7.

Considering play

From method to analysis

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ABSTRACT

This paper deals with play as an important methodological issue when studying games as texts, and is intended as a practical methodological guide. After considering text as both the structuring object as well as its plural processual activations, we argue that different methodological considerations can turn the focus towards one of the two (without completely excluding the other). After outlining and synthesizing a broad range of existing

research we move beyond the more general advice to be reflective about the type of players that we are, and explore two methodological considerations more concretely. First of all, we discuss the various considerations to have regarding the different choices to make when playing a game. Here we show how different instrumental and free strategies lay bare different parts of the game as object and/or process. Secondly, we consider how different contexts in which the game and the player exist, can function as different reference points for meaning construction and the way they can put limitations on the claims we can make about our object of analysis.

INTRODUCTION

Many entering the field of game studies do so with great affinity with, and knowledge of, games. This does, however, not imply that these newcomers know from the get-go how to combine their close affective proximity to the medium to a clear research methodology needed to study and understand games from an academic perspective. This issue might even be more relevant for those entering the field as relative newcomers, for whom playing games – let alone studying them – seems daunting. For game studies as a research field there is an ongoing need to help newcomers get to grips not just with the complex nature of video games, but also with how to engage with them in an academic setting.

This need is not limited to researchers. Over the past two decades, a large number of programmes have sprung up at universities that teach students how to consider, and thereby, analyse games. These programmes sometimes take form in dedicated game studies

bachelors or masters, but in many cases, game-related research is part of broader programmes dealing with new media, digital culture, communication studies, or other related fields. Independent of the curriculum, students need to get to grips with the idea that, to quote Mäyrä, "analytical play as part of one's studies is different from leisurely play" (2008, 165). But what is analytical play? How do our actions, skills and background knowledge impact the analysis of these multi-cursal texts? And of course, how do we deal with these complex methodological issues to come to academically sound and relevant reflections of the game?

In this paper, we aim to set up play-related methodological pointers for students doing game research. Many have already pointed out that play lies at the core of studying games (Mäyrä 2008; Zagal 2010a; Fernández-Vara 2015). However, these often introductory texts to game studies leave the reader with the advice to be reflective and open about the type of player that he or she is, and seldom go into detail about how different playing modes can highlight different elements of a video game. As such, in many of these cases, play as method appears to be a matter that is frequently emphasized but seldom explored further.Our focus on play as method goes beyond the obvious – that a researcher should be able to play the games in order to understand them fully as a text with meaning or as a sociocultural and sociotechnical phenomenon. Rather, we engage with various methodological issues and considerations we might have as researchers-at-play. By connecting these issues and considerations, we aim to provide a more concrete methodological overview that can function as a guide that allows those studying games – especially newcomers to the field of game studies – to get to grips with analytical play. It should be made clear here that we do primarily focus on games research from a humanities angle, where textual analysis of games is a key approach. However, as playing games is the "most crucial element in any methodology of game studies" (Mäyrä 2008, 165), many of the observations and considerations should apply to other fields as well.

Discussing play as method Aarseth was among the first to reflect on the kinds of play approaches that fit best with specific research questions. He starts by acknowledging the problem that combining existing player typologies (referring to Bartle (1996)), game genres and a researcher's theoretical foundations can lead to a "cornucopia of analytical combined modes and angles" to study games (2003, 6). Therefore, Aarseth provides a more focused approach, suggesting that there are "different strata of engagement that playing analysis allows" (2003, 6). These range from superficial and light play, all the way to expert and innovative forms of play, where the latter even goes beyond playing by the rules, inventing entirely new ones. He acknowledges that the methodological reflections he offers are only first attempts, and that any further development of play as method will have to come from future research.His invitation for further research on the notion of play as method has been answered by Lammes (2007) and Karppi and Sotamaa (2012), among others, and will, in extension of these earlier elaborations, also be answered here. Lammes has critiqued Aarseth's approach for creating "a blind spot for situating the player/researcher in its particular local culture" and argues for a more context-aware approach in which the player acknowledges his/her position as both player-researcher (reflexivity) and agent within a certain socio-economic cultural and historical context (situatedness) (2007, 27). Here Lammes criticizes Aarseth for approaching games as "universal" and "hermetic" phenomena even though "play is a more messy cultural practice" (2007, 27). Also Karppi and Sotamaa (2012) argue for a more context-aware approach by shifting the focus from the game as object to the game as process. They argue that Aarseth's later exploration of the role of the player in game research (2007) puts too much emphasis on the game as object, while, according to them, a game should instead be seen as an assemblage of human and non-human related components including the game and the player's incorporeal enunciations and actions as well as their many socio-economic, cultural and historical linkages (2012).

Both Lammes and Karppi and Sotamaa offer valuable methodological considerations and suggestions, but at the same time pay minimal attention to play as method itself. Lammes, for instance, does not elaborate on *how* a game scholar would go about acknowledging his/her situatedness when studying a game or writing up the analysis, nor does she elaborate on how one would (or could) avoid purely idiosyncratic readings of a game, given the suggested individual nature of the player's "environment". Karppi and Sotamaa's approach, in turn, seems particularly useful in pushing the analysis past a focus on either the player or the game, and towards the various forces and connections holding up the assemblage of games as processes. However, in doing so, their approach becomes more of a general lens highlighting such linkages rather than a method that provides us with some concrete considerations about the different impacts of actions and backgrounds we employ in analysing a complex multi-cursal text. Furthermore, by only considering games as processes, their approach highlights one end of the methodological spectrum in which a free active player is given analytical preference over a game system purposefully designed to structure that play behaviour. This means that their analysis risks completely slipping away from the material architecture of the game towards transgressive play behaviours which, as Karppi and Sotamaa themselves put it, "exit the structure and rules of the game" (2012, 425).

Working towards a more concrete set of considerations for playing as a method, our aim is certainly not to set aside this earlier work, but to elaborate and build on these (and more) works. To illustrate our argumentation, we will reference existing analyses of a variety of different games, and the choices which made the analysis possible. Underpinning this, we bring together a more or less disparate set of loosely connected works. Before we can start discussing play as method more closely, we wish to briefly discuss the coupling of games and play, and pull the focus back from Karppi and Sotamaa's (2012) sole focus on games as processes or Aarseth's (2007) focus on games as objects, to finally come

to an understanding of games as texts. In line with Fernández-Vara (2015, 11-12), we consider texts in a broad sense as both a shaping authoritative game structure (what Barthes (1977) would call a 'work') as well as a played set of meanings and behaviours which exist in an intertextual web of cultural, social and historical perspectives (what Barthes (1977) would call the actual 'text'). In the next section, we discuss games as both object and process, which ultimately results in different methodological considerations.[1]<

A GAME AS OBJECT AND PROCESS

The notion of games as object and games as process connects to two broad and often opposing ontological strategies within game studies. First, there are those who are trying to find their way around the complex issue of multiple 'playings' and try to gain intersubjective access to the formal components of the game as object (cf. Björk & Holopainen 2005, Bogost 2007). In this case, scholars assume that the game object provides some core structure that encourages or even enforces certain play actions to be performed, and aim to study this structure in relation to – or in spite of – the various actions it may facilitate. Second, there are those who submit to the inherent selectivity of our play actions and argue that a game should be understood in the form of its (partly) subjective actualization (cf. Atkins 2003, Malaby 2007). These scholars consider games as activities or processes (as in, 'this game of chess is amazing') rather than as material objects (as in, 'can I borrow your game of chess') (see Aarseth 2001 and

1. Of course, we realize that it is very difficult (if not impossible) to come to methodological considerations that are universal for the vastly diverse range of games available. However, we argue that as long as one is willing to adopt our underlying ontological assumption that games are texts that require enabling or activation by players (and thereby can be considered as both objects and processes that can be read), the various considerations discussed in this paper can be useful for any researcher at play. In that case, the choices and contexts considered will depend on one's research question and more pragmatic things such as the researcher's repertoire knowledge and the amount of time available.

Frasca 2007 for this division). For instance, literary scholars tend to consider individual play sessions (i.e. what happened during one play-through) as 'texts' and objects of study (cf. Atkins 2003). In both these cases, of course, play still takes on an important role. However, for the first group interested in games as objects, play becomes a methodological challenge, while for the second group interested in games as processes, play becomes an object of analytical interest itself.

Within game studies, this has led to a distinction between what Smith has termed formalist and situationist methodologies, where "the former is an attempt to study and categorize formal aspects of games" and the latter "seeks to study concrete gaming practises sometimes arguing that gaming is context dependent and cannot be studied in the abstract" (2006, 39). As Egenfeldt-Nielsen, Smith and Tosca have pointed out, this distinction can be seen as separated schools of thought with their own established conferences and journals (2016, 12). Rather than seeing a game as a designed object, or approaching games purely as an activity, Stenros and Waern frame games "as residing in the sweet-spot intersection between designed activities and enacted experiences; they are consciously designed activities that we engage in purely in order to experience something" (2011, 16). Their approach to think about games as residing between designed activities and enacted experiences helps to understand and position our research questions somewhere on the continuum (rather than on either end) between a games-as-objects and games-as-processes distinction.

Being able to understand our research questions somewhere between games as objects or processes positions also allows for more specific methodological considerations to study games and play. As all games require player input to "come to life", focusing only on the structural elements of a game, like its system of rules, puts a researcher in danger of ignoring the fact that play does not always abide by the rules set by a game's design. Similarly, just looking at play styles and practices might miss the meaning game designers knowingly or unknowingly instilled in a game,

or other aesthetic dimensions of a game's design. Whether that is problematic within one's research design depends on the research question, but entirely ignoring either side might not lead to a full understanding of the issue at hand. Understanding one's research position as located somewhere between opposites helps in making appropriate choices related to playing a game for analytical purposes as well as taking into account contextual matters when doing so. This is where we want to go next. In the section "Considering play" we discuss various matters of time investment and dedicated play strategies for a game researcher. In the section "Considering context", we bring forth issues related to the context of a game in terms of genre, platform, culture and so forth, as well as the situated context of the player-researcher him or herself. In both sections, we will discuss methodological considerations in relation to notions of games as objects and games as processes. Doing so helps us point out that not all considerations relate to each type of research question.

CONSIDERING PLAY

When it comes to playing digital games, it does not hurt to more specifically elaborate on what actually constitutes "play". For the purpose of this article we are not talking about play in the most general sense of "free movement within a more rigid structure" as Salen and Zimmerman define it (2004, 304). More specifically we are talking about *gameplay*, play only occurring within games or "the formalized interaction that occurs when players follow rules of a game and experience its system through play" (2004, 303). For Juul, however, the notion of gameplay is a bit more complex. He argues that gameplay results from the interaction of the rules of the game, the pursuit of the goal by players (during which a player "seeks strategies that work due to the emergent properties of the game") and finally the player's "competence and repertoire of strategies and playing methods" (2005, 91). For methodological purposes, the last point is interesting as it relates to a degree of familiarity and literacy of games, which only comes from repeated

play over time, both of singular games and games in general. You take your experiences from playing a game – in the form of a repertoire of playing methods and strategies – and apply them knowingly and unknowingly to next ones. For Juul, this is "a quite overlooked aspect of playing games, that *a game changes the player that plays it*" (2005, 96, emphasis by author).

Gameplay therefore does not just involve playing games, but is a process that feeds itself: the more games you play, the better you understand them. This has potential implications for the types of research questions one can answer. In his discussion of player strata, Aarseth, for instance, mentions the "superficial play" mode where a researcher "plays around with the game for a few minutes, merely to make a quick classification and get a "feel" for the game" (2003, 6). Such an approach works best, of course, if you are already game literate enough to understand game genres and associated "feels". For a relative newcomer to games, superficial play might therefore not be enough to fully understand a game. It might require continued play and partial or even total completion, and maybe superficial play of some similar games to understand a game in its proper context. Similarly, for a player-researcher well-versed in games, playing games all the way to completion might not be necessary if the research question does not focus on the game as a whole, but rather on a specific element of it

The amount of time you will have to invest in a game, however, says little about play as a method itself. How you engage with games depends on some choices you can make beforehand. As some bigger games like MMORPGs or open world titles can be played in a seemingly endless amount of ways, one may want to adopt a heuristic approach to the game. In such a case, the player does not strive to exhaust all potential play styles and options, but rather goes through a bottom-up process of testing different hypotheses (if I do this, then I expect this to happen) to then let the outcome of that test determine the following action. Broadly speaking, we argue that players can let their further actions be informed by two different approaches. First of all, players can try

to take the route of least resistance and follow the game's lead. In such a case, we do what the game's formal components are encouraging us to do, so that we may progress through the game and achieve its goals. We term this strategy *instrumental play*. This type of play stands in opposition to a more unstructured type of play that we term *free play*. In this type of play, players are not playing to any set challenges or game objectives, but freely engage in the to-and-fro movement of play. The first approach we align most closely to the notion of games as object, whereas the latter can be seen in the light of games as processes.

Instrumental Play

One could argue that to make a claim about a game as a whole, one should try to perform all the different actions that a game makes available. We can call this an *exhaustive* playing strategy. This strategy relies on the idea that any argument becomes stronger if we can show it to be based on intersubjective characteristics of a designed system. One particular play strategy might yield interesting results and arguments, but these results and arguments are stronger when they take into account as many different play choices (successful and unsuccessful), and test as many different interpretations as possible. An example of this strategy can be found in Treanor and Mateas' proceduralist analysis of the classic arcade game *BurgerTime* (Data East 1982), where they try every possible way to play the game in order to arrive at a particular reading of what the game wants and means. Even a relatively simple game like *BurgerTime,* it turns out,requires a considerable amount of playthroughs to arrive at an exhaustive reading. However, as soon as we want to study a game like *Grand Theft Auto V* (Rockstar North 2013), it simply becomes impossible to perform all the different combinations of actions available. More so, many more contemporary games can change after release through patches and other software updates. This suggests that an exhaustive strategy is inherently limited, and it might simply be impossible beyond either very small games or very specific research questions to pursue such a strategy.

Alternatively, a more heuristic strategy seems more apt. For this purpose, we draw on Iser's notion of *instrumental play,* which he explains as a play form that aims for order and structure, and is thereby able to keep the more free form of play from moving away from its (undetermined) goal (1993, 237-238). In other words, instrumental play is a form of play that is goal focused and constrained to an ordering system. This idea of instrumental play shows similarities to the notion of an *implied player* discussed – though not necessarily advocated – by Aarseth (2007) who bases it on the implied reader, another one of Iser's concepts (1974). Aarseth argues that if we want to study the "expectations laid down by the game for the player", in other words, if we wish to focus on the formal characteristics of a game and the way it encourages certain play responses, we need to fulfil those expectations (2007, 132). This suggests that adopting the role of the implied player means performing those actions that lead to success in the game (or in terms of instrumental play: actions that are beneficial to achieving the target). It then becomes important to establish what the goal is and how the game is encouraging certain actions to be performed to achieve that goal.

To show how this instrumental play can come to inform more concrete methodological considerations we discuss three examples below: the gameplay condition, rational play, and cooperative play. First Leino argues that, on the basis of the game's materiality, success can only be defined as holding the ability to keep playing; successful actions consist of those actions that the game requires to continue the play session (2010, 120-162). The way that the game requires certain successful actions, which Leino terms the *gameplay condition* (2010, 133-134), then comes to inform one's heuristic analytical strategy. Secondly, Smith (2006) argues that for a rational player, success equals achieving the game's objective goals, which means that, as a method, rational play means performing those actions that are beneficial to achieving that objective. Finally, for van Vught (2016) success has a broader meaning and includes ludic success as well as constructing a narrative, or being able to see connections to other artworks or

the world beyond the game. In this case, our playing method becomes informed by a more general desire to cooperate with all the different cues a game gives us.

The gameplay condition

Using Leino's gameplay condition as a heuristic play strategy means that every subsequent choice the player makes is simply based on the desire to keep playing. This provides insights into the variety of possible play actions that do not lead to an eventual fail state but, more importantly, pulls the focus towards those formal game components that help to keep the player playing. By, for instance, comparing two erotic Tetris clones, Leino provides a good example of how the placement and use of the erotic content results in this content being either undeniable for the continuation of the play session or something superfluous (deniable) (2007, 117-119).

If we aim to use Leino's gameplay condition as an instrumental heuristic strategy in laying bare the more ludically essential formal components of the game, we need a relatively linear game of progression in which the designer yields strong control over what a player needs to do in order to progress in the game (Juul 2005, 72-73). However, in larger open world games with strong emergent properties (ibid., 73-82), a simple desire to keep playing can lead to an incredible variety of different play responses, which means that using this as heuristic strategy can only activate one of many potential playings, thereby turning the focus to the individual play session rather than the game's formal components. For example, in *Grand Theft Auto V* holding a desire to keep playing still allows us to choose the different missions and get caught up in a life of crime, or instead live out a more peaceful and somewhat mundane existence playing tennis, doing some yoga or watching in-game television. The latter strategy is easier in terms of gameplay, but doing so would not allow us to say anything about formal components important for progression in the game's designed narrative or the formal rules governing the game's

wanted level system. It does, however, allow us to reflect on the experience of performing mundane daily tasks in a "bad" virtual world that is continuously trying to lure us into a life of crime.

The rational player

As a second heuristic playing strategy that puts the focus on the game as a structuring system, we turn to Smith's model of a *rational player* (2006, 34). In this case, the player's choices are informed by the attempts to 'optimize his or her chances of achieving the goals' (ibid.). Here, Smith draws from economic game theory and argues that as long as we strive for those game states that are given a positive value by the designers, (i.e. "objective goals" (2006, 19) that we are meant to achieve from a designer's perspective) we are encouraged to perform a relatively limited set of in-game actions that connect to, and thereby also highlight the functioning of the game's rule-based formal components. In other words, as long as our every 'move' is informed by the desire to achieve the game's objective goals, we get to focus on the way that the game structures our behaviour through a dichotomy of positively and negatively valued content. This allows us to ask questions about the way that the game's rules encourage certain actions over others, which can lay bare interesting ideologies in the game's design.

For example, both Sicart (2009) and Zagal (2010b) have reflected upon the ethical dilemma created in the game *Manhunt* (Rockstar North, 2003) due to the fact that the game rules encourage or enforce players to perform morally abhorrent acts of violence. At first, it would seem that a rational player model does not lead to other actions than an approach informed by Leino's gameplay condition. After all, as Sicart puts it, 'there is only one way of winning the game, and that is to comply with the instructions given in the fictional world and commit these acts' (2009, 52). However, the game also offers the player the option to perform the acts in three levels of 'gruesomeness' each rewarding a higher score thereby making it an (added) objective goal. By adopting

the role of a rational player one would then base every subsequent action on the desire to maximize the score and perform the most gruesome executions. This results in a situation where, as Zagal puts it, the player is "forced to confront the act of being a successful player as a moral dilemma itself. […] How far are you willing to go, as a player, in carrying out the executions?" (2010b, 241). What Zagal aptly notes here is that, as long as we assume the player to be a moral being (a relatively virtuous one that denounces gruesome executions), being a rational player in *Manhunt* also triggers an ethical dilemma about being a rational player. In other words, it is only by trying to achieve *Manhunt*'s objective goals that we can start to question the moral validity of those goals and our actions towards them.

The cooperative player

A third and final instrumental heuristic strategy we discuss here can be found in van Vught's conceptualization of a *cooperative player* (2016). Here cooperation occurs between the player and the game (rather than between players) in the sense that the player follows the game's cues to come to an activation of the game that is "appropriate" on the basis of the functioning of the game's formal components (2016 186-192). He argues that following a game's objective goals can indeed lay bare those elements that are ludically important – in the sense that they "facilitate the player's rule-bound, goal directed progress in a game" (2016, 85) – these strategies do not help to focus on formal elements that have more dominant non-ludic functions (2016, 192-198). For example, to also disclose formal game elements that play a crucial role in the unfolding of the game's narrative, formal elements that play a role in having the player appeal to notions of a real world beyond the game or to other cultural artefacts, and formal elements that play a role in contributing to the game's overall abstract artistic shape, one needs to adopt a strategy that does more than play towards success. Here, van Vught returns to Iser's implied reader and argues that the 'predispositions laid down (…) by the text' (1978, 34) that a player should adopt in order for the text to exercise its

many (not just ludic) effects should not just include a desire to optimize our chances of ludic success/progression. It also requires the skills and appropriate background knowledge to construct a narrative, draw from relevant contexts including related cultural artefacts, and to evaluate the game for its overall artistic shape (2016, 196). Approaching gameplay in this sense also immediately connects it to broader contextual factors that we will discuss more thoroughly below.

Practically, the strategy helps to focus one's analysis towards those formal elements that are the more crucial ones in all five categories: ludic, compositional, realistic, transtextual and artistic. This means that cooperative play can not only help to distinguish between more and less important elements for ludic progress (e.g. main quests from side quests), but also allows for distinguishing between those components more or less crucial to the game's plot development (e.g. certain cutscenes over others); those more or less crucial for the overall realistic quality (e.g. when sound helps to create the sensation of a 3-dimensional space); those more or less crucial for the game's transtextual references to other cultural artefacts (e.g. Donkey Kong's similarities to King Kong), and those components more or less crucial for the overall artistic shape of the game (e.g. the visual characteristics of *MadWorld* (PlatinumGames 2009) or the 'bullet cam' in *Max Payne 3* (Rockstar Studios 2012)).

Free Play

While the above instrumental approaches provide specific takes on how to play games to understand them as objects, they are not necessarily all best-equipped to understand them as processes. Another way to frame this is that while more instrumental approaches are, as Aarseth rightfully points out, "sufficient to understand the expectations laid down by the game for the player" (2007, 132), they do not tell us much about the many other ways in which a game can be activated. Here we again draw on Iser who coined the term free play to focus on the unrestrained boundary-

crossing to-and-fro movement of play which has a tendency to move away from a goal-directed path (1993, 236-237). In this section we thus let go of the idea of an implied player, and instead engage more freely in play: not just following but exploring, pushing, bending, deviating from and transgressing the intended playing paths – not just "playing" but "gaming" a game. While we should avoid a bias in our research towards "the statistically marginal subversive or truly innovative play styles" (ibid. 131), from a method perspective, taking an approach which deviates from dominant play styles might just yield new insights. In fact, they lead to understandings of the game and/or its culture of play which could not have been achieved otherwise.

To show how free play fits within methodological considerations, we distinguish between three forms: exploration, transgressive play, and going native. As with instrumental play, these three forms are to be seen as a starting point to think about free play as method, not as an exhaustive list. These free forms of play can occur on a scale from behaviour that is facilitated and anticipated by the designers, to behaviour which actively seeks to test boundaries and even create new rules and forms of play. With free play, we arguably come closer to understanding what Aarseth would call "real player behavior" (2007, 132) since players often do things in games which go beyond the game's primary goals. Although it is not our intention here to move away from studying the game to a study of players, the fact that real players often do widely different things, does have consequences for the claims we can make about the meaning of a game or the experiences that it affords or yields. It is often only when we engage in free play that the processual nature of the game becomes apparent, resulting in different forms of meaning-making and associated research questions and approaches.

Exploration

A key characteristic of games is that they afford exploring both ludic strategies as well as fictional dimensions (if present) beyond

the intended or primary playing paths, resulting in an almost endless range of potential playings. A game might have more solutions to problems and a player might experiment with different, more creative and unexpected approaches for progression. Players wander off the most clearly sign-posted paths in a virtual world, not to finish a quest or seek the next part in the storyline, but just out of sheer curiosity about what lies beyond. Exploratory play presents, as Raessens puts it, "the actualization of something that is virtually, in the sense of potentially, already available as one of the options, created by the developer" (2005, 381). It is an actualization of the game which, while afforded by design, is the result of a player's creativity and interest.

As a methodological approach, explorative play yields different results from simply following intended or dominant paths through a game. For some game genres like adventure or role-playing games, exploration is not just optional but an integral part to the overall experience. As Fernandez-Vara puts it, they "thrive on allowing players to explore the world in their own time, or at least give room to gather information, and even learn from trial and error" (2016, 234). Here, following a purely instrumental approach provides only limited insights into the game as a whole.

By taking specific explorative approaches, a researcher can reach new understandings about how games operate and how we could investigate them. Miller, for instance, approaches single-player open world games like an ethnographer, and describes her visit to *Grand Theft Auto IV* (Rockstar North 2004) as fieldwork where she encounters and observes non-player characters as inhabitants of a world. As such, she argues, gameplay becomes more like in-game tourism, which, among other things, refocuses the role of the avatar and its place within the game world (2008). Explorative play can therefore provide insights into the kinds of play a game affords, but also what it inhibits. Actively looking for non-violent or non-lethal solutions in otherwise action-oriented games, such as the action-adventure genre, signal the various ways in which games deal with violence and associated ethical considerations

(see Glas 2015; Jørgensen 2015). Using a self-imposed rule of permadeath, where having your character die means restarting the entire game, Keogh made a playthrough of *Minecraft* (Mojang 2011) into an experience with unexpected narrative weight (2013).

Transgressive play

Another free play strategy is transgressive play. Like explorative play, transgressive play diverges from a game's intended or dominant repertoire of actions. Here, however, it usually involves creative use of game mechanics or exploitation of bugs that "would in most cases have been rendered impossible if the game designers could have predicted them" (Aarseth 2007, 132). Depending on game type and platform, such play activities, when discovered, are indeed rendered impossible through software updates. But sometimes, particular forms of transgressive play become so widespread and popular that they become formalized as part of the "intended" experience within the rules of the system or newer iterations of that system, like with the strafe-jumping technique in first-person shooter *Quake* (id Software 1996). In such a case, we can even speak of "transformative play", where "play doesn't just occupy and oppose the interstices of the system, but actually transforms the space as a whole" creating new game practices or even new games in the process (Salen & Zimmerman 2004, 305). Whether unwanted or transformative, transgressive play can be considered as "a symbolic gesture of rebellion against the tyranny of the game, a (perhaps illusory) way for the played subject to regain their sense of identity and uniqueness through the mechanisms of the game itself" (Aarseth 2007, 132). This once more shows that games are not stable objects, but under constant negotiation by its players.

Transgression can also translate itself into method, for instance in the form of cheating, a term which, in relation to research, immediately sounds problematic. Conventionally, cheating should not be seen by researchers as a way of circumventing playing a game, at least not according to Aarseth. Cheaters, he argues, are

certainly present among game scholars, but cheating researchers "cannot be expected to reach a deep understanding of the games they examine" as cheating takes away a game's challenges (2003, 7). As Karppi and Sotamaa have already pointed out, by approaching cheating this way, Aarseth seems to indicate that there are good and bad ways to play games, and that by doing so he "at least implicitly claims that the researcher also needs to be a good player" (2010, 63). In their analysis of *DJ Hero* (FreeStyleGames 2009), which like many games has built-in cheat codes and player-created cheat programs and guides, they are quick to point out that the presence of cheats "indicate that 'playing' is […] far from a rigid construct" (ibid.). In fact, cheating is an important part of game culture, where constant negotiations occur about what constitutes cheating. What is cheating for some is entirely acceptable behaviour for others (see Consalvo 2007).

Karppi and Sotamaa then point to Kücklich, who suggests that cheating can actually be a worthwhile pursuit for a researcher because it "allows us to reflect upon the presuppositions that we bring to games, (…) enables us to identify blind spots in our research, and thus discover new avenues of inquiry (…), [and can] help us recognize flaws in our theoretical models, which are so often built upon the experience of playing by the rules, rather than breaking the rules" (2007, 357). By using a rubber band modification of the *DJ Hero* hardware (to pull the crossfader slider back into a central position), Karppi and Sotamaa for instance highlight "a whole culture of services around the game whose potentiality is actualized only when we exit the structure and the rules of the game" (2012, 425). In other words, this cheat allows them to reflect on the participatory culture around the game and the way it is transforming gameplay.

Transgressive play can also come in forms other than cheating. As Meades (2015) notes, transgressive play, or what he chooses to term counterplay, is not just defined by its working against the coded game rules, but also against more socially negotiated play etiquette, or it enters the grey areas regarding Terms of Use

or End-User Licence Agreements. Dibbell, for instance, started a year-long effort to make a living trading virtual currency for real money within the MMORPG, *Ultima Online* (Origin Systems 1997), engaging with the genre's virtual economies and real-money trade. In doing so, Dibbell lays bare the problematic relationship between play and work in these types of games (2006). Similarly, Myers (2008) conducted a series of social experiments in the MMORPG,*City of Heroes/Villains* (Cryptic Studios 2004-2012), where he played purely according to the game's rules thereby breaching social conventions of the player community, which led to him being ostracized. Not only did this allow Myers to study the relationship between those rules governing the game system and those rules governing the game society, but it also shows how following the rules in multiplayer games can sometimes be a form of transgressive play.

Going 'native'

The phrase "going native" within sociology is linked to participant observation and is often linked to concerns of losing objectivity by becoming too involved with a group or culture under investigation. We argue, however, that from a humanities perspective, a more subjective experience is not just acceptable, but unavoidable as, to quote Aarseth, a playing game scholar "is a necessary but uncontrollable part of the process of creating ludic meaning, a function that is created by the gameplay as well as co-creator of it" (2007, 131-132). To explain that "going native" as a methodological approach goes a step further than merely paying attention to the more personal nature of play (which is discussed more in depth below), we can point towards a methodological discussion raised by Bartle concerning play as a method.

For Bartle, the repertoire knowledge and experience gained by playing a lot of games is essential in relation to the time investment needed to understand a game. In his view, game researchers following fixed methodological approaches might even put too much time in games if they already have the appropriate literacy

and competence. He argues that "[i]f you, as a Game Studies researcher, study game after game after game, eventually you'll reach the same point that game designers reach: you'll merely have to read the manual to know what a game is going to play like" (2010). At this point, you will "grok" a game – an intuitive understanding of a game's concepts. Playing games all the way through every time therefore results in "swiftly diminishing results" (ibid.). With enough ludoliteracy under your belt, it is indeed possible to reach conclusions about a game's design earlier than other less-literate researchers. This view does seem to understand games primarily as objects, with the focus primarily on its design. Putting too much focus on play as a method within game studies, Bartle argues, might even rob scholars of their ability to enjoy play (ibid.).

Prolonged, expert play of singular titles produces more than just an understanding of a game's basic design concepts. In order to understand the affordances for learning in games, Hock-koon, for instance, trained for six months to become a "supergamer" able to perform a one-credit run on an *Alien Vs. Predator* arcade game (Capcom 1994). By doing so, he was able to pinpoint how game mechanisms relate to understandings of mastery over a game (2012). Investing a lot of time into a game also brings one closer to the experience of regular players, especially those heavily engaged in online multiplayer games. With titles popular in eSports, it provides insights into the so-called "meta" of game-transcending strategies. This can indeed mean a lot of repetitive play but, as Glas points out in relation to MMORPGs, "at moments where play seems to become repetitive and intuitive rather than challenging, players are more prone […] to engage in devious, transgressive or otherwise divergent play practices" (2012, 175). In his research on the *World of Warcraft*'s complex participatory culture, he points out that many of the often highly transformative play practices of players are "born from the interplay between boredom and fun", adding that to truly understand why players engage in unexpected or unorthodox play practices "grokking a game as a researcher can be as valuable as playing it for the first time" (2012, 176).

Within MMORPGs we can also start to understand the many practices players engage in, like game world exploration, griefing, powerleveling, role-playing, the creation of user-interface modifications, machinima videos or other creative productions (cf. Taylor 2006; Corneliussen & Rettberg 2008; Chen 2012). And with understanding here, we mean not as an outsider looking in, but as a true insider: fully engaged in these activities and able to understand a MMORPG as an object in which meaning is not fixed but under constant negotiation.

CONSIDERING CONTEXT

Aside from the fact that different strategic choices highlight different parts of a game experience, it also matters for our signification processes what background knowledge we bring to the game. A game does not exist in a void, but is part of a large and complex (media) environment in which it has its own medium-specific characteristics, genres, history and industry practices. As explained earlier, these are sociotechnical phenomena. As Fernández-Vara points out, merely looking at a text while ignoring the circumstances of its production and play "overlooks aspects that may be essential to understand the text" (2015, 14). At the same time, games are also sociocultural in nature. How we play and understand them is influenced by our sociocultural baggage and, if present, repertoire knowledge about games. In this section we therefore discuss how this context can, and in cases should, be taken into consideration when playing games for research purposes. We subdivide this section into two parts which, again, relate to the distinction between game as object and game as process. In the first part, we discuss the context of the game – the aforementioned circumstances of production – while in the second part we focus on the situated nature of the player-researcher and how this matters in terms of our methodological considerations.

Putting a game in context

The context of a game can mean many things, and it is here that a researcher also needs to decide upon those elements which are of most importance for answering a research question. As Zagal points out, to be able to derive meaning from games means having "the ability to understand games as the ability to explain, discuss, describe, frame, situate, interpret, and/or position games" in their proper contexts (2010a, 24). Being ludoliterate means being able to place a game in the context of human culture (including the relation with other media); in the context of other games (including genre); and the context of the technological platform on which games run (ibid.). Fernández-Vara adds even more specific contexts, like the economic context, a game's specific production team, and its audience (2015, 59-60). While it is impossible to discuss all potentially relevant contexts here, a few examples might help to understand games as objects born from and existing within certain cultural, historical, technological and other contexts.

Take a game like *Gone Home* (The Fullbright Company 2013), which offers an experience that relies heavily on existing narrative competencies of its players. The game presents what Jenkins calls an "evocative space" by drawing upon pre-existing genre traditions (2004, 123), in this case the horror genre, to trick the player into initially believing they are entering a house where something terrible might have happened – something terrible might even still be present. Being able to understand the game's design as part of a burgeoning new genre known by the somewhat contested moniker "walking simulator" (Irwin 2017) might also help in understanding *Gone Home*'s aesthetic choice of placing narrative before challenges. Also, a game like *Pokémon Go* (Niantic 2016) is best understood in relation to its genre roots in pervasive games (cf. Montola, Stenros & Waern 2009). As *Pokémon Go* is a so-called free-to-play game, understanding the game's design also requires some insight into the underlying monetization model of free-to-play games and how this economic

context has shaped the contemporary gaming market on platforms like the App Store for Apple's smartphones (Nieborg 2016).

The platform on which games run does not just form an economic context, but also very much a technological one. In the example of *Pokémon Go*, smartphones offer the location-based technology needed to create its augmented reality experience. Head-mounted displays like the Oculus Rift also offer very specific gameplay experiences, in this case related to "virtual reality" experiences. Some games, however, are released both on more traditional platforms like a gaming console or PC and on these new VR devices. Playing a game like *Superhot* (Superhot Team 2016) on an Xbox One yields a very different experience than on an Oculus Rift where you can actually use your full body to dodge bullets and swing weapons around. Taking the platform into account therefore matters, as experiences can differ considerably between them. As Zagal points out, "videogames are implemented on technological platforms that shape both the form and functionalities and experiences they can offer" (2010a, 32). The fact is, Montfort and Bogost remind us in their overview of what platform studies should look like, "a computational platform is not an alien machine, but a cultural artefact that is shaped by values and forces and which expresses views about the world" (2009, 148) and as such should be taken as serious as the games played on them. While not every research project might need to fully engage in an in-depth study of the underlying platform, being aware of this technological context matters as it plays an important part in shaping the gameplay experience.

Putting oneself in context

Aside from acknowledging the various contexts of a game, it is also important to acknowledge one's own context as a researcher at play. As a researcher, one may first be tempted to strive for an approach that is as objective as possible. A way of playing that may activate the game in a certain way, but nevertheless keeps a critical distance towards the object during that activation process.

However, as a researcher studying games (as is the case with many other objects), downplaying or obscuring oneself becomes problematic since, as we noted above, the researcher is inherently caught up in the object of study.

Here, the distinction between those considering games as objects and those considering games as processes, surfaces again. When we're interested in games as objects we may try to bracket off personal preferences as much as possible to come to an experience that can be seen as closely connected to the materiality of the game as object (see Leino's (2010) gameplay condition). But when we're considering games as processes we're more inclined to embrace the indeterminacy of the text and see any personal experience as a valid contribution to our understanding of the text. Also in the latter case, however, we still need some methodological rigor and show where our personal experiences come from. In other words, we need to acknowledge our position as both researchers and players and reflect on our how our cultural, social, economic and historical situation feeds into our understanding of the game as process. Here Lammes offers two important considerations.

First of all, by drawing from Boelstorff's ethnographic approach and his acknowledgment that a researcher is always a participant in the culture that she or he is trying to study (2006), Lammes argues that also scholars studying games as texts should be reflexive about their dual role as researcher and players (2007, 28). This *reflexivity* helps us to be open about the unique position that we are in when we're playing for analytical purposes rather than, or in most cases in addition to playing for pleasure. As Fernández-Vara puts it, "the sheer fact that we are tackling games systematically and critically sets us aside from most other players" (2015, 28). Given the fact that play is often seen as intrinsically purposeful and that any added benefit like prizes or indeed analytical gain should become secondary to the primary purpose of play (what Apter (1991, 16) calls paratelic), a more "utilitarian" analytical way of playing (Mäyrä 2008, 165) impacts the type of claims that we

can make. So, if making general claims about possible other play experiences on the basis of one's own experience was not already problematic enough, it becomes all the more problematic if we consider that our play experience as a researcher is in fact anything but the play experience of the "average" gamer. Being reflexive about our role as researchers at play thus keeps us from making universal knowledge claims, and forces us to further explore the consequences of our academic gaze.

A good example of reflexivity at work is Jenkins' (1992) conceptualization of the "aca-fan". The aca-fan is a portmanteau of an academic with access to and knowledge of scholarly resources and methodological rigor, and a fan with access to the fine-grained knowledge of the object of the fan's admiration. While approaching a research object as an aca-fan may at first seem like a best-of-both-worlds option, the idea has been criticized for the fact that taste has become too much of a determining factor in the types of texts that we do and don't study, as well as for the lack of scepticism in fans which may be important to attain analytical depth (e.g. Bogost 2010). As Bartle puts it in the form of a question: "If researchers are writing in the light of their experience as players, isn't there bound to be an unhealthy correlation between what they find fun as players and what they regard to be significant as researchers?" (2010). On the other hand, Jenkins' introduction of the concept also seemed to specifically address any idealized vision of academic scepticism (or worse, objectivism), arguing that fans can also be highly critical of the media they love (for instance when a beloved series keeps using racial or gender stereotypes) (Jenkins, McPherson, Shattuc 2002, 6-11). However, whether one is either positive or negative about the combination of being an academic and a fan, the point here is that one should be reflexive about it. We should be reflexive about the way it may have steered our analysis towards certain objects or components. We should be reflexive about our love for or distaste of the object of study. And we should be reflexive about the way that the involvement with or distance from the object could potentially impact our findings.

The aca-fan also brings us to Lammes' (2007) second consideration: *situatedness*. In a similar way that the self-reflection of an aca-fan makes for more subjective and autobiographical writings, so should any gamer be open about the socio-economic, cultural and historical situation in which she or he exists and encounters the game. While Lammes only gives one small example of research pertaining to this category of situatedness, we would argue that there is now a strong tradition in game studies that acknowledges and highlights the researcher at play as a subject existent and playing in a specific context. Not only can those pieces be found in more informal blogposts such as Costikyan's criticism of *September 12th* (Frasca 2003a) from the position of a 9/11 survivor (see Bogost 2006, 131-132), but also in academic articles such as Frasca's (2001) analysis of *The Sims* (Maxis 2000) or his analysis (2003b) of *Grand Theft Auto III* (DMA Design 2001). In fact, as Fernández-Vara notes in her discussion of the "personal account" (2015, 210-215), this situatedness also seems to be the core characteristics of New Games Journalism: a kind of journalism akin to the highly subjective gonzo journalism popularized by Hunter S. Thompson. As Gillen puts it in his manifesto, New Games Journalism "argues that the worth of a videogame lies not in the game, but in the gamer. What a gamer feels and thinks as this alien construct takes over all their sensory inputs is what's interesting here" (2004, see also Rossignol 2008). From a New Game Journalist perspective, such a personal telling is preferred over the notion that game criticism should be a pursuit of objectivity (see also Foxman & Nieborg 2016) thereby showing itself to be on the processual side of the object-process continuum.

CONCLUSION

In this paper, we aimed to provide an overview of the various methodological considerations we may have as researchers at play. We have argued that such considerations should *precede* the actual analysis of games, as making choices in the approach to playing

enables and affords certain types of analysis, while at the same time making other types of analyses less feasible. As such, this work should be approached in congruence with literature that focuses more specifically on textual analysis of games as a methodology such as Carr (2009), Bizzochi and Tanenbaum (2011), or Fernández-Vara's comprehensive handbook on the topic (2015). Here, more detailed approaches and frameworks for the study of games as texts can be found.

However, when performing such a textual analysis, a fundamental underlying question that remains to be addressed, concerns whether or not we aim to study games as objects and/or as processes, as this implies a play style that matches this ontological starting point both in terms of strategic choices and contextual considerations. An overview of how the various considerations connect can be seen in the figure below. While this overview might seem orderly, we want to keep on stressing that various parts are not meant as mutually exclusive opposites, but should be seen as overlapping and fundamentally intermingled. The goal here is to show how methodological considerations relate to rather than exclude one another even if, in the end, a particular research emphasis also leads one to consider certain choices and contexts more than others.

	Considering Play	Considering Context
	Instrumental play	Game Context
Games as object	– Gameplay condition	– Sociocultural
		– Genre
	– Rational play	– Technological
	– Cooperative play	– Economic
	Free play	
		Player Context
Games as process	– Exploration	
	– Transgressive play	– Reflexivity
	– Going native	– Situatedness

Figure 1: Relations of methodological play considerations as discussed in this paper.

When engaging with games for a research project, one should be able to better understand the type of play that is more appropriate, as well as the time investment and game literacy needed to be able to fully and fruitfully engage with one's question. In a classroom

setting, the latter considerations are especially noteworthy as, in our experience, students who are not too familiar with games tend to come up with research questions that they will not be able to answer. From a play as method perspective, a student can start with a few basic and often even pragmatic questions. If a game which has already piqued your interest is your starting point, you can ask what kind of research questions are actually viable based on your existing repertoire and contextual knowledge, as well as the amount of time that can be invested in the research itself. Starting with a specific research question or from a specific theoretical framework, you can ask whether or not this requires an object or process-oriented approach and, with it, a play approach which focuses on intended design structures or more subjective, situated experiences. Being able to answer such questions and reflecting on methodological choices before and during play will ultimately turn the play process into a more effective and well-considered part of one's research.

BIBLIOGRAPHY

Aarseth, Espen J. "Computer game studies, year one". *Game Studies.* vol. 1, no. 1 (2001). http://gamestudies.org/0101/editorial.html

Aarseth, Espen J. "Playing research: Methodological approaches to game analysis". Paper presented at *Digital Arts and Culture (DAC)*, Melbourne, 2003.

Aarseth, Espen J. "I fought the law: Transgressive play and the implied player". In *DiGRA 2007: Situated Play Proceedings*, pp. 130-133. DiGRA.

Apter, Michael J. "A structural phenomenology of play". In *Adult play: A reversal theory approach*, edited by John H. Kerr & Michael J. Apter, pp. 13-29. Amsterdam, NL: Swets & Zeitlinger, 1991.

Atkins, Barry. *More than a game: The computer game as fictional form*. Manchester, UK: Manchester University Press, 2003.

Barthes, Roland. "From work to text". In *Image-Music-Text*, pp. 155-164. London, UK: Fontana Press, 1977.

Bartle, Richard. "Hearts, clubs, diamonds, spades: Players who suit MUDS". (1996). http://mud.co.uk/richard/hcds.htm

Bartle, Richard. "A "Digital culture, play and identity: a World of Warcraft reader". *Game Studies* vol. 10, no. 1 (2010). http://gamestudies.org/1001/articles/bartle

Bizzocchi, Jim. & Joshua Tanenbaum. "Well read: Applying close reading techniques to gameplay experiences". In *Well-played 3.0*. edited by Drew Davidson, pp. 262-290. Pittsburgh, PA: ETC Press, 2011.

Björk, Staffan & Jussi Holopainen. *Patterns in game design*. Boston, MA: Charles River Media, 2005.

Blizzard Entertainment. *World of Warcraft* [Windows/MacOS]. Blizzard Entertainment, 2004.

Boelstorff, Tom. "A ludicrous discipline? Ethnography and game studies". *Games and Culture*. vol. 1, no. 1 (2006): 29-35.

Bogost, Ian. *Unit operations: An approach to videogame criticism*. Cambridge, MA: The MIT Press, 2006.

Bogost, Ian. *Persuasive games: The expressive power of video games*. Cambridge, MA: The MIT Press, 2007.

Bogost, Ian. "Against aca-fandom: On Jason Mittel on Mad Men". *Bogost.com*. Posted 29 July 2010. http://bogost.com/writing/blog/against_aca-fandom/

Capcom. *Alien vs. Predator* [Arcade]. Capcom, 1994.

Carr, Diane. "Textual analysis, digital games, zombies". In: *DiGRA '09 – Proceedings of the 2009 DiGRA International Conference: Breaking new ground: Innovation in games, play, practice and theory*. DiGRA. http://www.digra.org/wp-content/uploads/digital-library/09287.241711.pdf

Chen, Mark. *Leet noobs: The life and death of an expert player group in World of Warcraft*. New York, NY: Peter Lang, 2012.

Consalvo, Mia. *Cheating: Gaining advantage in videogames*. Cambridge, MA: The MIT Press, 2007

Corneliussen, Hilde G. & Jill Walker Rettberg (eds.).*Digital culture, play, and identity: A World of Warcraft reader*. Cambridge, MA: The MIT Press, 2008.

Cryptic Studios. *City of Heroes/Villains* [Windows/MacOS]. NCSOFT, 2004-2012.

Crystal Dynamics. *Tomb Raider* [multiplatform]. Square Enix, 2013.

Data East. *BurgerTime.* [Arcade]. Data East/Bally Midway, 1982.

Dibbell, Julian. *Play money: Or how I quit my day job and made millions trading virtual loot.* New York, NY: Basic Books, 2006.

DMA Design. *Grand Theft Auto III* [multiplatform]. Rockstar Games, 2001.

Egenfeldt-Nielsen, Simon, Jonas Heide Smith & Susana Pajares Tosca. *Understanding video games: The essential introduction – Third edition*. London, UK: Routledge, 2016.

Fernández-Vara, Clara. *Introduction to game analysis*. London, UK: Routledge, 2015.

Fernández-Vara, Clara. "Adventure". In *The Routledge companion to video game studies*, edited by Mark J.P. Wolf, & Bernard Perron, pp. 232-240. New York, NY: Routledge, 2016.

Foxman, Maxwell & David B. Nieborg. "Between a rock and a hard place: Games coverage and its network of ambivalences. *Journal of Games Criticism*. vol. 1, no. 3. (2016). http://gamescriticism.org/articles/foxmannieborg-3-1

Frasca, Gonzalo. "The Sims: Grandmothers are cooler than trolls". *Game Studies* vol. 1, no. 1. (2001). http://www.gamestudies.org/0101/frasca/

Frasca, Gonzalo. *September 12th* [browser-based]. Newsgaming.com, 2003a.

Frasca, Gonzalo. "Sim Sin City: Some thoughts about Grand Theft Auto 3". *Game Studies* vol. 3, no. 1. (2003b). http://gamestudies.org/0302/frasca/

Frasca, Gonzalo. *Play the message: Play, game and videogame rhetoric*. Ph.D. Dissertation. IT University of Copenhagen. Denmark, 2007.

FreeStyleGames. *DJ Hero* [multiplatform]. Activision, 2009.

Fullbright Company, The. *Gone Home* [multiplatform]. The Fullbright Company, 2013.

Gillen, Kieron. "The new games journalism". *Kieron Gillen's Workblog*. Posted 23 March, 2004. http://gillen.cream.org/wordpress_html/assorted-essays/the-new-games-journalism/

Glas, René. *Battlefields of negotiation: Control, agency, and ownership in World of Warcraft*. Amsterdam, NL: Amsterdam University Press, 2012.

Glas, René. "Of heroes and henchmen: The conventions of killing generic expendables in digital games". In *The dark side of game play: Controversial issues in playful environments* edited by Torill Elvira Mortensen, Jonas Linderoth & Ashley ML Brown, pp. 33-49. New York, NY: Routledge, 2015.

Hock-koon, Sébastien. "Affordances of elliptical learning in arcade video games". In: *Proceedings of DiGRA Nordic 2012 Conference: Local and Global – Games in Culture and Society*. DiGRA. http://www.digra.org/wp-content/uploads/digital-library/ 12168.59440.pdf

id Software. *Quake* [multiplatform]. GT Interactive, 1996.

Irwin, Jon. "Devs discuss the history and future of Walking Sims". *Gamasutra*. Posted 7 February, 2017. http://www.gamasutra.com/ view/news/291307/ Devs_discuss_the_history_and_the_future_of_Walking_Sims.php

Iser, Wolfgang. *The implied reader: Patterns of communication in prose fiction from Bunyan to Becket*. Baltimore, Maryland: John Hopkins University Press, 1974.

Iser, Wolfgang. *The act of reading: A theory of aesthetic response*. Baltimore, Maryland: John Hopkins University Press, 1978.

Iser, Wolfgang. *The fictive and the imaginary: Charting Literary Anthropology*. Baltimore, Maryland: The John Hopkins University Press, 1993.

Jenkins, Henry. *Textual poachers: Television fans and participatory culture*. New York, NY: Routledge, 1992.

Jenkins, Henry, Tara McPherson & Jane Shattuc. "The culture that sticks to your skin: A manifesto for a new cultural studies". In *Hop on Pop: The politics and pleasures of popular culture*, edited by Henry Jenkins, Tara McPherson & Jane Shattuc, pp. 3-25. London, UK: Duke University Press, 2002.

Jenkins, Henry. "Game design as narrative architecture". In *First-person: New media as story, performance, and game*, edited by Noah Wardrip-Fruin & Pat Harrigan, pp. 118-130. Cambridge, MA: The MIT Press, 2004.

Jørgensen, Kristine. "Dark play in Dishonored". In *The dark side of game play: Controversial issues in playful environments* edited by Torill Elvira Mortensen, Jonas Linderoth & Ashley ML Brown, pp. 210-225. New York, NY: Routledge, 2015.

Juul, Jesper. *Half-real: Video games between real rules and fictional worlds*. Cambridge, MA: The MIT Press, 2005.

Karppi, Tero & Olli Sotamaa. "Methodological observations from behind the decks". In *Games as services: Final report*, edited by Tero Karppi & Olli Sotamaa, pp. 56-72. Tampere, Finland: University of Tampere, 2010.

Karppi, Tero & Olli Sotamaa. "Rethinking playing research: DJ HERO and methodological observations in the mix". *Simulation & Gaming* vol. 43, no. 3 (2012): 413-429.

Keogh, Brendan. "When game over means game over: Using permanent death to craft living stories in Minecraft". In *Proceedings of The 9th Australasian Conference on Interactive Entertainment: Matters of Life and Death*. Melbourne, 2013. https://dl.acm.org/citation.cfm?doid=2513002.2513572

Kücklich, Julian. "Homo Deludens: Cheating as a methodological tool in digital games research". *Convergence* vol.13, no. 4 (2007): 255-367.

Lammes, Sybille. "Approaching game studies: towards a reflexive methodology of games as situated cultures". In *DiGRA 2007: Situated Play Conference Proceedings*, pp. 25-30. DiGRA.

Leino, Olli Tapio. "Emotions about the Deniable/Undeniable: Sketch for a

Classification of Game Content as Experienced". In *DiGRA 2007: Situated Play Conference Proceedings*, pp. 113-120. DiGRA.

Leino, Olli Tapio. *Emotions in play: On the constitution of emotion in solitary computer game play*. Ph.D. Dissertation, IT University of Copenhagen, Denmark, 2010.

Malaby, Thomas M. "Beyond play: A new approach to games". *Games and Culture* vol. 2, no. 2 (2007): 95-113.

Mäyrä, Frans. *An introduction to game studies: Games in culture*. London, UK: Sage, 2008.

Maxis. *The Sims* [multiplatform]. Electronic Arts, 2000.

Miller, Kiri. "The accidental carjack: Ethnography, gameworld tourism, and Grand Theft Auto". *Game Studies* vol. 8, no. 1. (2008) http://gamestudies.org/0801/articles/miller

Mojang. *Minecraft*. [multiplatform]. Mojang/Microsoft Studios, 2011.

Montfort, Nick & Ian Bogost. *Racing the beam: The Atari Video Computer System*. Cambridge, MA: The MIT Press, 2009.

Montola, Markus, Jaakko Stenros, & Annika Waern. *Pervasive games: Theory and design*. Burlington, MA: Morgan Kaufmann, 2009.

Myers, David. "Play and punishment: The sad and curious case of Twixt". In *Proceedings of the [Player] conference*, pp. 1-27. IT University Copenhagen, 2008.

Nieborg, David B. "From premium to freemium: The political economy of the app. In *Social, casual, and mobile games: The changing gaming landscape*, edited by Tama Leaver & Michele Willson, pp. 225-240. New York, NY: Bloomsbury, 2016.

Niantic. *Pokémon GO*. [Android/iOS]. Niantic, 2016.

Origin Systems. *Ultima Online* [Windows/Linux]. Electronic Arts, 1997.

PlatinumGames. *MadWorld* [Wii]. Sega, 2009.

Raessens, Joost. "Computer games as participatory culture". In *Handbook of computer game studies*, edited by Joost Raessens & Jeffrey Goldstein, pp. 373-388. Cambridge, MA: The MIT Press, 2005.

Rockstar North. *Grand Theft Auto IV* [multiplatform]. Rockstar Games, 2008.

Rockstar North. *Grand Theft Auto V* [multiplatform]. Rockstar Games, 2013.

Rockstar Studios. *Max Payne 3* [multiplatform]. Rockstar Games, 2012.

Rossignol, Jim. *This gaming life: Travels in three cities*. Ann Arbor, MI: The University of Michigan Press, 2008.

Salen, Katie, & Eric Zimmerman. *Rules of play: Game design fundamentals*. Cambridge, MA: The MIT Press, 2004.

Sicart, Miguel. *The ethics of computer games*. Cambridge, MA: The MIT Press, 2009.

Smith, Jonas Heide. *Plans and purposes: How videogame goals shape player behaviour*. Ph.D. Dissertation. IT University of Copenhagen, Denmark, 2006.

Stenros, Jaakko & Annika Waern. "Games as activity: Correcting the digital fallacy". In *Videogame studies: Concepts, cultures and communications*, edited by Monica Evans, pp 11-22. Oxford, UK: Inter-disciplinary Press, 2011.

SUPERHOT Team. *Superhot* [multiplatform]. SUPERHOT Team, 2016.

Taylor, T.L. *Play between worlds: Exploring online game culture*. Cambridge, MA: The MIT Press, 2006.

Treanor, Mike, & Michael Mateas. "BurgerTime: A proceduralist investigation". In *Proceedings of DiGRA 2011 Conference: Think Design Play*. DiGRA. http://www.digra.org/digital-library/ publications/burgertime-a-proceduralist-investigation/

van Vught, Jasper. *Neoformalist game analysis A methodological exploration of single-player game violence*. Ph.D. Dissertation. University of Waikato, New Zealand, 2016.

Zagal, José P. *Ludoliteracy: Defining, understanding and supporting games education*. Pittsburgh, PA: ETC Press, 2010a.

Zagal, José P. "Manhunt: The dilemma of play". In *Well-played 2.0*, edited by Drew Davidson, Drew, pp. 241-243. Pittsburgh, PA: ETC Press, 2010b.