as well as studies of simulation that is closely related to gaming (Mäyrä, 2008, p. 6). Of course, the very first studies could not possibly discuss digital games, because it still took years for the first digital game to appear.

In order to create a successful categorization, it is quite important to be aware of the features of to-be-categorized field – after all, creating a categorization means knowing the field sufficiently well to understand relations and boundaries between studies, themes and topics. But isn't this a vicious circle? How can one be aware of the features of a certain field when it is yet to be discovered what that certain field exactly is? While this study seeks to answer the question of game studies nature in means of categorizing the field, there are things that can be known even before and without the categorization.

Juul discusses the history of game studies in his book, *Half-Real* (2011). What is interesting about his book, is that it has subchapters called *The Study of Video Games* and *Video Game Studies*. Juul dates the birth of the video game studies around the beginning of the 21st century (2011, p. 11). The question that arises is whether this video game studies is a separate branch of game studies, or if the video game studies Juul mentions is equal to game studies. Once again, we are forced to repeat the question of what game studies is. While a categorization should be able to answer this question, we have to consider the potential outcomes. What are the options?

The answer to this question is not only important when thinking and doing a categorization to current and future studies, but also significant when positioning the field in historical perspective. Where are our roots? This question matters: the answer of it tells us what are the significant first studies in our field that should be acknowledged and where we base the comprehension we have of games' nature. While the categorization can, at best, explain current field of the game studies, it may have problems to capture the past studies the game studies probably draws from. Was this the case, it would be mainly because of the technological development during the recent centuries: a hundred years ago there were no such games as digital games are, but once the first commercial products hit the market, our comprehension of games changed irreversibly. Nevertheless, past studies can have managed to describe some features of games that are universal and apply in any game format, and that is why

these non-digital game study sources cannot be ignored, but rather their relevance to the current game studies (whatever that is) must be considered.

This being said, let us consider the options that can exist in current field between game studies and video game studies relation to each other. The options are listed below and the figure visualizes these potential relations. There are few options that could apply:

1. *Game studies* can, as a matter of fact, be regarded equal to *video game studies*, in which case all the game study content examines some digital game related phenomena (as the video game studies is a narrower concept), or
2. *Video game studies* can be a separate field of study that focuses solely on video games while game studies examines other games, or
3. *Video game studies* and *game studies* can be partly overlapping but include common components that can be regarded as both game studies and video game studies.
4. *Video game studies* can be a subcategory inside the game studies, or
5. Despite the greater specificity in *video game studies* compared to *game studies*, game studies can be a subcategory of video game studies.

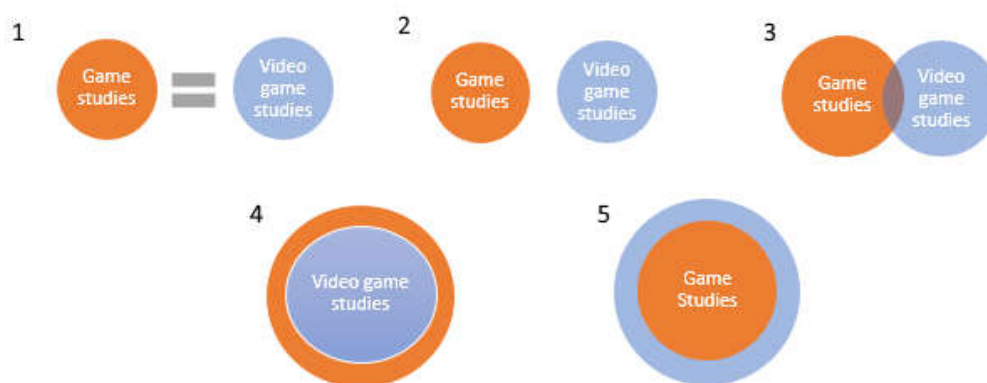


Figure 4: Game Studies Relation to Video Game Studies

Were the first case true, the discipline we call game studies would actually be video game studies, since the video game studies field is more narrow and specifies the subject of study with greater accuracy. If this was the case, (video) game studies would be born in the “year one” (Aarseth, 2001), meaning the year 2001, as Juul states (2011, p. 11). The study of other games apart from video games would not be a discipline, but rather a set of singular articles, or a “multidisciplinary research field that is focusing on games” (Mäyrä, 2008, p. 4). In the second case, game studies and video game studies are understood to be two different disciplines. Again, video game studies would be a separate field from game studies, although it would be possible that they have a common history. Which one

then would be the “real” game studies that is referred to when discussing of, for example, game study journals? That question should be examined further by taking an extensive look to the subjects of research.

In the third case, both the field of game studies and the field of video game studies would have their own characteristics, but they could share some common features and some amount of the researches could belong into both categories: in that case, there were two options when it comes to “game studies” as it is usually referred. Either neither one of the fields alone would form the game studies alone but the game studies as it is referred would be a discipline including both or just the intersection, or only the other one including the intersection would form the “game studies”.

In the fourth case, study of video games would be a subcategory of game studies. The field of the game studies would include studies of not only the digital games, but of any games. Video game studies could draw from game studies, and be a 2001 year born discipline, but simultaneously draw from the history of game studies. Instead, game studies would not be that young a field after all, since it can be seen to continue the traditions started by ethnologists and historians at the beginning of the 20th century. And finally, in the fifth case, game studies would be a subcategory of video game studies. Although the field of video game studies is more specific and thus is easier to perceive it as a subcategory, in this case game studies would actually refer to “other game studies”, a field that exist inside video game studies as a minority. In that case, (other) game studies would have the history that extend to the beginning of the 20th century, whereas video game studies could be a newer discipline, but the current study methods, theories, and terminologies in both video game and (other) game studies would draw from video game studies tradition founded in 2001.

We cannot choose any of the options above: instead, we should look at the studies and journals that are comprehend to form the body for the current field of game studies to find an answer of which of the depictions is the most correct one. This study won't be able to answer that question. However, depending on a way one looks at the field, or rather, how game studies is defined, the historical precursors can be discussed. While the questions like “Do we have some former traditions?” and “Are we born in the year one, and thus what studies can be seen as our forerunners?” are puzzling, it can be accepted that even without a strict definition of the field of game studies, some researches are usually considered to be the predecessors to the field of science we call game studies today.

In conclusion, there are several options of what can be meant with the “game studies”. While these options include different possibilities of what the focus of the study is during the present days, it is typical to run across certain names in different sources in the context of history of games studies.

They are not necessarily forerunners in the sense that they would contain strictly the same issues the current field does, but rather ones that are often perceived to form the history of the field of current game studies.

The two classic texts of game studies are Johan Huizinga's Homo Ludens (1950) and Roger Caillois's Man, Play, and Games (1961) (Juul, 2011, p. 10)

In his quote above, Juul presents two different, often cited sources. Huizinga discusses a lot of paidia-like play that is discussed briefly in chapter 3.3. However, he is best known for his concept called magic circle that explains the borderline between playing and non-playing (see the chapter 3.3 for further information) (Huizinga, 1971, p. 10). Along with the Huizinga, Caillois's work include his theory of division of play to competition, chance, simulation and vertigo (Juul, 2011, p. 10). His work forms background to game studies as well (Henricks, 2010). In addition to these two classics, Brian Sutton-Smith's *The Ambiguity of Play* is considered very important (see e.g. Frasca, 2007) and Wittgenstein, not so much as a game theoretic, but as one of the first academics to consider the definition of game, appears frequently in studies that examine the nature of games.

3.1. Previous Categorizations

As discussed, there are other ways of depicting the field as well: one of the most notable ones published lately is *Games Research Today: Analyzing the Academic Landscape 2000-2014* (Melcer et al., 2015). The study goes through a massive amount of data from the years 2000 to 2014 by analyzing themes and keywords and explaining relations between each theme and between the different venues using co-word and co-venue analysis. The top 10 keywords of the 20 most frequent themes (see Figure 3) are interesting, because this study will also discuss themes identified in the articles. Similar kind of keywords are identified and grouped in Melcer et al. study, and then named in the paper with short tags (T1, T2, etc.), so that each tagged group include keyword sets that constitute of 10 different terms related to each other. The keywords in the study are generated automatically from source data.

Searching and analyzing keywords and their interconnections is one way of conceiving the discipline. Another way of perceiving the field is to look the authors of studies. Sotamaa and Suominen (2013, pp. 109–121) have published a meta research of game studies examining the researchers. The research examines Finnish doctoral theses made in years 1998-2012 that are related to games. The purpose of this meta research is to analyze and represent the game study field and its evolution in Finland by taking a look to their authors' academic backgrounds. This study includes quantitative data of where the studies have been made and what fields of study the authors represent, as well as how the amount

of game related doctoral theses have increased. Quite naturally part of the researchers' findings is that the amount of game-related doctoral theses has grown since the turn of the century; the same seems to apply to the amount of any game-related research that is made.

In addition to these two studies other ways of perceiving the field of game studies exist as well: Konzack (2007, p. 110) divides the field based on eight rhetorics that include 1) technology, 2) economy, 3) anxiety, 4) learning, 5) gender, 6) ideology, 7) narratology and 8) ludology. This kind of a division has its benefits, for example digital games and gender studies is an area where three separate main points of view dominate the field: either the study focuses on how women are depicted in games (Dietz, 1998), how games are marketed and designed to different genders (Cassell & Jenkins, 1998) or what kind of a relationship the game community or gaming culture have towards different genders (see e.g. Schott & Horrell, 2000). Although the three can be divided into different categories based on the research question and context, studying them separately can prove problematic: for example, how to talk about designing a game for girls without thinking about the contents of the game?

In addition to these meta studies, there are several publications that summarize some specific branches of game studies. Nevertheless, it is surprising to notice how few the amount of literature reviews is in the field of game studies. Is it because of the young age of game studies or its fragmented nature, or lately seen rapid growth of the contents? Some literature reviews exist, though. Griffiths (1999, pp. 203–212) has summarized preceding digital game and aggression studies already at the end of the 1990's, which tells something about the game related study focus in the end of 20th century. In addition to Griffiths' study, an example of a literature review is Friman's (2015, pp. 23–38) study that accounts the joint area of gender studies and game studies. Friman explains how gender related studies are conducted in the field of game studies and what kind of interconnections there is between them. In her article, she has created a model that depicts the field of gendered game culture studies, and separated 10 themes within the studies (see the attached figure below). These literature reviews help to form an overall picture a wide, but somewhat fragmented and rapidly grown field of game studies.

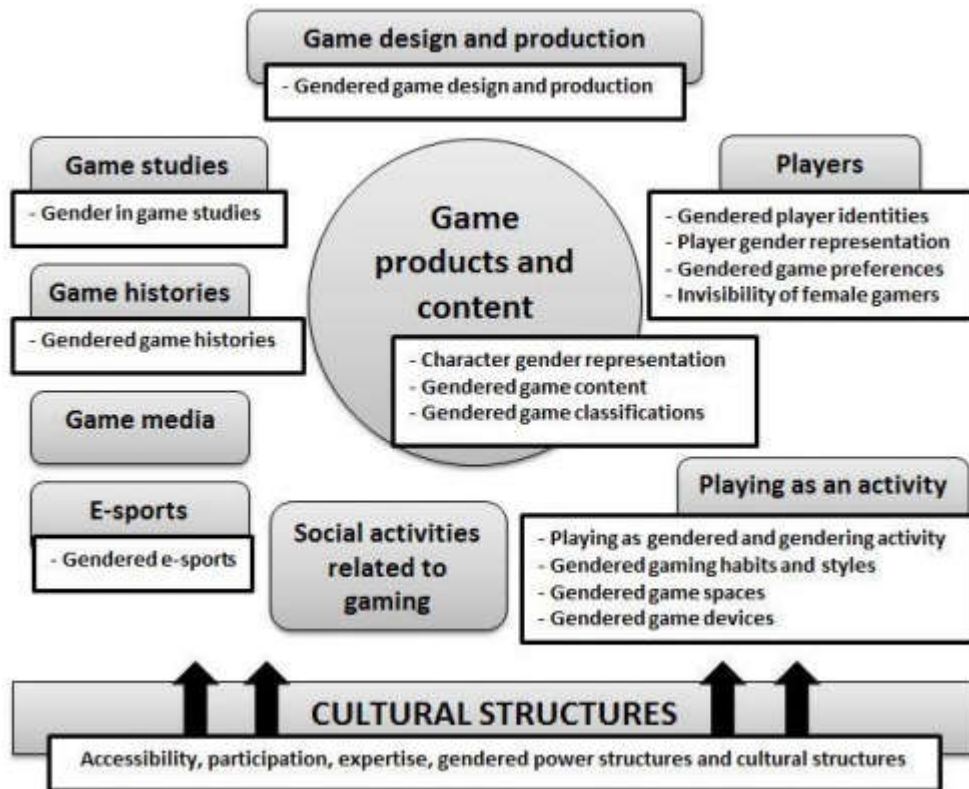


Figure 5: Friman (2015): Themes in Gendered Game Culture

3.2. Why the 3+1 Model?

I have constructed a model called 3+1 model that bases on the division both Mäyrä (2008) and Juul (2011) make. While both Mäyrä and Juul discuss the division not as a model or a categorization, but rather as a simplification to describe the variety of studies in game studies field, I use the division of theirs in construction of the 3+1 model. Obviously, the purpose of this study is not to convert a simplification into a tool without first examining it: As discussed in the chapter of research questions, this study attempts to examine if the 3+1 model can be used in categorizing the field of game studies.

Why not to use any of the other mentioned categorizations or ways of perceiving the field? Mäyrä's tripartite division is a good basis to construct the 3+1 model on: The focus is a little bit different compared to other categorizations, as it is on the subjects of the study instead of contents of the study, or the theme of it. Themes and study contents can vary in time, for example because of the development of the field, whereas a subject or subjects of study remain rather unchangeable. Naturally, the understanding of what the studied subjects are can change, but human sciences still study human and issues related to that, whereas biology still studies nature and phenomena connected to nature, even if our understanding of these subjects have changed over the time. Accordingly, this

means that while our understanding or definition of what games or player or context of these two are can change over the time, these are still the subjects that remain as the focus of the study.

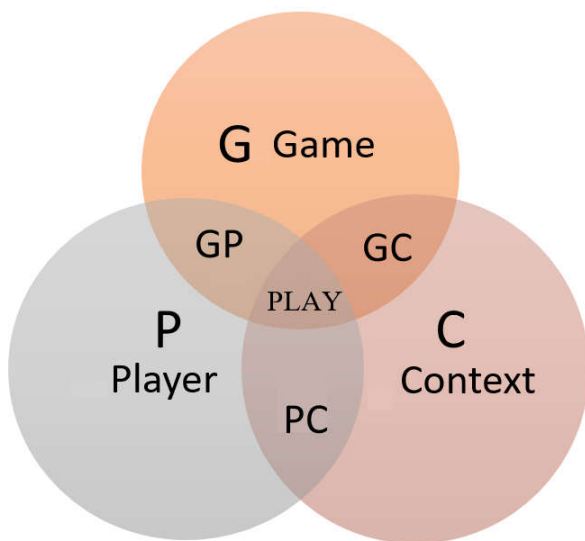


Figure 6: The 3+1 Model

While Juul (2011) mentions two key study subjects of game studies, game and player, and Mäyrä (2008) adds the contextual frames that surround both the player and the game, the 3+1 model has 7 categories all together: In addition to Game, Player, and Context, there are the categories of PLAY and the intersections that are Game and Player, Player and Context and Game and Context. Next, we will discuss two things: First, we will examine why the model won't simply use player/game division or player/game/context division, and second, we will consider if these categories are practical at the first place.

The intersections between each studied subject are made visible in the 3+1 model. Why is that necessary? Prior to this study, I was drafting a literature review about the connections of gender studies and game studies as an assignment to one course. Although a categorization was not my primary purpose in that paper, a structure of some kind had to be made in order to logically present the different topics. I chose to present the topics by dividing them into the game, player and context categories. However, this division proved problematic after a short while, since many of the papers specifically studied the interconnection of two different categories: for example, there were topics that asked questions like how a certain type of game promoted specific attitudes among the players and was thus able to potentially cause problems in the gamer community. Is that a study of game? Or does it study players, because the game impacts on them? Or should it be categorized to context after all, since the effects of the studied phenomena can be seen in a cultural level? Because of this kind of

studies and the questions they cause, the 3+1 model is designed as presented in the figure above, and the visualization clarifies the model by presenting the intersection categories too.

With the 3+1 model, I attempt to categorize the field of game studies – although this study is only a preliminary research of if the model can be used for categorizing the field. Maybe the most central difference compared to the basis is within the category of play. It is situated in the nexus of game, player and context, which means that these three categories form the action of play. As discussed later in the next chapter in more detail, the play here should be understood as a verb, action of playing, and more specifically one that differs from the play we discuss when, for example, children play with dolls or cars. The study of play(ing a game) is obviously a part of game studies, but how it should be positioned in relation to other categories and are all the three assumed elements always present when playing is examined, is among the questions this study attempts to shed light on. The way PLAY category is situated in relation to other categories in the field of game studies is important, because it is a profound part of game and player relation.

Is there studies of game and player as such, with no significant contextual frames? In the 3+1 model, the visualization implicates the possibility of that. Without question, all the studies of either player or game are always somehow linked to their context: However, the 3+1 model, as discussed, is designed to serve as a tool. When doing the categorization for studies, the core focus of analyzed study is captured in to each category. In a sense, this means that all the categories are wide, as they can include multiple types of studies as long as the core focus is in the subject that is one of the topics of categories – but on the other hand, this is also what defines and borders studies.

How about the second question of these exact categories? Why are the categories the ones described above? This question leads us to consider what are the requirements of successful categorization. Categorizing a field is drawing lines between included and excluded contents and placing included contents into either side of the line that separates categories from each other. Every categorization has its own flaws – in the end, categorization has a lot in common with doing a definition, and doing a definition is creating boundaries, that are always imperfect somehow: as Arjoranta (2014) writes, there is always contents that should be included but for some small reason they won't fit in. Thus, even the most successful categorization is not able to include all the topics there should be, while excluding the rest. With the categories I use in the 3+1 model, I am hoping to get as close as possible: According to the 3+1 model, if there is a subject that is not about game, player, their context, some combination of these, or play, it cannot be categorized. With the model, one should be unable to categorize studies that are not game studies. With this study it will be examined, if this applies to the research material. Next, we will need to discuss what the names of each category actually means.

3.3. The 3+1 Model Categories

The model presented in this thesis is called the 3+1 model. The name comes from the categories it has: there are the categories of game, player and context, and the intersection of all these three, play. The names of the categories are not self-evident, however: a short overview is needed to share the same understanding. Let us start with a definition of the first category in 3+1 model, the “game”. Reading game studies of different kinds, one will soon notice that the definition of the “game” is quite often absent. In many cases, games are referred to as “games” without further questions, but on the other hand, a wide variety of studies exist in order to focus solely on a definition of a concept game. It is not too hard for most people to recognize a game, whether it is a city simulation or a war game, but things get more complicated when a definition is needed (Wittgenstein, 2001; as cited in Arjoranta, 2015).

First, let’s take a short moment to consider the differences between the concepts of game and play. Not all languages make the difference between these two concepts (Salen & Zimmerman, 2004, p. 84). However, game scholars like to make a distinction between the words in order to be able to describe the subjects with a greater accuracy (Frasca, 2007, p. 38). Frasca (2001, pp. 7–11) writes that the difference is within the rules and the goals. He uses Caillois’s (Caillois & Barash, 1961, p. 13) and Piaget’s (1979) concepts *Paidia* and *Ludus* to categorize different types of game and play. *Paidia* is a less rule-restricted form of action without winners or losers while *ludus* stands for an action regulated by more complex rules and an outcome that includes winners and/or losers (Frasca, 2003, p. 8). The definition is quite accordingly with the one Maroney (2001) represents, who says that - - “A game is a form of play with goals and structure”. Caillois’s original definition of *Paidia* and *Ludus* lays the concepts in opposite ends of the same continuum, where the *ludus* end is strictly regulated form of action whereas *paidia* is free of any regulations. In the research materials of this paper, digital games are emphasized, and thus Frasca’s definition with winners and losers is more apt. Hence, the first category is named *game*, due to its *ludus*-like nature. While this decision is made, it is of course noted that there can be digital games that do not have winners nor losers.

Understanding what the G category means in 3+1 model is important. Due to the orientation of my research material sources (see chapter **Error! Reference source not found.**), the concept of game equals “digital game” quite often, but not always. Let’s briefly review different names of what I have been calling a digital game. Other expressions that could be used (and appear quite frequently in game studies) are, for example, *video games* as well as *computer games*. I believe that the concept of computer games is a bit distracting since it suggests that the game is played with a computer – but as we know, there are many other appliances that can run what we call a computer game in our colloquial

language. As regards video games, the term can imply that the visual characteristics of the game are somehow dominant over other features. Mäyrä uses the concept of digital games, stating that it is the most neutral of the available words (Mäyrä, 2008). Despite the word we choose to describe the games that are played with various technical appliances, the concept is used accordingly with the following Frasca's (2001, p. 4) definition:

In this work, I will use the term videogame in the broadest possible sense, including any forms of computer-based entertainment software, either textual or image-based, using any electronic platform such as personal computers or consoles and involving one or multiple players in a physical or networked environment.

However, games can refer to a wide variety of other types of actions, as well. When Caillois presents the concepts of *paidia* and *ludus*, he gives examples of different kind of games, including lottery, diabolos, boxing and merry-go-rounds (Caillois & Barash, 1961, p. 12): some of them possibly forms of actions that are not usually perceived games, or at least not the first ones to occur to one when thinking of the game definition. Are they at the heart of games and thus game studies, though? This depends on a definition, but for the time being, the question must be left open: It may be that it will never be answered, for the reason Arjoranta (2014) points out:

Games are a sociocultural phenomenon and, therefore, they should be defined and redefined in a hermeneutic circle that enhances our understanding of them.

In this study, the concept of game is understood in a broadest possible sense, including all forms of games.

The second category, the player, is quite self-evident – at least at the first glance. While there may be other meanings to “player” as well, the obvious one and the one used here is that it refers to a person who somehow participates into action of winning or losing a game (though this definition would force us to return to the different definitions of *ludus* – but we can agree to be in *entente cordiale* and bear in mind different definitions of *ludus* while we continue). But why to call that person a player rather than a gamer? Didn't we just conclude that the play is less structured and the game is more regulated action with the winners and losers? So why the inconsistency with the derivatives?

First of all, the concept of “player” seems to be far more used in academic context than the “gamer”. While “player” is a rather neutral name of a person who plays games, “gamer” has lots of connotations. In addition to that, the “gamer” is becoming – or probably has already become – a concept used in identity study of – gamers (See e.g. Condis, 2015; De Grove, Courtois, & Van Looy, 2015; Neys, Jansz, & Tan, 2014; Shaw, 2011). “Are you a gamer” is a valid question referring to a

person's tendency to play certain types of games (Salter & Blodgett, 2012) whereas "Are you a player" is a valid question as well, but with quite a different meaning: see the attached image below.

Which is the difference between "player" and "gamer"?

This topic is locked from further discussion.




 <p>Thumbler76 Member Since: June 6, 2006 Posts: 70</p>	<p>#1 Posted by Thumbler76 (70 posts) - 2 years, 10 months ago</p> <p>Here in italy I have always used the two words without considering some differences. Could anyone explain them to me? Thank you and happy holydays to everyone!</p>
 <p>Treflis Member Since: June 11, 2004 Posts: 12955</p>	<p>#2 Edited by Treflis (12955 posts) - 2 years, 10 months ago</p> <p>Gamer = A person who plays games</p> <p>Player = Someone within a game (Such as Player 1, Player 2 etc.)</p> <p>That's my view atleast</p>
 <p>HuggyBear1020 Member Since: October 26, 2013 Posts: 467</p>	<p>#3 Edited by HuggyBear1020 (467 posts) - 2 years, 10 months ago</p> <p>Player: Someone who has sex with many different females.</p> <p>Gamer: Someone who plays a lot of video games, and usually has about zero sex with females.</p>

Figure 7: Gamer Versus Player¹

While we treat the concept of "player" differently to the dialog above, the conversation presents the multiple meanings that one word can has. While we are doing an analysis that bases on words, we must remember that their meanings are not self-evident. In this study, the other meanings are irrelevant, but it is good to remember that when dealing with words, the semiotics must be taken into account.

Because of the study of identity exists and it is obviously bound with the term gamer instead of player, I try to avoid causing confusion by choosing to use the term player. "Gamer study" could be

¹ Retrieved 28/10/2016 from <http://www.gamespot.com/forums/offtopic-discussion-314159273/which-is-the-difference-between-player-and-gamer-31001945/>

understood to refer to players that identify themselves with a group of persons that play (certain type of) games. Thus, naming the “player” category to “gamer” category could indicate that the studies in that category are about the players that identify themselves to gamers, and that is not the purpose. In addition to that, returning to our definition of the noun game, the “player” is far more typical word to use when it comes to other than the digital game players or gamers. Is the concept of player wider? Probably, and even if that is not the usual hierarchy there is between these two concepts, I will account all the “gamer studies” into “player” category.

What about the third category? In the 3+1 model, context is probably the easiest one to define once we have a definition to other 2 preceding categories. Context refers to the physical and social dimensions of the playing, game and player, as well as to cultural and economic dimension and media. Context includes basically any phenomena that relates to, but is not, game, player or playing. However, this does not mean that anything could be categorized under the context. Even if a study mentioned a word “game” and had it occurring several times, if it is not bound into the subject, nor a focus or part of the research question of the study, I would not categorize it with the context label. The C category is purposely wide, as there are multiple approaches to game studies that are not focusing on player or game. Nevertheless, it is not a dumpster where all the remotely game-related content can be tossed. I will give an example of a study I would exclude: If one were to study how staring screen affects the vision, and there was a digital game that the participants played in order to ensure staring the screen for a desired time, I would not categorize this as a game study. Thus, if a “game”, “player” or “playing” can be replaced with something else without causing problems to the execution of a study, I won’t categorize it to C category (nor to any other category). As I later explain, the study must produce additional information of games, player, context of these two or playing in order to be counted as a game study.

Last but not least, there is a category of PLAY, that refers to play as an action, *playing*, that should not be confused with the noun play. Again there is the issue of differences between gaming and playing. Playing can refer to child’s play, for example, children can be playing seek and hide or tag backyard. In contrary, gaming is a concept referring quite strictly to the action of digital play. Playing includes gaming (Frasca, 2007). Huizinga’s (1971) concept of magic circle explains playing: Magic circle is a magic boundary that separates the action of playing from non-playing. Huizinga explains the concept of magic circle with an example of resistance to action: one can either violate the rules in magic circle or violate the rules against it. Break the rules in magic circle and you are called a cheater, or a wall-hacker if you happen to play *Counter-Strike*; but if you break the rules against the magic circle you are a spoilsport. (Huizinga, 1971, p. 11.) This can probably help us to understand the

difference between gaming and playing little bit better: Violating the action of playing is, according to the definition above, stepping in and out of the magic circle, whereas violating the action of gaming would happen inside the magic circle and be simply cheating in the game.

Again, this study is a meta study focusing on the articles written to the field of game studies. For that reason, it is important to try to match the names of the categories to the actual contents of articles, so that the name could be as descriptive as possible. Playing, as a wider concept with more meanings, is probably closer to what the different articles will study, and that is why it is chosen to be used as a name of the category instead of gaming, and it is understood in a way it is defined above.

Now that we have discussed the names of each category, what are the contents that are categorized into each category? The G category, games, is reserved for the studies that study either games from some point of view, that could include for example a narrative or characters in the game, or to studies that study one part of game and its interaction with some of the other sections – those studies combining a study of games with study of players or context are placed into Venn diagram's intersections GP or GC based on the viewpoint they have. The P category is reserved to the player, and its intersections GP and PC to the topics that study not only the player, but include part of the game or context study subjects into the research. The C category, context, is broad and somewhat abstract, as discussed in this chapter. The categories of PLAY, P and G, however hard to define, manage to describe their contents better. However, the context refers to all the game-related phenomena that there are to study, for example, digital game journalism, e-Sports, gamer communities, etc.

Finally, the nexus of all the three categories, PLAY, is the study of play as an action: this is because of the hypothesis that the study of play has all the three elements, although the emphasis can be in one or two. Play connects the game, the player and the cultural, physical and social dimensions of game into one place: Thus, I assume that if there is a study of play, it has all the three elements of game, player and context in it, and other way around: The study of all these three elements will eventually be a discussion of play(ing). However, there are phenomena like zero-player games (Björk & Juul, 2012), meaning the games that do not involve a player. Examining phenomena of this kind are not in the core of this study, but rather something we must be aware of, when considering this kind of division. How come the zero-player games do not refute instantly my assumption of GPC being equal to PLAY? It does challenge it, but rather than refuting the assumption, it challenges our comprehension of players, or games. However, the analysis can hopefully provide some more information of if the PLAY equals the GPC.

4. Analysis

4.1. Categorization of Articles

Since the research material of this study is relatively small, only 24 articles altogether, I will analyze each of them separately. In this chapter, the analysis is discussed step by step. By picking the sentences that affect my interpretation I show, how the analyzed articles can be categorized according to the 3+1 model. For this analysis, I use mostly the authors' statements of what the article is about along with the meta-data and research questions found in each article. It must be noted, though, that there is always a chance that the actual contents of the article do not match with the author's statements of the article contents. However, even if that is the case with some of the articles, this is not much of a problem for the analysis: The focus is on testing how the 3+1 model suits for categorization, rather than doing a categorization to a particular set of articles.

I use italics and indentation to highlight the parts that are picked from the original articles. The category of each article is first listed along with the identified article's theme. I call the categories by their abbreviations in order to avoid confusion, thus, player is a person who plays a game while P is the player category in the 3+1 model. Similarly, G stands for game category and C for context category, and any combination of them (GP, GC, PC) for categories in the intersections of Venn diagram, and the PLAY category is written with upper case. The sentences picked from the articles are attached here and next their analysis is presented. After analyzing each article, I will discuss the results of categorization category by category, and see how the identified themes fit in to the categories. After that, in a results chapter I discuss the categorization process as well as any other additional topics that arise during the analysis.

ToDIGRA: Remembering & Exhibiting Games Past: The Popular Memory Archive (Stuckey, Swalwell, Ndalianis, & Vries, 2015)

Category: C

Theme: Player memories of games

This article surveys activity on the site and offers some preliminary evaluation of the significance of the online contributions. From this we consider the discursive, inclusive and questioning practices of the portal as a means of exhibiting historic games. [...] This paper surveys the activity of the Popular Memory Archive over the first eight months of it going live. We reflect on the expectations of the project and discuss the

significance of the contributions received online. [...] In this article, we've focused on player memory as a valuable resource [...]

The question that must be asked based on this article is the following: How do we see the position of “players” in this article? The subject of this article is the activity and the memories of “players”, but the players are not examined in this article as persons who actually play something. Despite the fact they are called players, they are not interesting from the perspective of this study as players but rather as writers’ to the forum. In addition, the article does not examine any individual game, but instead the contributions to the Popular Memory Archive. However, the study explicitly produces additional information of games’ significance in culture, and thus it can be categorized – it belongs to the category C.

ToDIGRA: Conceptualising Inspiration Networks in Game Design (Ho, Tomitsch, & Bednarz, 2015)

Category: C

Theme: Inspiration in design process

This paper examines the concept of inspiration and proposes a design process for inspiration networks using survey data from Global Game Jam. [...] This paper is not an algorithmic instruction to computerise the act of drawing, but to conceptualise the elements of drawing and exemplify the meanings of elements within the drawing itself. [...] This article explores game design ideas generated from brainstorming activities. It is not a theoretical piece on why ideas exist (e.g. Ronald et al. 2010), nor how ideas are generated (e.g. Tschang and Szczypula 2006; Hagen 2009, 2010; Kultima and Alha 2011), but what ideas are created, used, and how they are connected by their source of inspiration. We pose the research question, “What are inspiration networks in game design?” and specifically, “What inspiration networks can be found in Global Game Jam?”

Although one could first assume that all the design related topics belong under the G category, there are, as a matter of fact, various ways to examine the field of game design. This particular one discusses survey data from Global Game Jam that includes questions of inspiration networks and what inspiration networks can be found in this particular event. Is this a game study? An obvious answer is yes, since there are questions that discuss game design and thus produce data from games. But how does a study like this position in the field? Since the focus is not on players nor in the game itself, the

only option is context. Does this study fit in the C category though? It does not discuss directly design as such but rather actions connected to design, such as brainstorming and networking. As such, this article discusses phenomena that are contextual to game's and their design, and thus it can be categorized as C.

ToDIGRA: “Blackout!” Unpacking the Black Box of the Game Event (Conway & Trevillian, 2015)

Category: GPC or PLAY

Theme: Game's essence

In this article we propose a new ontology for games, synthesising phenomenology, Latourian Actor-Network Theory and Goffmanian frame analysis. In doing so we offer a robust, minimal and practical model for the analyst and designer, that clearly illustrates the network of objects within the 'Black Box' of any game, illuminating how each object (from player to memory card to sunlight) may move between three levels of the Game Event: Social World, Operative World and Character World. Abbreviating these worlds, a shorthand for the model is SOC (Social/Operative/Character). [...] the moment of play, the 'Game Event'

This article is particularly interesting when thinking of the categorization. At first, one may think that it studies games: after all, it states that it will propose a new ontology for games. However, when reading the article, one soon notices that the focus is not solely on a game, but rather in the listed levels of the situation called Game Event in the article. These elements are studied in relation to a game, which is why a game is one subject or variable of the study, but both the player and the context play important roles in the article as well. Ergo, the study would have all the three elements, GC and P, which, according to the visualization of the 3+1 model, would mean that the study is actually a study of play. However, placing this study to the PLAY category feels a bit misleading. Although the study examines a “Game Event” that translates into playing, does it really study playing? It surely discusses playing through the different levels. Let us categorize it as a GPC or PLAY category and discuss this problem within the results.

ToDIGRA: Tokimeki Memorial Girl's Side: Enacting femininity to avoid dying alone (Richards, 2015)

Category: GC

Theme: Games' impact on culture

This paper examines the Japanese dating simulator video game, Tokimeki Memorial Girl's Side, the first female protagonist version in the Tokimeki Memorial series. Analysis of the game mechanics, characterisations, player options and their results demonstrate that the game assumes and reinforces a range of cultural norms and social expectations in relation to gender performativity, courting and dating, relationships and intimacy. I discuss how the gameplay actively produces particular heteronormative perspectives on how girls and young women should enact femininity if they are to avoid being alone at the end of the game, and, for that matter, in life. [...] This paper has discussed how the gameplay of Tokimemi Memorial Girl's Side actively produces particular heteronormative perspectives on how girls and young women should enact femininity if they are to avoid being alone at the end of the game, and, for that matter, in life.

This article is a great example of GC category. It studies one game and discusses its impact on culture. Although a player is in between the game and the culture, this article bypasses the player and focuses on the bigger picture, which is why it is not GP or GPC (PLAY) study. If there was a question of how this player's behavior changes after the play session, this article would be obviously GP study, but that is not the case here.

ToDIGRA: Affect, Responsibility, and How Modes of Engagement Shape the Experience of Videogames (Veale, 2015)

Category: PG

Theme: Player engagement

In this article, I argue that a perception of responsibility on the part of the person playing a game is a natural consequence of dynamics within the 'messy, hybrid assemblage' that Brendan Keogh uses to describe the experience of game play. [...] The analytical framework I present here explores the modes of engagement common to the hybrid of videogame play, and how these modes of engagement result in affectively distinct experiences. - - In this paper I have argued that the underlying substrate of a text is not neutral, and seemingly trivial shifts can have dramatic consequences for our experiences of storytelling. [...] Even though the territory covered in this article has been focused solely on exploring what sets apart the experience of videogame texts [...]

In this article there are several things to take into account within the analysis. The most important one is the relation of playing and player: the article studies an experience of a player, but that experience quite obviously occurs while playing. However, the aim of the article is to explore “what sets apart the experience of video game texts” and thus the focus is not on playing as much as on the video game contents and the impact it has on its recipient, the player. In the core of the article is the question of the player’s and game’s interaction and player’s engagement to game, and playing is but a way to express this engagement. This is why it is categorized to PG category.

Game Studies: Self-Reflexivity and Humor in Adventure Games (Giappone, 2015)

Category: PG

Theme: Player expectations and humor in games

This article focuses primarily on the “adventure game” genre, its metafictional humor, and tendency towards self-parody in both its formative stage and its more recent ensuing nostalgic turn, with particular reference to Zork (Infocom, 1980), LucasArts’ Monkey Island games (1990-2000), and Telltale’s parodic-nostalgic “Reality 2.0” (Sam and Max, 2007). The article highlights a tendency towards parody on the levels of intertextual allusion, metafictional self-reflexivity, and meta-mediality [...] This article considers the process (the formation of its countergenre) in relation to adventure games, working towards the suggestion that humor is a frequent and often crucial aspect in the experience of playing such a game (and a key factor contributing towards their replayability). [...] The comic element will first be considered in its relation to players’ expectations for the genre. The limitations and possibilities available to the player, and the opportunity for digression and detour, will be discussed, giving consideration to the reduction in available actions from text to graphic adventure (see Fernández Vara 2009, pp. 114-5).

This article starts with describing specific games it will study and stating the point of view it will examine while discussing these games. Thus, the G category is obvious. However, the article continues by describing the means it will use in the research: while the research question makes a question of humor and self-reflexivity in games, this topic is considered in relation to a player. This aspect brings the player as a central variable of the study: hence, this study is categorized to the GP category.

Game Studies: The Demarcation Problem in Multiplayer Games: Boundary-Work in EVE Online's eSport (Arnold, 2015)

Category: PC

Theme: Demarcation of social rules in MMORPG

This paper argues that boundary-work is a constructive theory for understanding the processes through which players develop and dispute informal social rules that mediate play in online multiplayer games. The argument is illustrated through application of a boundary-work analysis to a disputed instance of play in an EVE Online tournament. [...] In this paper we argue that the sociological theory of boundary-work, developed to understand the demarcation problem in science, constructively describes how informal rules are negotiated by players. [...] In this paper we will demonstrate how players use these forms of rhetorical works to demarcate between play which is legitimate or illegitimate and to establish and maintain the informal game rules. [...] As stated in the introduction to this paper, we argue that informal rules are developed by players of multiplayer games as part of an effort to collectively maximize the interests (typically, to have fun) of all players

In this article, there are two key variables: players and community. The study researches how players discuss the informal rules of play in online multiplayer games. The discussion happens in relation to other players, and these other players constitute a community of some kind. In this sense, the study is, in addition to player study, a study of context in which the playing and the players operate. Hence, the category is PC.

Game Studies: Me and Lee: Identification and the Play of Attraction in The Walking Dead (Bell, 2015)

Category: PLAY

Theme: Decision making during the play

This paper reports on microethnographic research of players' game-based interactions and decisions, involving Telltale's The Walking Dead (Telltale, 2012; henceforth, TWD) and our subsequent discussions with them. [...] the goal of this research is to generate descriptively-driven insights into the 'play' of affect generated by TWD, rather than to produce generalizable claims about players. [...] From the highly specific context of this study, in which we both observed players and invited them

to account for their actions during play, we infer the presence of four recurrent, attractive forces that affected their decisions and rationalizations. [...] The task this paper lays out, therefore, is to apply this provisional framework to other game contexts and experiences, and to develop more finely-tuned methodological and theoretical tools for articulating the complex, messy and dynamic interplay of attractors shaping identification.

As this article quite specifically states, the goal of it is produce more information of play rather than player. Despite the fact the article studies player's made decision, it does not actually study players: if it did, the research question would have a different focus, like for example a one asking the differences between decision making in young and old player groups or male and female players. Now, instead, players are not interesting in this study apart from the fact that they act as decision makers, but the focus is on the interaction and decision making processes during the play. Thus, this article produces additional information about not the players, but about playing, and can be categorized as PLAY.

Game Studies: No Mastery Without Mystery: Dark Souls and the Ludic Sublime (Vella, 2015)

Category: G

Theme: Aesthetics and ludic sublime in a game

This paper argues that these discourses align with what Jacques Rancière termed the "representative regime" of art, and that, instead, much can be gained by adopting the perspective of the "aesthetic regime", which considers the artwork not as an objective system or logos, but as an object of thought for its recipient. [...] My argument in this paper shall be that the feeling of the sublime constitutes a necessary moment in the aesthetic encounter with digital games, and that a consideration of its formal operations can focus our attention on an aspect of the game as an object of experience that has remained under-examined.

This article studies a concept of ludic sublime that can exist in a game. While the experience of ludic sublime is reflected to the person experiencing it (which, of course, is a player in this context), the position of a player is much similar to the person who, in a famous philosophical question, is there not only witnessing but arguably causing the falling tree to make a voice. Thus, the player is not that much a variable to this study but rather a frame that reflects the experience of ludic sublime. The focus is on the one aspect of a game, and there is one particular game as an example: Dark Souls.

Both these two things are to be interpreted in a way that guides the categorization, and thus this one is clearly G.

Eludamos: From NES-4021 to moSMB3.wmv: Speedrunning the Serial Interface (LeMieux, 2014)

Category: PLAY

Theme: Seriality in speedruns

This essay explores digital seriality through the history and practice of tool-assisted speedrunning, a form of metagaming that stages a ludic intervention at the level of serial interfacing and subsequently disrupts the collective serialization of videogames as a mass medium. [...] From Nintendo's NES-4021 shift register to Morimoto's moSMB.wmv viral video, this essay explores the history and practice of "tool-assisted speedrunning," a form of metagaming that plays the serial interface. [...] The NES controller is both a serial interface and an example of Denson and Jahn-Sudmann's concept of "serial interfacing." For Denson and Jahn-Sudmann (2013, p. 11), serial interfacing qualitatively describes the "processes of temporal-serial experience that transpire at the interface between humans and digital technologies." This essay explores at greater length how forms of digital seriality also occur between nonhuman actors.

To categorize this article, let us first consider the meaning of tool-assisted speedrunning. As the article states, it is a form of metagaming: players speedrunning exploit various bugs or glitches in games and are thus able to play through levels and games in speed that would otherwise be impossible. Hence, speedrunning is a form of playing. This article, however, is a bit problematic to categorize: while it uses playing as a frame to this study, the focus is on the digital seriality. As the visualization of my model shows, my hypothesis includes an assumption that the PLAY category includes implicitly all the three elements of game, player and context. Yet, this article challenges that conception. While the game and the context (as a physical appliance) are clearly present, the player dimension is obviously nothing more than a self-evident notion of player being present whenever playing happens. In addition, focus being somewhere other than in research that adds knowledge of games themselves, categorizing this study to the PLAY category feels misleading. However, if this study is a game study, as it intuitively seems to be, it is indeed studying playing. Therefore, the category must be PLAY, but the further discussion of the visualization of the 3+1 model is needed.

Eludamos: “Tap, tap, flap, flap.” Ludic Seriality, Digitality, and the Finger (Heilmann, 2014)

Category: PLAY

Theme: Digitality in games and digital media

This article tries to answer the question, “What is ‘digital’ about digital media?” Building on the concept of ludic seriality as proposed by Shane Denson and Andreas Jahn-Sudmann and taking as an example the popular mobile Game Flappy Bird, it discusses the serial character of gameplay, in particular the intra-ludic serialization of in-game and operator actions. The article argues that the principle of digitality relates to the fingers of the human hand and the corresponding cultural techniques, from the ancient art of finger-counting which brought forth the abstract number concept to our current every day use of buttons and keys to operate digital devices.

Among the research material, this particular article is one of the hardest ones to categorize. While it discusses gameplay, the focus is on seriality that occurs in game and incarnates to physical repetition of certain player performed moves. So, should this one be categorized to C, PLAY or even to P category? While the focus of the article is in the seriality of digital media and digital games, I think that the context in which this issue is examined – the gameplay – is the significant one to consider when categorizing this article. Thus, it will be categorized into PLAY section.

Eludamos: Prolonging the Magic: The political economy of the 7th generation console game (Nieborg, 2014)

Category: GC

Theme: The nature of triple-A games

This paper draws on critical political economic theory to discuss the implications of the dominant mode of production and circulation of “Triple-A” or blockbuster console games. [...] The popular Call of Duty series of first person shooters serves as case study to demonstrate how game publisher Activision Blizzard not only formalized and institutionalized the annualization of the serialization strategy, the publisher also upped the ante in terms of post-launch content, theorized as “branched serialization [...] The goal of this paper, then, is to critically engage with the seventh generation blockbuster console game, specifically by drawing on political economic theory. [...] Triple-A game will be theorized here as a cultural commodity [...] The core of my argument is that the Triple-A game is neither simply a discrete cultural commodity, nor just a mere object

of play, but is best understood as an incremental and seemingly infinite stream of renewable gaming experiences.

In this article the focus is on serialization of certain game titles that are triple-A games or blockbuster console games. The focus is on the renewable gaming experience that products like triple-A games can offer and in addition a certain game is used as a case study example. The C category is obvious: but is this rather a C or GC study? Since this study produces an additional information of a specific game, Call of Duty, it can be categorized to GC-category. Although this study does not examine the contents of game, the focus is still on the game and phenomena related to it. It studies Call of Duty as an example of all the triple-A games and examines annualization and serialization as a question related to context of games, which is why the C category is also obvious. However, this kind of studies raise the question how strictly we should define each category. Is it sufficient that the study produces additional information of, for example, game, or does the information have to be of specific quality? This issue must be discussed further later in the results.

Eludamos: Finishing the Fight, One Step at a Time: Seriality in Bungie's Halo (Bonk, 2014)

Category: GC

Theme: Seriality in a game series

Focusing particularly on the original series produced by American video game developer Bungie, this paper seeks to explore the different modes of seriality that Halo expresses, elicits, and engages with in its various contexts of production, consumption, and textual as well as ludic interfacing. [...] Thus, in an effort to give a more detailed explanation of the role intra-ludic seriality plays in Halo as a whole, a large part of this paper will consist of a close reading of Halo 3's first chapter. [...] This paper seeks to explore the different modes of seriality that Halo engages with. It thus traces Halo's narrative across what Denson and Jahn-Sudmann have called "intra-ludic, inter-ludic and para-ludic" boundaries (2013). [...] Beginning with the big picture of Halo as a transmedia universe, this paper will analyze the relationships between the different layers of seriality that make up Halo as a singular, yet disjointed, narrative [...] In this paper, I have shown that Halo 3 is not just part of a larger series, but that it is also serialized in itself.

This article studies seriality, too. Two dimensions how this article belong to the game studies can be identified: first, it studies a game, specifically Halo 3, from the seriality point of view. Second, it

discusses Halo's transmedia universe, including other media forms as well. These media forms include books, videos etc. While the study focuses on close-reading the Halo 3 first chapter, the transmediality is the background framing the study and guiding the interpretation during the analysis. Thus, there is the G category strongly present, but as the approach originates from transmedial point of view, there is also the category of C that can be identified.

Eludamos: “Did you shoot the girl in the street?” – On the Digital Seriality of The Walking Dead (Sulimma, 2014)

Category: GC

Theme: Seriality in production, reception and game-play

With the Walking Dead game series, I tackle a very extensive and rich material in this paper and show how digital seriality accounts for very specific practices of production, reception, as well as game-play. The first section focuses on the inter-ludic seriality of the game's release and structuring as reminiscent of TV series (seasons, episodes, “previously on”) as well as the comic book-aesthetic and transmedia storytelling as para-ludic seriality. [...] In this paper I analyze the game series The Walking Dead as a case study in the specific production and reception practices that games and game cultures foster in the digital environs of what has been described as convergence culture (Jenkins 2006) or analyzed in terms of digital storytelling (Alexander 2011), immersive narratives (Rose 2012), and spreadable media (Jenkins, Ford, and Green 2013). [...] This analysis explores how the game actively encourages certain types of engagement by asking gamers to recall significant moments and to remember the decisions they made. [...] I will look at how the game series provides gamers with an alternative take on the theme of parenthood—a theme which occupies a central position in all extensions of the franchise — thus involving players not only in an intermedial process of hermeneutic activity but also in a serialized process of community.

According to my analysis, this article has two central elements: one of them is focused on the themes outside the game contents, the seriality in production, reception and in game-play. The other, however, focuses on the game contents and in the specific theme of parenting. There is an aspect of gamers as well, but they are merely mentioned as the recipients and objects and not studied as such. Hence, this study can be categorized to CG category.

Eludamos: Seriality's Ludic Promise: Film Serials and the Pre-History of Digital Gaming
(Higgins, 2014)

Category: C

Theme: Prehistory of digital games

This essay explores the American Sound Serial film as part of a continuum to which digital gaming may also belong. By drawing on concepts derived from the study of video games, this study broadens our understanding of youth-oriented films produced in Hollywood from the 1930s to the mid 1950s. In turn, this provides a new vantage on continuities between old and new serial forms, and sheds light on digital gaming's pre-history. [...] Where the storied debate over "ludological" and "narratological" approaches to digital gaming signalled the desire to distinguish games from previous media, my aim here is to return to the history of a narrative form equipped with ludic awareness and cast it as part of a continuum to which digital gaming may also belong.

This study focuses on issues that are not strictly game centered, but by doing so, it is also able to draw conclusions of game related phenomena. The topic it touches upon is the prehistory of digital games. Since this study produces new information on games – of their origin – it is a game study, and can be categorized to the C category.

Eludamos: Types and Bytes. Ludic Seriality and Digital Typography (Gotto, 2014)

Category: G

Theme: interrelation of text and icon in digital games

This essay concentrates on the interrelation of text and icon in videogames. The first section focuses on the medial quality of writing and textuality as a formal system, the second discusses the dimension of the image as an iconic extension of the textual format, and the third brings together both lines of thought to debate the operational efficiency of digital games as a way of constituting new forms of ludic literacy. [...] Type Rider (2013), a game that both implements the theme of writing's transformation and, by means of its own specific medial properties, is part of its progression, serves as an example. In the following three sections, I will investigate this game as a critical space for rethinking assumptions around writing techniques as well as the historical frameworks through which they have been consistently addressed and evaluated. [...] This essay aims to demonstrate that the cultural technique of typing is crucial in this

process. It not only allows for serial intervention (as a way of navigation), it can also transform letters into objects deprived of their literary function (as a way of representation). [...] Thus, digital games are more than archives and systems, more than apparatuses and applications. They are laboratories in which we have to move and prove ourselves.

In this study the focus is obviously on games and their ability to transform and construct meanings. Type Rider is used as an example. While the examination produces more information on both ludic seriality and digital typography, the subject of study is a game. Hence, this article can be categorized to G category.

Eludamos: Digital Seriality as Structure and Process (Maeder & Wentz, 2014)

Category: C

Theme: Digital seriality in web-based media

The article analyzes and theorizes oftentimes overlooked phenomena of digital seriality in web-based media. Digital seriality can be located on two different levels: on the structural level of web interfaces, digital seriality concerns the web as a structure of interconnected websites, as well as the organizational forms through which the operational images of web interfaces establish, manage, and regulate these connections. [...] While the article does not aim at describing the entirety of networks in terms of seriality, serial operations and procedures have to be understood as playing a distinct and significant role in the digital realm.

This article is not directly related to a study of game nor a player, but it examines a topic that is important and closely related to seriality of digital games. The article discusses digital seriality in web-based media, and in e.g. the let's play videos, that are recorded videos of game play. Although this article is a bit side of the core focus of game studies, it studies a related issue that can be categorized into the C-category.

Eludamos: The Eternal Recurrence of All Bits: How Historicizing Video Game Series Transform Factual History into Affective Historicity (Winnerling, 2014)

Category: G

Theme: How games represent history

Video games that feature historical content – what I term ‘historicizing’ video games – often come in series. Civilization (I–V), Age of Empires (I–IV), Anno (5 pts.), Monkey Island (5 pts.), Total War (7 pts.), Assassin’s Creed (I–IV), to name but a few, are heavily serialized in that they all, save for their respective first incarnations, point continuously to the other titles in their series’, be it on a structural level or with regard to content. [...] First, semiotically such a set of game titles is aptly described in Deleuze/Guattari-terms as an instance of the paranoid-despotic regime of signs, where signs signify nothing but other signs, bound up in an endless virtual cycle. And second, philosophically this may be taken as a prime instance of the Nietzschean ‘eternal recurrence of all things’. Both readings converge in the implication that as these games’ series seemingly stage ‘history’, they unlink history and temporality, installing a chron-ological framing. [...] My argument in this paper revolves centrally around this difference between ‘factual history’ and ‘affective historicity’—terms that I will try to define briefly.

In this study, the focus is on the history and its representation in games. The study discusses the seriality within published titles (that have examples listed above) too, but the point is in the historical features that become affective historicity when transformed into a playable format. This study clearly produces additional info of how the games are able to present certain phenomenon and thus, it will be categorized with a G tag.

Eludamos: Gandalf on the Death Star: Levels of Seriality between Bricks, Bits, and Blockbusters (Nørgård & Toft-Nielsen, 2014)

Category: C

Theme: Playful seriality across different mediums

[...]the article develops an analytical comprehension of and conceptual framework for digital seriality through (i) taking a more play(er)centric and interactional approach field that a more in line with the concept of “new serialities,” (ii) uncovering and establishing the transformative and transgressive nature of play(er)centric digital seriality that emerge from actual “serialities-in-use,” and (iii) developing frameworks and conceptual models for serialities-in-use that are able to embrace these emerging play(er)centric aspects of digital seriality. [...] Overall, the article posits digital seriality, as it e.g. emerges through experiencing LEGO Star Wars and LEGO The Lord of the Rings games and franchises, as something concurrently material (bricks &

engaged technologies) and immaterial (bits & perceived worlds). [...] The goal is to grasp and conceptualize such new playful seriality-franchises like LEGO, World of Warcraft, or My Little Pony that transcend narrow franchise-transmitted world-building conceptions of seriality. [...] Thus, we explore not only "the aesthetic forms and cultural practices of serialization as they are articulated in and around interactive digital media" (Denson and Jahn-Sudmann 2013, pp. 10-11) but also the kinaesthetic forms and practices of interaction design practices at the heart of playful serialities.

In this article, the play and player refers to paidia-like play and its performer. Thus, it does not discuss an action that is bind to games, and despite the player-centricity, it cannot be categorized to the P category. However, the game related theme in the article can be discovered within the way game affects to playing (paidia playing). As the topic states, levels of seriality are examined between the “bricks” which means legos, “bits” that are referring to digital formats of examined titles, particularly games, and blockbusters: thus, this study produces information of how games are transferred into play (paidia) and what kind of interconnections can be found in between the different forms, and for that reason it can be categorized into the C category.

Games and Culture: Art Video Games Ritual Communication of Feelings in the Digital Era
(Díaz & Tungtjitcharoen, 2015)

Category: GP

Theme: representation and communication in (art) games

This study conducted analytical and semiexperimental research with the purpose of testing if art video games serve as a form of transmission of social representations and feelings. Accordingly, a free-association questionnaire was used after participants played the game The Graveyard. [...] The main objective of the study is to inquire how video games, particularly art video games, work as an art form by eliciting some representations in the people playing them. What is more, the current study aims to analyze how those representations are linked to the emotions that are triggered when a person elicits the representations via video gaming. [...] The second objective of the study is to prove how these representations and feelings are socially shared among the people playing the game and assisted by the game designers. [...] However, the representations shared among participants were not similar to the ones that game designers expected.

This study focuses on art games and how their representations are linked to emotions. The focus of this study is on art games and their capacity to elicit certain feelings. While players are in the receiver end of representation, they are also the ones that share and give meanings to experiences: this study asks a question of if the players' experience and game designers' expectation are alike, and thus this study also examines players. So, it will be categorized to GP category.

Games and Culture: When Life Mattered: The Politics of the Real in Video Games' Reappropriation of History, Myth, and Ritual (Hong, 2015)

Category: G

Theme: History in games

Games borrow ceaselessly from the past to constitute themselves. This locates the medium at the heart of our contemporary obsession with how to engage the past and the "real." [...] This article analyzes three key aspects of liminoid games: (1) techniques of reappropriation during production, (2) rules and expectations of engagement with the past and the "real" that games offer, and (3) emergent ways in which player communities, discourses, and productions recalibrate those politics of engagement. [...] Extending this line of thought, this article focuses on one key way in which games make use of history, myth, and ritual: their invocation of a time when life mattered, a heroic and superlative past. [...] Tracing the reappropriation of history, myth, and ritual by games and their user-created paratexts, such as mods and Let's Plays (LPs), this article reflects on the ways in which new media are inaugurating a phenomenology particular to their technological and industrial structures.

Although this article lists three different aspects of research, all these approaches focus on games. There is also some discussion of Let's Plays and mods attached, but these constitute a smaller part of the study and, in addition, are linked back to games as well. Both the research question and the frame are located into games and thus, this is a study of G category.

Games and Culture: User-Generated Video Gaming: Little Big Planet and Participatory Cultures in Italy (Comunello & Mulargia, 2015)

Category: P

Theme: Participatory practices among the players

This article focuses on the participatory practices related to Little Big Planet (LBP) 1, a PlayStation platform video game that encourages users to create and share their own gaming levels. [...] A total of 8,829 Italian PlayStation Network (PSN) users were surveyed regarding their gaming practices, their attitude toward digital technology, and their LBP usage experiences. [...] The aim of our article is to analyze the participatory practices related to Little Big Planet (LBP) [...] The article refers to the empirical findings of a broader research project aiming at studying the relations between gaming and social network sites, with regard to the PSN environment and to the Italian population. [...] The key purpose of this contribution is to explore the participatory practices related to LBP 1, also focusing on the characteristics of the users who appear to be most actively engaged.

While the article states that the gaming practices of players were surveyed, this study is not a study of PLAY but rather it focuses on players. There is the question of participatory practices and the characteristics of the users, which both indicate that the study concentrates on players. Although participatory practices could be surveyed regarding the game-related forum as well, this particular study examines in-game practices, which is why the players are in the player position, and not for example in a forum writer position, in this study. Thus, this is a P category study.

Games and Culture: From Discussion Forum to Discursive Studio: Learning and Creativity in Design-Oriented Affinity Spaces (Marone, 2015)

Category: P

Theme: learning through games

This study analyzes one of these design-driven environments dedicated to game levels created with the popular series LittleBigPlanet. [...] This study examines threads/posts retrieved from the LittleBigPlanet Central discussion forum, which is one of the largest online communities dedicated to the LittleBigPlanet series. [...] the primary purpose of this study was to advance the understanding of how the participants of a design-driven discussion forum learn and create together by socially constructing a “studio environment,” in which they present, discuss, and critique their creations. [...] It also contributes to the understanding of the dynamics of design-driven participation in informal online spaces, which carries implications for the interpretation and development of online educational environments that promote social learning and creativity. [...] Building on these studies, in the effort to contribute to affinity space

research and methodology, this study calls attention to the specificity of online environments in which social interactions are driven by design, as participants present, discuss, and critique user-generated artifacts.

In this study the focus is not in a game, although one game, LittleBigPlanet, is a context for this study. Instead, the focus is on players, although these players are also studied as designers here – this is due to the nature of the game. The players’ posts written in the forum are examined from the learning aspect. Because of the study subject and the focus of this study, the article can be categorized into the P category.

Games and Culture: Beyond Today’s Video Game Rating Systems: A Critical Approach to PEGI and ESRB, and Proposed Improvements (Felini, 2015)

Category: C

Theme: Digital games' age limits

This article offers a critical examination of the European PEGI and the North American ESRB rating systems, and, starting from this analysis, suggests improvements that could make video game rating systems more appropriate in terms of their function as parental guidance. [...] Similar to my earlier studies on television and the Internet (Felini, 2007, 2008), the aim of this article is to analyze critically—from a pedagogical (not a legal) point of view—the initiatives taken to protect children from the (real or presumed) risks of video games. To do so, I mainly focus on current rating practices and suggest ways for their possible enhancement.

This article is a good example of C category. It examines the rating system of games, but it is not a study of a game because of the approach: it does not focus on any individual game but rather to qualities of the two rating systems. Thus, it is a good example of a study that produces additional information of games but does not examine a game or a player, and for that reason it is categorized into C category.

4.2. Analysis by Category

All the analyzed articles fitted in to the 3+1 model categories. However, some of the articles as discussed above did challenge the 3+1 model. They are discussed further below. Next, a table of study results is attached.

Table 2: The categorization of research materials

Journal	Topic	Theme	P/G/C/PLAY
ToDIGRA	Remembering & Exhibiting Games Past: The Popular Memory Archive	Player memories of games	C
ToDIGRA	Conceptualising Inspiration Networks in Game Design	Inspiration in design process	C
ToDIGRA	“Blackout!” Unpacking the Black Box of the Game Event	Game's essence	PLAY or GPC
ToDIGRA	Tokimeki Memorial Girl’s Side: Enacting femininity to avoid dying alone	Games' impact on culture	GC
ToDIGRA	Affect, Responsibility, and How Modes of Engagement Shape the Experience of Videogames	Player engagement	GP
Game Studies	Self-Reflexivity and Humor in Adventure Games	Player expectations and humor in games	GP
Game Studies	The Demarcation Problem in Multiplayer Games: Boundary-Work in EVE Online's eSport	Demarcation of social rules in MMORPG	PC
Game Studies	Me and Lee: Identification and the Play of Attraction in The Walking Dead	Decision making during play	PLAY
Game Studies	No Mastery Without Mystery: Dark Souls and the Ludic Sublime	Aesthetics and ludic sublime in a game	G
Eludamos	From NES-4021 to moSMB3.wmv: Speedrunning the Serial Interface	Seriality in speedruns	PLAY
Eludamos	“Tap, tap, flap, flap.” Ludic Seriality, Digitality, and the Finger	Digitality in games and digital media	PLAY
Eludamos	Prolonging the Magic: The political economy of the 7th generation console game	The nature of Triple-A games	GC
Eludamos	Finishing the Fight, One Step at a Time: Seriality in Bungie’s Halo	Seriality in one game series	GC

Eludamos	“Did you shoot the girl in the street?” – On the Digital Seriality of The Walking Dead	Seriality in game-play, production, and reception	GC
Eludamos	Seriality's Ludic Promise: Film Serials and the Pre-History of Digital Gaming	Prehistory of digital games	C
Eludamos	Types and Bytes. Ludic Seriality and Digital Typography	Interrelation of text and icon in digital games	G
Eludamos	Digital Seriality as Structure and Process	Digital seriality in web-based media	C
Eludamos	The Eternal Recurrence of All Bits: How Historicizing Video Game Series Transform Factual History into Affective Historicity	How games represent history	G
Eludamos	Gandalf on the Death Star: Levels of Seriality between Bricks, Bits, and Blockbusters	Playful seriality across different mediums	C
Games and Culture	Art Video Games: Ritual Communication of Feelings in the Digital Era	Representation and communication in (art) games	GP
Games and Culture	When Life Mattered: The Politics of the Real in Video Games' Reappropriation of History, Myth, and Ritual	History in games	G
Games and Culture	User-Generated Video Gaming: Little Big Planet and Participatory Cultures in Italy	Participatory practices among the players	P
Games and Culture	From Discussion Forum to Discursive Studio: Learning and Creativity in Design-Oriented Affinity Spaces	Learning through games	P
Games and Culture	Beyond Today's Video Game Rating Systems: A Critical Approach to PEGI and ESRB, and Proposed Improvements	Digital games' age limits	C

The following table shows the amounts of each categories presented in the research material. While we cannot make further conclusions based on the data presented in this table because of the small amount of studied articles, we can still see that, for example, there is no such a trend that all the articles would be in one category. Despite the small sample, this is reassuring when considering the model’s validity. The C component in different categories is little emphasized comparing to other categories, but this may have something to do with the chosen journals: two of them addressed the “culture” in their title or description, hence the context related issues emphasis is logical.

Table 3: Amounts of Studies in Each Category

Category	C	P	G	PLAY/GPC	PC	GP	GC	Sum
Amount	6	2	4	4	1	3	4	24

Next, I will review the categories and their contents, and consider how the contents of each category are related to one another. In addition, I will briefly discuss what could be typical content in each category, how the boundaries are set – if that is necessary – and how the categorized articles relate to these.

GAME

There are four articles among the research materials that are placed into this category. Let us consider the game as a category for a while: what are the contents that can be placed into this category? As the analysis proved, in this research material, the history related game study is present. Both the articles, *The Eternal Recurrence of All Bits: How Historicizing Video Game Series Transform Factual History into Affective Historicity* (Winnerling, 2014) and *When Life Mattered: The Politics of the Real in Video Games’ Reappropriation of History, Myth, and Ritual* (Hong, 2015) study directly history related issues. “How games represent history?” and “history in games” are the two themes identified in these studies. If these are questions that can be asked in the G category, surely history is not the only topic. Instead, by replacing the term history with other words (How games represent religion? How games represent women? Travelling in games. Poor people in games.) we are able to understand what kind of topics could be placed into each category, even if the topics are not studied yet.

The same applies with two other articles, *Types and Bytes. Ludic Seriality and Digital Typography* (Gotto, 2014) and *No Mastery Without Mystery: Dark Souls and the Ludic Sublime* (Vella, 2015). The themes identified within these two articles are “interrelation of text and icon in digital games” and “aesthetics and ludic sublime in a game.” Again, we can replace the “text and icon”, and decide to study some other phenomena like the interrelation of “atmosphere and graphics” in digital games

or literature and ludic joy in a game – and discover new subjects that fit into this category. Returning to the original question of what are the contents that can be placed into this category, the answer is: various, and the amount of them is countless. They all have a common feature, however, and this common feature is that they study a game, its contents, and the way game represents various phenomena and the world – and these are only few examples.

However, there are some topics that did not show in the analysis. One of the most notable ones is that all the technical research is absent. This is mostly due to the research material choices. By choosing a different kind of research material, there could have been technically oriented articles: and if there were these technical articles, they most likely would have been in this G category: But the studies of games with the technical orientation are not a homogenous group of studies of one type, but instead they include a wide variety of studies from game engines to 3D coding and everything in between. Thus, although there is a possibility they would have been placed in this category, it does not mean that they are all the same, but rather that this categorization may have problems with more specific themes, that would require a finer categorization. Despite the lack of some themes, we can make an observation that the present articles categorized into this section are alike and logical, and this category is useful and can help to define subjects of study.

PLAYER

In this analysis, there is a curious detail in research materials: Both the articles that study the player, *User-Generated Video Gaming: Little Big Planet* (Comunello & Mulargia, 2015) and *Participatory Cultures in Italy and From Discussion Forum to Discursive Studio: Learning and Creativity in Design-Oriented Affinity Spaces* (Comunello & Mulargia, 2015), research the topic in a context of the same game, *Little Big Planet*. However, the approaches of the articles differ. The two identified themes are “participatory practices among the players” and “learning through games”. While many of the potential themes are missing due to the little amount of research material, these two subjects are very central and discussed topics.

Throughout the analysis I followed the next principle: if the studies focused on the player as someone who plays a game, I placed the study in this category. Likewise, if the focus of studies was on players and their actions or attitudes etc. as a community or on a cultural level, the studies were most often positioned into the C category. Is this a rational division? With this analysis, the question cannot be answered. It can be assumed, that this kind of a division positions methodically similar articles to their own groups, but further research must be made in order to know if this is the case.

CONTEXT

There are six studies that can be placed into this category altogether, which makes the C category the biggest one, but since the amount of research material is limited, no generalizations can be made based on it. As discussed in this study in chapter 3.3, the C category is the most obscure one in a sense. “Context” as a concept does not define too well the studies categorized into it, but as it can be noticed from the analyzed articles, it is hard to define this category with any concept that would be more specific. Nevertheless, this is a little bit problematic, since it is tempting to try to fit all the studies that won’t fit in any other category into C category, even if they should not belong into C category either, and could thus prove the 3+1 model faulty. Thus, it is possible that this can be a reason why this category is a bit emphasized, and not necessarily representing the real situation in the field. However, there is also a possibility that this category is emphasized due to the reason found from the research material choices: When talking about a journal called *Game and Culture*, for example, it can be assumed that the cultural and thus contextual dimensions are present in articles. In addition, it is also a possibility that the amount of C category studies is the highest.

How about the themes identified in the analysis? There are themes that discuss the evolution and the history of games, like “prehistory of digital games” and “player memories of games”, as well as games’ media related connections, like in “digital seriality in web-based media” and “playful seriality across different mediums”. In addition to these, the only game design related article in research materials can be positioned into this category: the article of *Conceptualising Inspiration Networks in Game Design* (Ho et al., 2015) discussing the “inspiration in design process.” The approach in this article is human-centric and thus the article cannot be categorized in G category, where I assumed the most of the game design related topics would be. Finally, there is a good example of a C category study that is indeed game studies, but would not position into neither of G nor P categories: it is *Beyond Today’s Video Game Rating Systems: A Critical Approach to PEGI and ESRB, and Proposed Improvements* (Felini, 2015) which discusses “digital games’ age limits” as thematized and suggests new guidelines in rating the games.

Even an analysis of a limited amount of research material can show that this category is quite fragmented and consists of many different approaches. However, the analysis also suggests that there is a lot of research going on in relation to games and players, but not directly about each one of them. This is why the C category is necessary. With a further, quantitative research, it could be possible to explore what amount of studies can be placed into the C category.

PLAY/GPC

The PLAY category is indeed one of the most interesting ones in the light of this research. The original hypothesis included an assumption that the PLAY category and GPC are one and same thing – in other words, that includes an assumption that if a study of play is present, it has all the three components of game, player and context. The other way around, this could be interpreted that the study in which all the three components are present is actually a study of play. However, in the light of the analysis of the articles, it seems that there can be a study that includes all the three components – GPC – but is not about play. This is the case with the “*Blackout!*” *Unpacking the Black Box of the Game Event* (Conway & Trevillian, 2015) article. While the theme of it is “game’s essence”, article examines it throughout what it calls Game Event. This Game Event is not a study of play but rather of all the three components of player, game and context. This suggests that PLAY and GPC are not one and same category after all. However, the question of what makes the play to be play, if these three components are not sufficient to do that, is outside the extent of this study – and of course, this study is neither able to prove, that these three elements are always needed, even if that seems to be the case based on this study. Next, we will examine the three other articles that belong into this category.

The article of *Me and Lee: Identification and the Play of Attraction in The Walking Dead* (Bell, 2015) is a good example of this category as it discusses the decision making during playing. This article alone can suggest that PLAY category is necessary: While the player is the one making the decisions, the game is quite naturally a vital component affecting to these decisions. Apart from this study, we can also assume that the context in which the play occurs is able to impact on decisions as well as the hardware that are used during the play. Let’s think about this a short while. *Sims* is a digital game where you can build and decorate houses and towns, and have human characters that you play household with and educate and evolve their relationships. Let us now think that someone buys the game and plays *Sims* for the first time. Most likely, in-game decisions along with reasons to make these decisions during the first play session are very different compared to decisions that are made, if the 50-hour save is played or if the game is played with a group, or if *Sims* is played to consider different floor plans. With this example, it is easy to imagine how the context affects the decisions as well.

In addition to these two articles, there are the articles *From NES-4021 to moSMB3.wmv: Speedrunning the Serial Interface* (LeMieux, 2014) and “*Tap, tap, flap, flap.*” *Ludic Seriality, Digitality, and the Finger* (Heilmann, 2014), in the PLAY category. The identified themes in these two are “seriality in speedruns” and “digitality in games and digital media.” Speedrunning means

playing a game in a way that enables the fastest possible playthrough, and thus belongs obviously to this category. With this notion we can conclude that probably different types or styles of playing could be placed into this category. What comes to the other article, it discusses the concrete action of playing, including the finger movements – as discussed, it is way too easy to forget the different approaches, as this article is probably not among the ones to first come to mind when thinking about playing. Nevertheless, the physical action of playing can be a great matter of interest, when considering for instance the interconnection of sport scientists and game studies, thus this category could also include “playing as a physical action” themes. No doubt there are multiple other topics that could be placed into this category as well, but even this analysis is able to indicate that the play study is an important part of the field of game studies.

GAME & PLAYER

The three articles categorized into this category are *Affect, Responsibility, and How Modes of Engagement Shape the Experience of Videogames* (Veale, 2015), *Self-Reflexivity and Humor in Adventure Games* (Giappone, 2015) and *Art Video Games: Ritual Communication of Feelings in the Digital Era* (Díaz & Tungtjitcharoen, 2015). Of the identified themes, one included an obvious topic to this category that is “Player expectations and humor in games.” Player expectations is exactly one of the reasons why this kind of category is needed. First, it might appear that the connection between player and game is always play, but as we have discussed, it seems that play requires the third category of context and maybe even something more than that. However, that is not the only existing connection between the player and the game, but the players’ expectations is one of the obvious, studied subjects. In addition to that, the emotions a game is capable of creating in a player is another link between these two. Both topics are studied in Giappone’s article.

Other themes identified in the analysis are “representation and communication in (art) games” and “player engagement”. Both these two themes discuss the player and game relation. The one big missing theme, which could possibly be discovered in the game and player context, is learning. Can learning theme be categorized into this category, and are there some other missing themes? This should be studied further, with a larger amount of studies.

GAME & CONTEXT

When I was formatting this study and designing the categories, I first considered what could be the best example of each category. One of the reasons why the 3+1 model is designed in a way it is, is that I encountered studies like *Tokimeki Memorial Girl’s Side: Enacting Femininity to Avoid Dying Alone* (Richards, 2015) that discuss of a game and its impact on culture. The study of this kind is not

only a contextual study, but a study of a game: but simultaneously, it is not just a study of game, but it discusses the culture and society level topics. This article is thematized with “games impact on culture”, but more specific theme could be “how games modify females’ dating behavior in real world”, which is the topic it discusses: and again this kind of a topic could be replaced with other kind of phenomena that can be studied in relation to games. “How games modify aggressive behavior” might be one of the most asked questions in its different forms.

In addition to that article, there are three more articles in this category. All of these articles, *Prolonging the Magic: The political economy of the 7th generation console game* (Nieborg, 2014), *Finishing the Fight, One Step at a Time: Seriality in Bungie’s Halo* (Bonk, 2014) and “*Did you shoot the girl in the street?*” – *On the Digital Seriality of The Walking Dead* (Sulimma, 2014), discuss some specific game and examine the relation of that game to society, culture or other contextual frame. The discovered themes are “the nature of triple A-games”, “seriality in one game series” and “seriality in production, reception and game-play”. As these themes indicate, one of the analyzed journals, *Eludamos*, was a theme number of serialization. Putting that aside, we are able to notice that GC category includes articles that discuss not only game contents, but the game as a product and a product distribution from the designers’ end to the customers’ consumption as well as how this product can be valued. Although there are only four articles in this category, they give a good general review of what could be placed in this category.

PLAYER & CONTEXT

Finally, there is a PC category. The article placed in this category, *The Demarcation Problem in Multiplayer Games: Boundary-Work in EVE Online’s eSport* (Arnold, 2015), discusses the “demarcation of social rules in MMORPG’s” (MMORPG is an abbreviation of “massively multiplayer online role-playing game”) as it is thematized. Again, we can replace some words and end up with themes like “negotiating play tactics in PVP’s” to understand, what kind of themes could be placed into this category. What kind of other studies could have been placed into this category? “How players tell about the games they play to other players and to non-playing friends?” could, for example, be among the topics asked within this category. The limited amount of articles positioned in this category might be only random and not connected to the real situation in the field, since the amount of research materials is so small, but this should be further studied. Although the amount of articles in this category is very limited in this analysis, it seems that PC category is not unnecessary, and a further research can discover new kind of approaches to it.

4.3. Results

In this analysis, the focus has been on individual articles. While the articles have been chosen to the analysis without a previous knowledge of what the chosen issues of each journal contain, there are certain problems within this method: For example, can we be certain in advance that the analyzed studies are game studies? As the purpose of this study is to test and discuss the 3+1 model's validity, we need to be certain that the research materials are game studies: otherwise, the results could indicate that some of the research material articles could not be categorized, but we would not know if this is due to the flaw in the model or because of the article was not indeed a game study, and the model worked properly. Of course, we can also discuss if the model should even be used to analyze individual articles, or merely kept as a theoretical presentation of the field. What is the value of analyzing individual articles? Although these questions are partly unanswerable within the extend of this analysis, the value of analyzing individual articles is hopefully not just within testing the validity of the 3+1 model but also in positioning one's study to the field and possibly discovering the connections and relations it may have in relation to other studies in the field of game studies.

I have attempted to construct this study along with the 3+1 model in a way that any issue published in any given year would qualify to the analysis. Thus, it should be possible to repeat this study with any given research materials. The question of game studies relation to digital game studies asked in the chapter 3 remains unanswered, as this analysis is way too limited to answer it. In order to answer it, a much wider analysis would be needed that would explore all the research conducted in game studies field.

Analyzing the articles has been surprisingly hard. One the one hand this could indicate that the model is somehow faulty, but on the other hand, it can tell something about the nature of game studies, or the analyzed articles – or, of course, about the author of this study. The three separate subjects of study – game, player and context, are overlapping (Mäyrä, 2008) for a reason: in many of the articles, it is hard to tell the subject of the study precisely, because it can have elements of all the three, and sometimes the different variables are inseparable. Nevertheless, because of the difficulties experienced during the analysis, we must consider potential problems within this study's execution. First, there is always a possibility that some of the studies are categorized to wrong categories or thematized with a wrong emphasis. Of course, categorizing is a matter of point of view: Depending on point of perception, one study can belong into P or into C category. However, as the categorization in this study is executed according to the subject of study and identified variables, it is possible that I have made misinterpretations during the analysis. Various reasons can affect to misinterpretation: To

name but few, there is a risk that my language skills are not sufficient enough or some particular detail of the study is misinterpreted.

How does a chance of misinterpretation affect the results of this study? The purpose of this analysis lays within testing the 3+1 model, and not within doing a categorization to these particular articles – being mistaken, then, however unfortunate, won't affect the results, unless there is a recognizable pattern of misinterpretations. In that case, the misinterpretations should of course be discussed in relation to model's validity. In the analysis, I try to explain how I positioned each article to their categories, but in addition to misinterpretations, it is in a nature of qualitative studies that somebody interprets the contents differently. For that reason, however, this kind of study could significantly benefit of multiple researchers studying the same research material sources, but unfortunately it was not possible this time. However, I would like to remind that this study is not so much about categorizing a certain set of articles, but about creating a model and testing it in practice.

So far, we have discussed about the subject and variables of each study. However, the analysis indicates that there can be more issues that should be taken into account when analyzing the articles and categorizing them. An example of this is an article: *Prolonging the Magic: The political economy of the 7th generation console game* (Nieborg, 2014). It discusses the Triple-A games and uses *Call of Duty* as an example. While this study produces information of *Call of Duty* branch, it does not examine *Call of Duty* as a game, but as an example of serialization and an object belonging into triple-A class. Is this a G category study then? Or does it belong to C category? In the analysis above, I concluded that it belongs to GC category. However, different interpretations are possible. I categorized the articles based on the variables, as explained in the methodology chapter. It is not always easy to define the subject of study and the variables: For this evaluation, I asked if the study produces additional information of its subject. In this article, an additional information of a game, *Call of Duty*, is produced. However, other interpretations could be possible as well. The way in which the subject of study is positioned in the article affects the categorization: player is not always in a player position, but sometimes a forum writer, designer or something else. When categorizing articles, the position of both, subject and variables, should be considered as well.

Both the volume of *ToDIGRA* and the volume of *Eludamos* were special issues. The theme of seriality seems over emphasized in my data, and that is because the *Eludamos* analyzed volume was a special issue of digital seriality. The analyzed volume of *ToDIGRA* was a collection of articles from the Australian DiGRA conference. How could a different kind of research material have affected to this study? Because this is not a quantitative study, the amount of topics in certain categories is not that

interesting. Choosing different research materials could most likely have affected the way the studies are situated in different categories, but since that is not significant in the context of this particular study, I think that the research material chosen to this study served its purpose despite its area specificity. It must still be noted that the themes reflect the research materials' contents rather than the topics of game studies. They should not be considered to represent the field of game studies.

As discussed, along with other problems there is with the C category, it is in a sense probably too wide and at least unable to describe the studies belonging to C category. I would like to be able to explicitly define why an individual study belongs to the C category, but way too often the reason seems to be that it won't suit any other category, and it still is a study that produces additional information of games, playing or players – or all these three. Quite obviously, a question like “how does the gamer community treat women” belong to issues that should be and is understood as a content of the field of game studies, but a question of this kind cannot be categorized into a P or G or PLAY categories: there has to be an additional category that includes this kind of questions. This is why the C category is necessary, even if it resembles a trash can where all the topics that cannot be categorized into any other category are dumped. Is that a problem, then? It is, and it is not. In order to help the new researchers and students to conceive a comprehension of the field, there should not be a category of “others”, at least not a wide one: thus, while the intersections (PC and GC) help in defining the subjects of study with a greater accuracy, there is still a wide variety of “context” studies.

Maybe the most problematic part of the 3+1 model is the intersection of all the three categories, GPC or PLAY as I call it. After analyzing all the articles and discussing all the categories, it appears that in the light of this analysis, the PLAY has all the three dimensions: There is a player, and a game, and a context in which the playing happens: This context is both physical and psychological, it is individual and social: It can be various different things. The research material supports this claim, as the studies categorized into the PLAY category did indeed have all the three mentioned dimensions. However, with the limited amount of research materials and due to the phenomena like zero-player games that was touched upon in the chapter 3.3, this topic must be further examined. In addition, the other way around there seems to be studies that discuss all the three categories of game, player and contexts, but the actual PLAY component is missing or non-significant. For this reason, the model's visualization must be re-evaluated.

That being said, a slightly remodeled version of the 3+1 model is attached below. The following figure could probably even better explain and visualize the connections in the field and their interrelations. In this model, the PLAY is surrounded of all the three elements, but not equal to them,

and the intersection of GPC categories is not necessarily play, as it was in the original version. Thus, the model is better able to describe how different sections position in relation to each other. With this modification, the intersection of all the three categories can examine player, game and context even if the focus is not on playing.

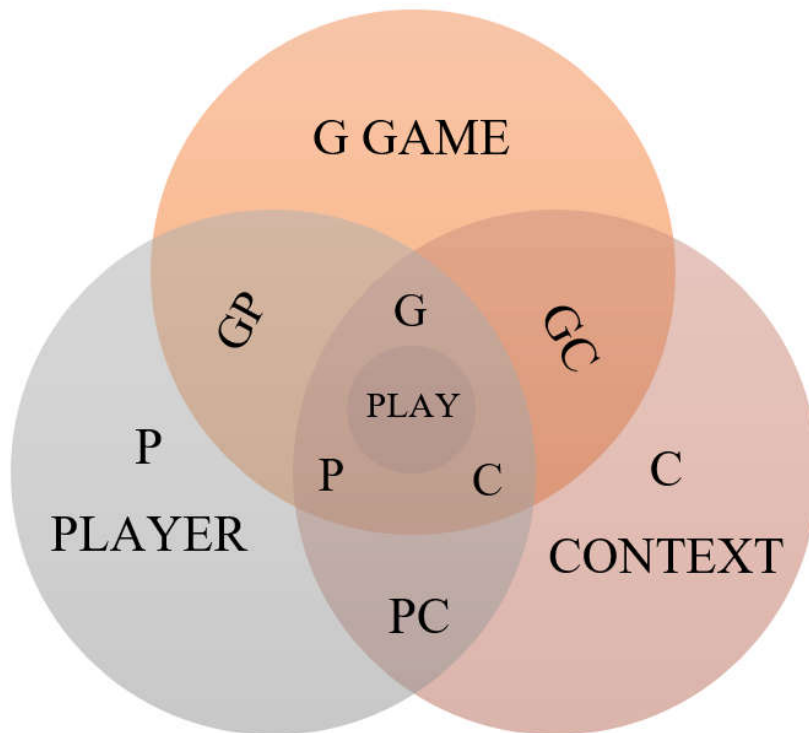


Figure 8: Refined version of 3+1 model

4.4. Further Research

From the Melcer et al. listing attached to this study (see the Figure 2), the next step could include choosing other journals to the analysis, and analyzing the categories of each of them. Presumably, this would produce different kind of data, but even more importantly, the potential differences could reveal problems within the model as well as its potentially in positioning and analyzing existing studies. Thinking of, for example, more technical publication, should we encounter the problem of all the analyzed articles situate in the G category? Is it even a problem? This question could be answered with a further research.

In order to be able to say something about the game studies versus video game studies relation, a large sample including different kind of game studies should be further studied with the same method. With that kind of analysis, we could see how non-digital game studies position into categories and if they can be categorized with the same methods.

A research that continues this analysis could be able not only identify what are the core questions asked within each category, but also further evaluate the 3+1 model. Originally I wanted to be able to fit the thematizations into the model in order to visualize what kind of themes there exist in each category. However, with the amount of research material I had, each category was so specific that a visualization could not have clarified the field (as I was hoping) but instead only appear confusing. With a significantly broader analysis, there could be certain question types that could be identified and some generalizations constructed based on the identified themes, and this kind of generalizations and question models could be placed into the model. This way, the model could help as an easily approachable model or even as an aid in planning one's study.

As discussed, this article is qualitative. The amount of research material, 24 articles altogether, is the reason why there is not too much use for pie charts or other visualizations of the numbers. I only presented some statistical data (the amount of articles in each category) in order to be able to observe if there was some specific emphasis, and to see if there was any category that would be of no use. This was not the case, but later on there should probably be a quantitative study including lot more data from all the different journals around the field of game studies. If we later come to an agreement that the model is a valid tool to categorize the field, as the preliminary results indicate, a quantitative analysis could produce interesting data of current emphasis in the field.

Finally, one interesting thing to consider is if there is use for a more specific categorization. Should we further divide, for example, the G category? What could be gained with that? In that kind of study, there is always a danger of creating artificial boundaries between studies. Also, there comes a question of what kind of division would best serve the field, or should there be multiple ways of doing subcategorizations? However, the benefit would be that for example, a G category could be divided into genres, and with a great amount of data (and preferably some interactive interface that could rearrange the subcategories), we could instantly see if there is some over or under emphasized category, and consider the potential reasons to this. Also, it would be easier to find studies similar to one's planned study.

5. Conclusion and Discussion

In this study, the field of game studies has been discussed from the perspective of categorization. First we considered the categorizations done in the field, and discussed the need to a model that could be used to categorize the field of game studies. A purpose was to examine if the corpus of game studies could be fitted into categories that could be later used in describing and positioning one's own study to the field. I then introduced the 3+1 model which bases on the division by Mäyrä (2008) and Juul (2011). The model consists of categories of game, player and context, and their intersections that are game and player, game and context and player and context. In addition, there is a category of play in the intersection of all three categories.

Next, research materials were presented and discussed. All the four core game study journals (*Eludamos*, *Game Studies*, *Game and Culture* and *ToDIGRA*) were chosen as research materials without a knowledge of their contents. They were selected based on their established position in the field. In addition, all but *ToDIGRA* appear in the Melcer et al. (2015) list of core game study journals, and *ToDIGRA* is published by Digital Games Research Association, which is why it was included to the analysis.

In the analysis, the themes and categories of each article were defined. After that, the articles were discussed together with the other ones that belonged into the same category. Some refining to the model was suggested because of the encountered problems with preliminary assumption of GPC and PLAY categories being the same, and a further research was considered. With this study, it cannot be said with a certainty that the 3+1 model could be used to categorize the entire field of game studies, but this study can be seen as a starting point for a further research and discussion. The preliminary results, however, indicate that the 3+1 model could be used as a tool to categorize the field of game studies.

Again, I would ask you, dear reader, to stop for a moment and consider your field of study. At the introduction chapter of this study, I asked you to think about a game-related study that also relates to your field. If you did this, what was the research question of yours? What would be the subject of study, and can you identify the variables there? With the 3+1 model, I hope that you can position it into the field of game studies. And how about my Skyrim study? As I wrote, I first meant to execute a study of people playing Skyrim's first quest and then explaining what happened in the game. Although this Skyrim study is only a rough plan in my head, with the 3+1 model it could be possible to identify how a study of this kind positions in the field of game studies and what could be the potential traditions or sources helping me once I start my research. The Skyrim study I planned would

position in the GP category. With this notion, I could conclude that I will probably need to use methods of studies that humanists usually use in their research – in the Skyrim case, this could mean a theory of narrative and environmental story telling. In addition, I should use some sources that help me with observing and interviewing the players – if the interview is the best method – maybe traditions used in the social sciences could help me with this one?

Playing seems to be a profound part of our lives. Yet, only one form of playing was discussed within this study. As digital games are still a young form of entertainment, and constantly reforming with new inventions such as augmented reality games and some of the older inventions finding their route to market – 3D glasses as an example of this – it is obvious that a study focusing on articles discussing digital games in 2016 will soon be outdated in a way or other. Does this notion mean that it is not even worth of try to conceptualize a field but rather we should wait and see when the development stops? Of course not. Hopefully such a day won't come. Rather, any model or visualization developed to capture and describe the field should be either able to follow its time and respond into changes, or kept as a portrayal of the times when it was constructed. The constant change in study fields and in the world we live in must be acknowledged and responded to. Some core publications of different fields have decided to change their names to better reflect the changed subject of study or the changed world, as has happened for example with Finnish journal of women's studies changing their name to gender studies (Elomäki, Jauhola, & Meskus, 2014). As discussed earlier in this study, we can assume that the subjects of study are somewhat stabile, but are they eternal? – definitely not. Thus, this categorization is in light of this study able to illustrate the current situation in the field of game studies, but not much more.

As Aarseth writes (2015), game studies is a field that is hard to define. Making a definition can, however, be beneficial, if it can be successfully made. By this preliminary categorization, I hope that I am able to help in defining game studies, and throughout the definition, help to develop the field further with raising some conversation over the categorization model. We are – still – in our home bases, as Williams (2005) writes. Maybe it is time to start exploring, not only in the virtual worlds (but in them, too!), but also in the real world where we can build fruitful connections and offer new perspectives to the field of game studies by collaboration.

Sources

- Aarseth, E. (2001). Computer Game Studies, Year One. *Game Studies*, 1(1). Retrieved from <http://www.gamestudies.org/0101/editorial.html>
- Aarseth, E. (2015). Meta-Game Studies. *Game Studies*, 15(1). Retrieved from <http://gamestudies.org/1501/articles/editorial>
- Arjoranta, J. (2014). Game Definitions: A Wittgensteinian Approach. *Game Studies*, 14(1). Retrieved from <http://gamestudies.org/1401/articles/arjoranta>
- Arjoranta, J. (2015). Real-time Hermeneutics: Meaning-Making in Ludonarrative Digital Games. Retrieved from <https://jyx.jyu.fi/dspace/handle/123456789/45647>
- Arnold, M. C., Martin Gibbs, Michael. (2015). The Demarcation Problem in Multiplayer Games: Boundary-Work in EVE Online's eSport. *Game Studies*, 15(1). Retrieved from <http://gamestudies.org/1501/articles/carter>
- Bell, N. T., Chris Kampe, Kristina. (2015). Me and Lee: Identification and the Play of Attraction in The Walking Dead. *Game Studies*, 15(1). Retrieved from <http://gamestudies.org/1501/articles/taylor>
- Björk, S., & Juul, J. (2012). Zero-Player Games. Or: What We Talk about When We Talk about Players. *The Philosophy of Computer Games Conference*.
- Bonk, J. (2014). Finishing the Fight, One Step at a Time: Seriality in Bungie's Halo. *Eludamos. Journal for Computer Game Culture*, 8(1), 65–81.
- Caillois, R., & Barash, M. (1961). *Man, Play, and Games*. University of Illinois Press.
- Cassell, J., & Jenkins, H. (1998). Chess For Girls?: Feminism and Computer Games. In *From Barbie to Mortal Kombat: Gender and Computer Games* (pp. 2–45).
- Coavoux, S., Boutet, M., & Zabban, V. (2016). What We Know About Games A Scientometric Approach to Game Studies in the 2000s. *Games and Culture*, 1555412016676661. <https://doi.org/10.1177/1555412016676661>

- Comunello, F., & Mulargia, S. (2015). User-Generated Video Gaming Little Big Planet and Participatory Cultures in Italy. *Games and Culture*, 10(1), 57–80. <https://doi.org/10.1177/1555412014557028>
- Condis, M. (2015). No Homosexuals in Star Wars? BioWare, “Gamer” Identity, and the Politics of Privilege in a Convergence Culture. *Convergence: The International Journal of Research into New Media Technologies*, 21(2), 198–212. <https://doi.org/10.1177/1354856514527205>
- Conway, S., & Trevillian, A. (2015). “Blackout!” Unpacking the Black Box of the Game Event. *Transactions of the Digital Games Research Association*, 2(1). Retrieved from <http://todigra.org/index.php/todigra/article/view/42>
- De Grove, F., Courtois, C., & Van Looy, J. (2015). How to be a gamer! Exploring personal and social indicators of gamer identity. *Journal of Computer-Mediated Communication*, 20(3), 346–361. <https://doi.org/10.1111/jcc4.12114>
- Díaz, C. M. C., & Tungtjitcharoen, W. (2015). Art Video Games Ritual Communication of Feelings in the Digital Era. *Games and Culture*, 10(1), 3–34. <https://doi.org/10.1177/1555412014557543>
- Dietz, T. L. (1998). An Examination of Violence and Gender Role Portrayals in Video Games: Implications for Gender Socialization and Aggressive Behavior. *Sex Roles*, 38(5–6), 425–442. <https://doi.org/10.1023/A:1018709905920>
- Elomäki, A., Jauhola, M., & Meskus, M. (2014). Naistutkimuksesta sukupuolentutkimukseen. Retrieved from <http://www.doria.fi/handle/10024/122148>
- Eskelinen, M. (2005). *Pelit ja pelitutkimus luovassa taloudessa*. Helsinki: Sitra.
- Felini, D. (2015). Beyond Today’s Video Game Rating Systems A Critical Approach to PEGI and ESRB, and Proposed Improvements. *Games and Culture*, 10(1), 106–122. <https://doi.org/10.1177/1555412014560192>

- Frasca, G. (2001). Videogames of the Oppressed - Thesis by Gonzalo Frasca. Retrieved April 1, 2016, from <http://www.ludology.org/articles/thesis/>
- Frasca, G. (2003). Simulation versus narrative. Retrieved from http://www.phil-fak.uni-duesseldorf.de/fileadmin/Redaktion/Institute/Kultur_und_Medien/Medien_und_Kulturwissenschaft/Dozenten/Szentivanyi/Computerspielanalyse_aus_kulturwissenschaftlicher_Sicht/frasca.pdf
- Frasca, G. (2007). *Play the Message Play, Game and Videogame Rhetoric*. IT University of Copenhagen. Retrieved from http://www.powerfulrobot.com/Frasca_Play_the_Message_PhD.pdf
- Friman, U. (2015). Sukupuolittuneen pelikulttuurin tutkimuksen lähtökohdat. In *Pelitutkimuksen vuosikirja 2015*.
- Giappone, K. B. R. (2015). Self-Reflexivity and Humor in Adventure Games. *Game Studies*, 15(1). Retrieved from http://gamestudies.org/1501/articles/bonello_k
- Gotto, L. (2014). Types and Bytes. Ludic Seriality and Digital Typography. *Eludamos. Journal for Computer Game Culture*, 8(1), 115–128.
- Griffiths, M. (1999). Violent Video Games and Aggression: a Review of the Literature. *Aggression and Violent Behavior*, 4(2), 203–212.
- Heilmann, T. A. (2014). “Tap, tap, flap, flap.” Ludic Seriality, Digitality, and the Finger. *Eludamos. Journal for Computer Game Culture*, 8(1), 33–46.
- Henricks, T. S. (2010). Caillois’s Man, Play, and Games An Appreciation and Evaluation. *American Journal of Play*, 3(2), 157–185.
- Higgins, S. (2014). Seriality’s Ludic Promise: Film Serials and the Pre-History of Digital Gaming. *Eludamos. Journal for Computer Game Culture*, 8(1), 101–113.

- Ho, X., Tomitsch, M., & Bednarz, T. (2015). Conceptualising Inspiration Networks in Game Design. *Transactions of the Digital Games Research Association*, 2(1). Retrieved from <http://todigra.org/index.php/todigra/article/view/41>
- Hong, S. (2015). When Life Mattered The Politics of the Real in Video Games' Reappropriation of History, Myth, and Ritual. *Games and Culture*, 10(1), 35–56. <https://doi.org/10.1177/1555412014557542>
- Huizinga, J. (1971). *Homo Ludens: A Study of the Play-Element in Culture* (1st edition). Beacon Press.
- Juul, J. (2011). *Half-Real: Video Games between Real Rules and Fictional Worlds*. Cambridge, Mass: The MIT Press.
- Konzack, L. (2007). Rhetorics of Computer and Video Game Research. Presented at the McFarland & Company, Incorporated Publishers. Retrieved from [http://vbn.aau.dk/en/publications/rhetorics-of-computer-and-video-game-research\(d4635410-09cc-11dc-b676-000ea68e967b\).html](http://vbn.aau.dk/en/publications/rhetorics-of-computer-and-video-game-research(d4635410-09cc-11dc-b676-000ea68e967b).html)
- Koskimaa, R. (2016, May). *Welcome Speech, Pelitutkimuksen päivä, Jyväskylä Finland*. Welcome Speech presented at the Pelitutkimuksen päivä, University of Jyväskylä.
- LeMieux, P. (2014). From NES-4021 to moSMB3. wmv: Speedrunning the Serial Interface. *Eludamos. Journal for Computer Game Culture*, 8(1), 7–31.
- Maeder, D., & Wentz, D. (2014). Digital seriality as structure and process. *Eludamos. Journal for Computer Game Culture*, 8(1), 129–149.
- Marone, V. (2015). From Discussion Forum to Discursive Studio Learning and Creativity in Design-Oriented Affinity Spaces. *Games and Culture*, 10(1), 81–105. <https://doi.org/10.1177/1555412014557328>
- Maroney, K. (2001). My Entire Waking Life. *The Games Journal*. Retrieved from <http://www.thegamesjournal.com/articles/MyEntireWakingLife.shtml>

- Mäyrä, F. (2008). *An introduction to game studies: games in culture*. London: SAGE.
- Melcer, E., Truong-Huy, N., Isbister, K., Zhengxing, C., Canossa, A., & Seif El-Nasr, M. (2015). Games Research Today: Analyzing the Academic Landscape 2000-2014. Retrieved from https://www.researchgate.net/publication/278678569_Games_Research_Today_Analyzing_the_Academic_Landscape_2000-2014
- Neys, J. L. D., Jansz, J., & Tan, E. S. H. (2014). Exploring persistence in gaming: The role of self-determination and social identity. *Computers in Human Behavior*, 37, 196–209. <https://doi.org/10.1016/j.chb.2014.04.047>
- Nieborg, D. B. (2014). Prolonging the Magic: The political economy of the 7th generation console game. *Eludamos. Journal for Computer Game Culture*, 8(1), 47–63.
- Nørgård, R. T., & Toft-Nielsen, C. (2014). Gandalf on the Death Star: Levels of Seriality between Bricks, Bits, and Blockbusters. *Eludamos. Journal for Computer Game Culture*, 8(1), 171–198.
- Piaget, J., & Gutiérrez, J. (1979). *La formación del símbolo en el niño: imitación, juego y sueño, Imagen y representación*. México: FCE.
- Richards, T. (2015). Tokimeki Memorial Girl's Side: Enacting femininity to avoid dying alone. *Transactions of the Digital Games Research Association*, 2(1). Retrieved from <http://todigra.org/index.php/todigra/article/view/43>
- Salen, K., & Zimmerman, E. (2004). *Rules of Play: Game Design Fundamentals*. MIT Press.
- Salter, A., & Blodgett, B. (2012). Hypermasculinity & Dickwolves: The Contentious Role of Women in the New Gaming Public. *Journal of Broadcasting & Electronic Media*, 56(3), 401–416. <https://doi.org/10.1080/08838151.2012.705199>
- Schott, G. R., & Horrell, K. R. (2000). Girl Gamers and their Relationship with the Gaming Culture. *Convergence: The International Journal of Research into New Media Technologies*, 6(4), 36–53. <https://doi.org/10.1177/135485650000600404>

- Shaw, A. (2011). Do you identify as a gamer? Gender, race, sexuality, and gamer identity. *New Media & Society*, 1461444811410394. <https://doi.org/10.1177/1461444811410394>
- Sotamaa, O., & Suominen, J. (2013). Suomalainen pelitutkimus vuosina 1998–2012 julkaistujen peliväitöskirjojen valossa. In *Pelitutkimuksen vuosikirja 2013*.
- Stuckey, H., Swalwell, M., Ndalianis, A., & Vries, D. de. (2015). Remembering & Exhibiting Games Past: The Popular Memory Archive. *Transactions of the Digital Games Research Association*, 2(1). Retrieved from <http://todigra.org/index.php/todigra/article/view/40>
- Sulimma, M. (2014). “Did you shoot the girl in the street?”—On the Digital Seriality of The Walking Dead. *Eludamos. Journal for Computer Game Culture*, 8(1), 83–100.
- Veale, K. (2015). Affect, Responsibility, and How Modes of Engagement Shape the Experience of Videogames. *Transactions of the Digital Games Research Association*, 2(1). Retrieved from <http://todigra.org/index.php/todigra/article/view/44>
- Vella, D. (2015). No Mastery Without Mystery: Dark Souls and the Ludic Sublime. *Game Studies*, 15(1). Retrieved from <http://gamestudies.org/1501/articles/vella>
- Westecott, E., Jahn-Sudmann, A., Schott, G. R., & Wagner, M. (2007). Introduction. *Eludamos. Journal for Computer Game Culture*, 1(1). Retrieved from <http://www.eludamos.org/index.php/eludamos/article/view/vol1no1-1/1>
- Williams, D. (2005). Bridging the methodological divide in game research. *Simulation & Gaming*, 36(4), 447–463. <https://doi.org/10.1177/1046878105282275>
- Winnerling, T. (2014). The Eternal Recurrence of All Bits: How Historicizing Video Game Series Transform Factual History into Affective Historicity. *Eludamos. Journal for Computer Game Culture*, 8(1), 151–170.
- Wittgenstein, L. (2001). *Philosophische untersuchungen: The German text, with a revised English translation (GEM Anscombe, Trans.)*. Oxford: Blackwell.

Game References

Bubble Shooter, 2001

Counter-Strike series, Valve Corporation, Sierra Entertainment, Namco, Nexon, 1999-2012

Fallout 3, Bethesda Softworks, Bethesda Game Studios, 2008

Skyrim, Bethesda Game Studios, 2011

Sims by Will Wright, Electronic Arts (2000-2006, 2012 –), The Sims Studio (2006 –)