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Editorial: Transitions

Holger Pötzsch, Kristine Jørgensen

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Editorial: Transitions

HOLGER PÖTZSCH AND KRISTINE JØRGENSEN

The past years have given us little to be hopeful about. Even a creative and generally joyful discipline such as game studies has not been unaffected by exploding global inequalities, ecological and economic crises, austerity politics, de-democratization, pandemics, and wars. Given this rather bleak backdrop, we have to ask: Can we still play today? Does the present condition still allow for playfulness? We believe not only that it does, but also that difficult times, indeed, *require play*—and more so than eras characterized by peace, prosperity, and general wellbeing. Already in 1938, Huizinga (1938 [1955], Foreword, n.p.) pointed out, at a bleak historical moment of his own that in many chilling aspects seems comparable to ours, that "civilization arises and unfolds in and as play"—to retain our humaneness and to remain civilized despite the challenges we are put to, *we need to be playful*. Thus, we might want to follow Huizinga's suggestion and look to Homo Ludens—the playful human—for solutions to our self-inflicted problems.

In Huizinga's terms, a civilized world is not a condition for play. On the contrary, he claims, play is the basis for all civilization. Without a playful mind we run the danger of letting loose the demons of unchecked instrumental rationality and of relentless disruptive acts of making-and-breaking, void of caution, empathy, or remorse. Only a playful mind can help us use our enormous faculties with the necessary thoughtfulness and care. Play, playfulness, and games, it seems, matter more in times of crisis than otherwise, and so do studies of these complex and multifaceted phenomena. In a world of multiple severe challenges, we need to study games and play with an eye on their implications for society, culture, and politics, and with focus on possible alternatives and solutions they might offer. If play and playfulness matter for civilization, so do games and game studies.

This opening frame enables us to make a first transition in this editorial—a shift from global crises in an era of increasing bleakness and general decline to more mundane matters, here represented by game studies and games scholarship. *Eludamos: Journal for Computer Game Culture* is one arena where manuscripts studying play, playfulness, and games can be published and debated. In line with the journal's overall scope, we conceive of computer games as aesthetic expressions with cultural, political, and societal implications, and see it as an important part of our mission to investigate how games and play both shape and are shaped by the world. In doing this, we are interested in both media-specific and transmedial aspects and put particular emphasis on the embedding of formal aspects of games in complex and multifaceted contexts of use and adaptation. Difficult times such as ours require critical approaches able to question received assumptions, biases, and prejudices, and which can offer new perspectives as well as concrete alternatives. With this journal, we hope that we can make a small contribution toward such goals.

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This brings us to a second transition: the changes to the editorial board and organizational structure of the journal. As of January 2022, *Eludamos* has a new editorial board consisting of Kristine Jørgensen (University of Bergen) and Holger Pötzsch (UiT The Arctic University of Norway) in a shared role as new editors-in-chief, and a team consisting of Dom Ford (independent), Joleen Blom (Tampere University), and Martin Lüthe (FU Berlin) as board members. Our efforts have been kindly supported by our new publishing platform Septentrio Academic Publishing and staff at the university library at UiT The Arctic University of Norway, in particular Aysa Ekanger and Obiajulu Odu. With their help, the journal is now up and running. All articles have received permanent identifiers (DOI) and we are working toward full indexation in databases such as the Directory of Open Access Journals (DOJA), Web of Science, and Scopus. In this transition process we could also rely upon the kind support of previous editors Andreas Sudmann and Arne Schröder. We are grateful for your tireless assistance in transferring the institutional memory of *Eludamos* to a new team. In particular, Arne Schröder's contribution has been invaluable for the completion of the complicated and time-consuming process of importing all previous *Eludamos* issues and articles into the new system.

Together with old and new partners, we have spent the year 2022 completing these changes and adaptations aimed at building stable structures and institutional connections to secure the long-term prospects of *Eludamos* to serve as a clear and critical voice in the international game studies community. One first result of these endeavors is the issue you currently hold in your virtual hands.

Eludamos publishes original research articles, commentaries, book, and game reviews. In our experience, academic publishing is a trade to be learned and it is therefore our conviction that senior scholars should use their experience and expertise to offer young scholars with emerging careers a helping hand. Because of this, *Eludamos* is planning doctoral consortia once every two years focusing on the preparation of draft papers for submission to *Eludamos* or other game studies journals. To these events, we invite PhD students to submit draft papers to be discussed in plenary sessions and solicit both senior and junior scholars as keynote speakers. With kind support from the University of Bergen, the IT University in Copenhagen, and to a modest degree UiT The Arctic University of Norway, we arranged the consortium *Futures of Game Studies* at the IT University in Copenhagen (April 6–8, 2022). Further events are in the planning stage.

Doctoral consortia arranged by the *Eludamos* board and partners will result in special issues of our journal where young scholars have received a head-start towards peer review and publication through symposium feedback and discussions of their drafts prior to open calls for papers. Other issues of *Eludamos* will be developed in close cooperation with other partners such as the *Games and Literary Theory 2023* conference in Katowice leading to a special issue scheduled for 2024.

Let us now move on from organizational issues and make yet another transition—from the context of *Eludamos* to its content. In the present issue, we bring together four research articles that are summarized below.

In the first paper titled 'A Game of Twisted Shouting: Ludo-Narrative Dissonance Revisited', Paweł Grabarczyk and Bo Kampmann Walther return to the concept of

ludo-narrative dissonance (LND) introduced in a blog post by Clint Hocking in 2007 and discussed vividly since then. Aligning with earlier works that have argued against received notions of LND as a mere design problem to be fixed, the authors show that a thoughtful implementation of apparent contradictions between narrative elements and game mechanics can have an estranging effect that can invigorate both play and game development. Observing that a huge amount of creativity is involved in fixing assumed LND-related 'problems', they offer inspiration to scholars, developers, and players, and show how careful game design and analysis can embrace and bend towards the positive what is generally perceived as bugs or flaws. Their article makes an important intervention as it redeploys and develops further key concepts in the field.

In moves reminiscent of Mieke Bal's (2002) idea of 'travelling concepts' as key ingredients in interdisciplinary research endeavors, the following two contributions by Marco Caracciolo and Fredrik Rusk, Mathilda Ståhl, and Sofia Jusslin creatively combine methods and analytical instruments from apparently unrelated fields of research to enable new insights into the intricacies of games and play. In the process, they attest to the potential of game studies to adapt and utilize theories and methods across disciplinary boundaries thus productively dislodging what often appears as entrenched forms of scholarship.

Marco Caracciolo draws upon key concepts and theories from archaeology and adapts these to the study of games and play. Building upon Andrew Reinhard's (2018) study on archaeogaming, Caracciolo's article 'Materiality, Nonlinearity, and Interpretive Openness in Contemporary Archaeogames' argues that games make use of archaeological objects both at the level of representation and narrative as well as at the level of mechanics and play. Through illustrative studies of medial and transmedial aspects of *Heaven's Vault* (Inkle 2019), *Outer Wilds* (Mobius Digital 2019), *The Forgotten City* (Modern Storyteller 2021) and *Elden Ring* (FromSoftware 2022), the author shows how games and play can problematize notions of materiality, chronology as well as the limits of interpretation in archaeological thinking, and advances the idea of archaeological fandom as a specific practice of collaborative storytelling across medial divides.

In their contribution, 'Understanding CS:GO Teamplay as an Emergent Choreography: An Ethnomethodological Analysis', Fredrik Rusk, Mathilda Ståhl, and Sofia Jusslin draw upon concepts from the study of dance and performance to better understand how teams of players coordinate their actions in virtual domains. Through analyses of screen-recorded multiplayer matches of *Counter Strike: Global Offensive* (Valve and Hidden Path Entertainment, 2012), the authors sketch out how teams activate interactional resources and collectively adapt these to changing situations and contexts. Through their case study they demonstrate the applicability of theories and concepts from choreography to analyses of interaction and coordination in multiplayer game play.

The last contribution to this issue is titled 'Categorizations of World War II in Videogames' and was authored by Estrid Sørensen and Jan Schank. This article was originally submitted to *Eludamos* prior to the transitions described above and has been peer reviewed and prepared by the former editorial board of the journal. In their text, Sørensen and Schank draw upon the method of membership categorization analysis to distinguish different ways through which games invite players to vicariously

participate in the historical events depicted in the respective titles. Delimiting their study from approaches concerned with psychological aspects, questions of authenticity, or issues of ideology, the authors identify a series of categories applicable to enable a better understanding of practices of play and reception of WWII-focused titles.

Besides peer-reviewed research articles, *Eludamos* also invites general scholarly debate and exchange. For this purpose, we solicit commentaries from games scholars and practitioners that take up issues of potential concern to the community. In the present issue of *Eludamos*, Kristian Bjørkelo offers his critical view on, and cautions against, the dominance of *Dungeons & Dragons* (Gygax and Arneson 1974–present) in tabletop roleplaying. He argues that this dominance affects both players, development, and scholarship in a negative way and calls for a widening of analytical and creative scope of our fields.

Academic publishing is a time-consuming and often challenging process that would be impossible without the invaluable support from our anonymous reviewers. So, in this final section we would like to extend our sincere gratitude to all these largely invisible and unpaid helpers who contributed to completing this issue of *Eludamos*. During the past months we have read, discussed, re-read, and assessed many fine works, a significant number of which had to be rejected for various reasons. We would like to urge the authors who have not yet found a form suitable for academic publication to continue working on their manuscripts. All of them contained important thoughts and ideas that we believe are worth sharing with the world, eventually, in one way or another. Thank you all for your time and dedication!

Tromsø and Bergen, December 31st, 2022

Holger Pötzsch and Kristine Jørgensen, *Eludamos* editors-in-chief

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A Game of Twisted Shouting:
Ludo-Narrative Dissonance Revisited

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A Game of Twisted Shouting: Ludo-Narrative Dissonance Revisited

PAWEŁ GRABARCZYK AND BO KAMPMANN WALTHER

Abstract

This article takes a deeper look at the notion of ludo-narrative dissonance (henceforth LND), a popular term that refers to the perceived clash between the ludic and the narrative aspects of games. We wish to argue that a better understanding of the nature of LND and the reasons it appears in games enables us to look at this phenomenon from a new perspective that was not, as of yet, considered in game studies literature or the popular discourse. The typical approach to LND presents it as a problem or a design flaw that needs to be avoided by the developers. In contrast to this, we suggest that LND can be seen as a source of inspiration for the creators as it inherently invites the developers and the players to reflect on the game structure. We start with a closer look at the notion of LND and present three ways it can be interpreted. In section two we analyze the reasons LND can appear in games (regardless of the developers' intentions). Section three goes through some of the existing methods of dealing with LND. Here we argue that embracing LND as a result of some of the necessary tensions of game design can result in the creative victory of the developers. We finish the paper, in the fourth section, with a longer case study of *Manhunt* which we see as a good exemplification of the reinvigorating power of LND.

Keywords

Ludo-narrative dissonance; ludology; narrativity; gameplay; games and violence

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Introduction

The aim of this paper is twofold. First, we wish to provide a deeper look at the notion of ludo-narrative dissonance (henceforth LND), a popular term that refers to the perceived clash between the ludic and the narrative aspects of games. Second, we wish to argue that a better understanding of the nature of LND and the reasons it appears in games enables us to look at this phenomenon from a new perspective that was not considered in game studies literature or the popular discourse. We argue that the typical approach to LND presents it as a problem or a design flaw that needs to be avoided by the developers. In contrast to this, we suggest that LND can be seen as a source of inspiration for the creators as it inherently invites the developers and the players to reflect on the game structure. We argue that this positive perspective on LND brings video games closer to other art forms.

Within game design and the study of games (ludology) LND is primarily seen as a flaw that needs to be fixed (Wardrip-Fruin 2009; Turner 2013; Seraphine 2016).[1] Why this cavity waiting to be filled, this nuisance for the player? Or, is 'LND', as suggested by Eric Swain, simply an intellectual trope for narrative design gone rouge in computer games (Swain 2010)?[2] Christian Roth et al. address the problem too vis-à-vis the extended catalogue of literary experiments when they write that:

> [While] the term ludonarrative dissonance seems to evoke diachronicity—a tension or clash resulting from the combination of two disharmonious or unsuitable elements during a musical piece—the term very often describes its problem in holistic terms. A game either is ludonarratively dissonant, or it is not. (Roth et al. 2018, p. 96)

What we propose here is to bring some constructive vibe to the either-or understanding of LND—that the latter is actually good for something. Storytelling is not always about reaching harmony (Frederic 2016). Our prime hypothesis is that LND is not (only) to be interpreted as a shambolic byproduct of bad design or storytelling; but rather, that it is a fuel with which to energize the fissures that arise between gameplay or *ludus* and fiction or *poiesis*—no matter how well or how badly stories thrive in games in the first place (cf. e.g., Aarseth 2012; Domsch 2013; Neitzel 2014).

What we also want to pursue is that, as we are going to see in the examples such as *The Stanley Parable* (Galactic Cafe 2011) or *Manhunt* (Rockstar North 2003), the idea of a constructive LND opens a particular brand of meta-gameness, or meta-ludic awareness. These are questions concerning how games can inform us, the players, about their 'gameness'; or how games can be moral without being explicitly moralizing. Although we consider our line of thought to be important from a design perspective, our main focus is analytical, which means that we can bypass the question of 'intentionality': We do not have to ask the designers (authors) permission to crack open the crannies between game and story. In what follows we will investigate symptomatic sequences from popular computer games in which, we insist, the player is taken down into the underlying machinery of the gamified story (and the storified game).[3]

The argument that follows is structured over four sections. We start with a closer look at the notion of LND and present three ways it can be interpreted. In section two we analyze the reasons LND can appear in games (regardless of the developers' intentions). Section three goes through some of the existing methods of dealing with

LND. Here we argue that embracing LND as a result of some of the necessary tensions of game design can result in the creative victory of the developers. We finish the paper, in the fourth section, with a clarification of dissonant ludo-narrative 'narrators', which we call 'Shouters', followed by a longer case study of *Manhunt* which we see as a good exemplification of the reinvigorating power of LND.

What is ludo-narrative dissonance?

The term "ludo-narrative dissonance" was originally coined by Clint Hocking (2007) in response to the game *BioShock* (2K Boston and 2K Australia 2007) which, Hocking argued, endorses the theme of egocentric behavior through its gameplay and mechanics while at the same time promoting the opposing theme of selflessness through its narrative. Because of this crooked dichotomy of gameplay and fiction the game creates a violation of aesthetic distance that seems to pull the player out of the game. Hocking's point is that there is a recurrent conflict in games between the ludic and the narrative structure, and thus between what the player is allowed to do (i.e., the rules) and why the player is asked to do it, i.e., the fictional context of the game (see also Henry 2017). Related to *ludo* we find controls, choices, and consequences while the realm of narrative in games usually contain graphics, dialogue, cutscenes, and, obviously, characters.

Remedy Studio's writer Mikko Rautalahti has the following to say about storytelling in video games:

> I think it can be difficult to tell stories in video games. There are all these conventions—you are expected to have a certain amount of combat, a certain minimum number of gameplay hours, etc. These conventions aren't really engineered with storytelling in mind. So, a lot of the time, you end up kind of glossing over some of the details in your head—I mean, if you're playing the lone hero, in terms of the story, does that guy really rack up a four-digit body count? Does he really get repeatedly shot with high-calibre weapons and mysteriously heal himself? And if you really get stuck at a difficult part, does that really mean that the hero also spent an hour just running around in frustration and then quit. Probably not, you know. (Rautalahti, in Hernandez 2010)

There are methodologically challenging issues related to the task of establishing the 'inside' of games. Reflections tend to focus either on the functionality of invariant elements that constitute 'a game' (rules, mechanics, world; Juul 2005; Sicart 2008; Aarseth & Möring 2020); or they evolve around topics of genre, that is, what groups of games have in common while opposing others (Egenfeldt-Nielsen, Smith and Tosca 2009). Game studies thus primarily focus on the *poetics* of games, how to analyze or design the aesthetics that will harvest the internal configuration and hold the game together. What is lacking in this picture, and what we hope to find a shimmer of in the framework of LND, is the *poetological* side of affairs.[4]

One starting point for a poetological enquiry into the inside of games is to look at the word 'dissonance' in LND. The word covers (at least) three modes of meaning: musical, spatial, and conceptual. In musical terms, it refers to a lack of harmony (resonance) in the register of well-tempered notes, in particular overtones which are partial waves or constituent frequencies that are either harmonic or disharmonic. A disharmonic partial

(sound) represents a frequency that does not multiply with the totality of the waves of overtones. We then say that vibrations or pitches produce a harsh sound, a discord, or even a cacophony.

In spatial terms it refers to the ambiguity arising from dissonance signifying a *cavity* as well as an *opening*, at the same time. Note here, that we are not talking about space in computer games, how games are rendered as spatial designs and worlds (Aarseth 2001; Nitsche 2008; Günzel 2008; Möring 2019). Rather, what motivates the deployment of spatiality is the entry point to the structural configuration of games and especially how the complexity of *ludus* and story is arranged, or should we say *misarranged* to provoke sensations of disparity and non-identity. While the cavity is a flaw in the design of the alignment of game and story, and therefore is in desperate want of repair; the cavity-as-opening marks an entry to the "heart of gameness", to use Jesper Juul's phrase (Juul 2005).

Yet, while the spatial significance of 'dissonance' is more of a metaphor for the composition of stories and the way they cue into gameplay than it is actual game world design; space and narrative construction may nevertheless concur with each other.[5] Consider for instance the Express Car Service, in *Grand Theft Auto IV* (Rockstar Games 2008). It is a site of action for Niko Bellic that contains lots of gameplay as well as being a spatial 'hub' for the various plotlines that weave underneath the game. Thus, the inside of the Express Car Service serves as an arena for fast-moving, enjoyable gameplay moments, like preventing the Mafia from doing shady business and ultimately destroy the cousin's life's work. But the site also epitomizes the misalliance that the player faces, namely Bellic's engagements that as the game progresses stand in ever starker contrast to his allegedly more peaceful intentions. Ultimately, the site unveils the opening through which the player can detect the disparity within the game, the fissure between game and story, and subsequently ponder its meaning.

Last but not least, LND can be also seen as a conceptual conflict—a dissonance between the player's self-narrative and the game's narrative. It can be represented in the following way. Let us assume that the player describes all of the actions they observe on the screen. To make it easier, let's say that we index sentences in such a way that we label all of the sentences describing the player's actions as L-sentences and all of the sentences that describe narrative elements the player can only passively observe as N-sentences. The inspiration for this distinction comes from Rudolf Carnap who analyzed language of scientific theories using the distinction between empirical sentences and logical sentences (called L-sentences) (Carnap 1937). LND can be then defined as a contradiction between L and N sentences. To give a simple example: The player who experiences GTA IV (Rockstar North 2008) and wants to have some fun doing mayhem on the city streets has to deal with a contradiction of an N-sentence "I don't want to kill more people" with an L-sentence "I want to kill some more people". As we are going to argue below, this should not be treated as a design flaw that should be eliminated, but there is no denying that it causes a cognitive problem the player must solve. This cognitive problem is very close to the phenomenon of "cognitive dissonance", which is the state defined in psychology as holding contradictory beliefs (Festinger 1957). As pointed out in the psychological literature on the subject, people who become aware of the contradiction in their beliefs (or between their beliefs and actions) can often experience stress (van Kampen 2019, Ursin 1988) as well as fear (Archer 1976). Since cognitive dissonance results in discomfort, people try to eliminate

it with strategies, such as the process of rationalization. Similar to the way people deal with cognitive dissonance, the player may feel the pressure to "fix" the overarching narrative (comprised of L- and N-sentences), to make it coherent again. It is exactly this pressure, which is implicitly staged in the game *Manhunt*, as we shall see in the last section.

What causes ludo-narrative dissonances?

There are many reasons why playing games may result in LND. Up to this point, we already touched upon one of them. First, the game can demand the players to perform actions or prevent them from performing them in a way that clearly contradicts the narrative. This can happen on a very basic level. For example, the game may make it impossible for the players to jump over small obstacles and then present the character in a cut-scene easily making the same jump. This can also happen on a very general level of the meaning of the whole narrative, similarly to the *BioShock* case that inspired Clint Hocking. The other main reason for LND is that the game may allow the player to play in a transgressive way. This phenomenon can be traced back to the early text-adventures published in the 1980s for many microcomputers. The player interacted with the game using a parser that interpreted natural language sentences as commands for the avatar. It was very common for the players to test the limits of the parser by issuing commands that made very little sense from the point of view of the narrative, thus in a way toying with the L- and N-sentences that we described above. The practice was so common that the developers often tried to anticipate these transgressive practices and outsmart the players by creating narrative explanations of why a certain action was not performed by the avatar. For example, if the player tried to kill herself in *Zork II: The Wizard of Frobozz* (Infocom 1981) the game parser responded: "Suicide is not the answer".

This practice of finding the cracks in the unity of simulation and narration of games can be compared to the practice of looking for bugs or glitches in games and this may be one of the reasons why LND has been perceived as a flaw that should be avoided or eliminated (cf. Swink 2009). We argue that this line of reasoning impoverishes game design space as developers may favor one of the two easy ways out: downplaying the role of narration or making it strictly linear. In contrast to this, embracing the possibility of LND and finding ways of exploiting it in creative ways may lead to more interesting, experimental game design. One example of such an approach can be found in *The Stanley Parable*, released for PC in 2011. The biggest novelty of the game is the introduction of a narrator who recognizes and reacts to the player's actions. The role of the narrator is that of a guide as it gives the player clear objectives (Herte 2016; Backe and Thon 2019). The subtle difference comes from the fact that, in accord with a well-established literary tradition, the narrator uses past tense (Sarian 2018) which teases the player and invites transgressive play. The players learn about their objectives as if they were already performed in the narrative while the ludic part clearly shows that they are only about to happen. The players are then put in a position where the only choice they have is either to submit fully to the narrator or to try to break the game. This transforms *The Stanley Parable* into a game between a character staged within the narrative that could be called 'the developer' (more on that in Section 4) and

the player who try to outsmart each other. In this sense, it can be seen as a continuation of the tradition that originated in text-adventure games of the 1980s.

The third reason for the appearance of LND in games is very interesting as it seems to be tied mostly to modern game design and modern publishing practices. It can be best seen in the so-called “open-world” games such as GTA IV that we have already mentioned. The main cause of this is that most games of this type try to combine the rigid, linear structure of narratives with open simulations which require the player to perform actions that may be disjointed or blatantly incongruous with the narrative.

How does this incongruity play out? In GTA IV the player controls Niko Bellic, a petty immigrant from former Yugoslavia who arrives in the United States seduced by the usual clichés: freedom, happiness, and money. As it turns out, this is somewhat of an illusion. Niko gets trapped in the unforgiving gangland of Liberty City (a city loosely based on the real New York) with not much else to do than chop cars and fight. The core narrative of GTA IV portrays not only how Niko tussles his way to the crime summit, but it also showcases the fact that he is not capable of fleeing his destiny. He seems to be irresistibly tied up with his felonious *vitae*, as it is part and parcel of his interesting and playable ontology. Not to mention Bellic’s backstory. At some point it is implied that his father was an abusive alcoholic and that he suffered many traumas as a teenage soldier in the Bosnian War. Niko witnessed and committed numerous atrocities that shaped his cynical approach to life but also a certain degree of repentance, depression, and emotional friability. And on top of that, he is caught in a computer game that you and I are playing for fun.

As Miguel Sicart notes, we not only play by the rules, but are also immersed into the simulation, the game world, the fiction, and the characters (Sicart 2009; 2011). Gameplay and drama, or narrative immersion, are not two opposing things; they weave into one another, enhance, and subtract energy from each other. GTA IV becomes a game that questions the very existence of the presence of morality. Our anti-hero, Bellic, has arguably huge existential challenges in facing the punitive set of rules in this world (first encountered when we meet his cousin, Roman Bellic, who owns a taxi company, the Express Car Service, which is later burnt down by the Russian Mafia). He wants to be emancipated from his criminal record, hunt down the villains of his unforgettable past. It is safe to say that we understand him. But in realizing the Utopia that he set out for himself he precisely must gather and master all the violent techniques required for the game to be a success.

In GTA IV narrative closure and the success and fun of gameplay point in two significantly different directions: the mainstream player would rather have Bellic cling to crime because otherwise the game loses its forthright fascination. The more fun we have as players, the more unhappy Niko Bellic becomes. Before one jump to the rash conclusion that the game of GTA IV suffers from a dissonance, a lacuna between gameplay and story; one could instead think of this subtle incongruity, suggested by Walther (2019), as a confrontational synthesis of two modes of ‘playing’ that invites the player to take a meta-ethical standpoint: One mode is where the drama is ‘fixed’ too soon, weakening the fictionality to lenient plot traversal. The openness that we tend to demand of computer games, with their myriads of bifurcations and interesting branch points, are narrowed down to a kind of ‘quasi-book’ that we read-by-playing instead of truly play. The other mode is where the player has too much power over the destiny of

the character. The point is that this complex asynchroneity which sparks the player's reflection is not reducible to a design-centric 'within' (meaning it cannot readily be devised and 'fixed'); but rather it emerges as a *result* of the dissonant ludo-narrational architecture, and maybe even to the point where the game "presents in itself a critical engagement with the politics of its genre", as commented by Hans-Joachim Backe on a different game but in a similar context (Backe 2018). Thus, the outcome of LND moves beyond mere design, and the effect is, as we shall look into in Section 4, constituted by the 'Shouters' of games, proxies of guidance and misguidance.

Even though typical for open-world design, this problem can be visible also in some of the linear games due to additional, narratively irrelevant requirements that are connected to meta-systems such as achievements or trophies. This can be easily seen in *Call of Duty: Modern Warfare* (Infinity Ward 2019) (and its sequels) where the player is constantly directed and hastened by his character's teammates. At the same time, the existence of the said meta-systems invites them to a meticulous search for trinkets that they have to collect to get the achievements/trophies.

One last example comes from the contemporary publishing model that accompanies the main game with additional downloaded content. To make the purchase more enticing these additional pieces of a game present narratives that are very different in tone (*Red Dead Redemption: Undead Nightmare*, Rockstar San Diego 2010) or introduce new activities. One example of this can be found in *Watch Dogs 2* (Ubisoft Montreal 2016), an open-world game set in modern San Francisco. The game depicts a struggle between a grassroots hacker group and a big IT corporation. Even though it addresses serious issues such as privacy, surveillance, and the state of digitized societies, the overall tone of the narrative borders on satire. A DLC mission "Zodiac Killer" represents a significant exception to this. The mission depicts a series of gruesome murders of women performed by a copycat of the infamous Zodiac Killer. The player is supposed to find the bodies and document them by taking a photograph. Because this particular mission represents only a very small portion of the game and functions as an addition, it does not change the gameplay of the main part and forces the player to use the existing camera mechanics to photograph the bodies. The problem is that true to the tone of the rest of the game, the photos made in the game are stylized as so-called "selfies" of the main character who strikes poses typically for this style of photography. This results in a jarring contradiction between a character who reports the shock and horror he feels when he discovers the bodies and the fact the player has to make him shoot a tourist style selfie with the deceased. Again, as we saw in GTA IV, we may suggest that it is the 'confrontational synthesis' of these two modes, shock versus selfie, that has the potential to spark ethical reflection in the player.

Even though all the examples presented above differ slightly, they can be regarded as similar because they are all caused by the modern paradigm of enclosing many different mechanics and narrative elements in a single game, especially if the game is later expanded by additional content.

How is the LND "problem" solved?

As we noted in the previous section the reasons LND appears in games are quite numerous and avoiding it completely might be difficult and time consuming. Still, since according to the prevailing paradigm LND is perceived as a problem to be solved, the developers routinely try to mitigate its effects. Roughly speaking we can discern three main strategies of dealing with LND that developers employ.

As Brett Makedonski writes, the first option is to create games that are ever evolving and wholly responsive to any actions that the player makes. Rather than focusing on telling a particular story, the developers would have to give the player the means to make a story. The second solution is for developers to make games that give the player little to no control over any in-game decisions. Doing this will eliminate the possibility of the player diverging from the exact path that the developers intended (Makedonski 2012).

It is easy to see that the first solution is effectively a simulation of life whereas the second solution is a simulation of a fixed sequence of narrative elements, that is, a linear story. Thus, in trying to solve the puzzle of LND we either get too much life or too much story (comp. Bruner 1987). Feng Zhu makes a similar argument in relation to *The Stanley Parable*:

> Its own ambiguous status brings out the dissonance between two objectives: to give the player freedom and room for expression (to be a 'good' game), and to be a tight and cogent work that provokes reflection about freedom and the possibility of meaning (to be a 'good' Lukacsian novel/work of art). (Zhu 2020, p. 130)

The third way of solving the LND problem is to (at least partially) embrace it and explain it away using some of the existing game elements. The irony that we wish to point out is that the creativity unleashed by these masking strategies leads to some of the most interesting design decisions that can be found in modern games. The most prevalent solution to the problem of LND in open-world games is to contextualize various types of dissonant ludo-narrative 'narrators' in such a way that it explains the chorus of the multitude of voices. This can be done in several ways, so let us just point out some of the most prevalent.

It seems that the most popular solution is to channel narrational commands and ways to proceed in the 'story' of the game through modern communication devices such as a cellphone (GTA IV; *Watch Dogs 2*; *Spider-Man*, Insomniac Games 2018). Here the game relies on players' real-life understanding of a phone as a single object that physically unifies all of the competing requirements of the environment. This is especially visible in GTA IV and *Spider-Man* both of which have no qualms interrupting the actions of the player to announce all of the additional possibilities that wait for her on their way to the task the already selected. This design decision is often combined with an inner monologue of the character who may comment on the priorities dictated by the narrative. For example, after answering another call, the main protagonist of *Spider-Man* comments on it saying that he should check it after he deals with the main task. What that means, theoretically, is that the player is instructed by some narrator proxy within the game to make sure that gameplay and narrative are neatly conjoined. Similarly, whenever the player experiences a quiet moment (whenever the game does not demand a specific task or linear progression by the player), the main character

suggests that this is a good opportunity to do some of the minor tasks typical for open-world games.

Lastly, there's the game's environment itself, which often serves as a road sign to where the player can (or must) go. The easiest way to do it is to merge the interface with the world using visual or audio cues. Think of the infamous blue arrow in GTA IV. Needless to say, if the requirements and possibilities given to the player are numerous, this 'visual voice' of the game may end up being just as intrusive as the shouting commands we get from *Call of Duty: Modern Warfare*.

Still, even the most successful unifying strategy that the developers employ on the side of the game-world does not change the main cause of LND in modern games—the identification of the player with the controlled avatar. To put it in simple terms, if the player identifies with the character, they must reconcile all of their actions as if they were the actions of a single entity. The fact that all of them were suggested by a plethora of dissonant ludo-narrative 'narrators' does not solve the problem on the side of the player/avatar.

Should we say that at least in this sense LND functions as a design flaw? Or maybe treat it as a price that we have to pay for the freedom modern games give us? We believe that even in these cases the LND should not be considered a flaw as its existence leaves an open window for in-depth interpretations and reconfigurations of the narrative.

A player who encounters LND may reflect on it and 'save' the narrative creating a consistent explanation of the apparent contradiction. At this point, the analogy with cognitive dissonance may once again be useful as the process is very similar to that of creating a rationalization, a new narrative that overwrites the inconsistent one. To refer to one of the examples we have given, a player could conclude that GTA IV's Nico is actually lying to himself in the narrative parts because he cannot accept his real nature that the actions of the player represent. There is nothing intrinsically wrong with letting the players deal with clashes between narration and simulation. Apparent contradictions can be thought-provoking.

It is nonetheless crucial to remember that the assumption of the existence of a single player-avatar entity is far from obvious and that it can be seen as a side-effect of modern game control schemes. In the old point-and-click adventure games, the main character was often negotiating its actions with the player, to the point where they were often refusing to do whatever they were asked to do. For example, in *Gobliiins* (Coktel Vision, Sierra On-Line 1991) the characters were often irritated at the player who made them do things that endangered them, gesticulating, and yelling at the screen. The attempt to kill the titular Gobliiins is not an act of transgressive play—it is just a lack of cooperation. Since most of the modern games moved from a point and click interface to direct movement, the duality of the player and the avatar became obfuscated. What remains are the residues such as the resistance of the avatar who does not 'want' to jump over a dangerous distance and has to be forced by the player by an additional input (see the *Assassin's Creed* series as a good example of this; Ubisoft 2007–2020).

Reminding the player of this underlying duality may be the most intriguing way of exploiting the LND. A very recent example of a game that tries to disconnect the player

from the avatar is *The Last of Us Part II* (Naughty Dog 2020). Roughly at half-point, the game narrative forces the player to change sides and control the character who up to this point played the role of the main antagonist. Note that this does not boil down to a simple change of the playable character as this happens often in games—for example in the first TLOU. The difference is that the players are being put in control of a character whose motivations are the exact opposite of the motivations the game tried the player to internalize earlier. Instead of trying to keep Ellie alive, the player has to now attack and (presumably) kill her. Even if many TLOU 2 players develop empathy towards Abby later in the game at this stage they are very likely to still be loyal to Ellie, a character they spent more time with (especially if you count in the prequel). At this point, the player realizes that the most natural way to situate herself within the game is to function as an efficient operator of the game, that is, switching allegiances and motivations whenever they are told.

The unexpected switch to the antagonist side inspired interesting reactions of the players. As can be seen in a compilation video many players straight up refused to play Abby and some of them even tried to kill her on purpose. The reason this reaction is interesting is that it shows that the players used LND—the possibility to kill the avatar in the simulation—to cope with the discomfort of being disconnected from the main character of the first half of the game. This action makes sense only on the symbolic level as at this point the players understand the ludic conventions of the game and know that they have to keep their character alive to proceed in the narrative. They exercise the freedom that the ludic side of the game gives them to ridicule or subvert the narrative (at least for a moment).

The dissonant ‘movie’ in *Manhunt*

Before we move on to the analysis of *Manhunt* we want to introduce the notion of ‘Shouters’. Our proposal is that Shouters should be understood as voiced proxies of LND. They steer the player in certain directions; not, and this is critical, *away* from the cracks and crannies of LND, but, quite the opposite, *towards* them. Shouters are tourist guides equipped with a metaphorical megaphone and assigned with the task of leading players to the dangerous but fragile places within the game. It is important to note that Shouters can take the shape of real characters in the game, or within the fiction of the game; but they can also be more abstract installment or parts of the game’s machinery. One such character-driven Shouter is Niko’s cousin Roman in GTA IV. He is obviously a character within the game world, but on top of that he is a proxy that ‘shouts’ the delicate mix of gameplay errands and narrative traits to Niko Bellic and the player. Yet rather than having his character denote either mission (gameplay) or ‘conscience’ (narrative), he is the embodiment of both; he is the “confrontational synthesis” (Walther 2019) of game and story and thus the centrifugal point of LND. Now, let’s look at the figure of the Shouter in more detail.

Shouters can have many faces, but we believe three emblematic shouter-figures can be discerned. The *Teacher* who tutors the player how to operate the game during (or prior to) gameplay; the *Director* who pilots the player in the right direction according to the narrative in the game; and the *Developer* that often with an ironical or a meta-fictional agenda guides (or misguides) the player in how to genuinely experience the layers of the game’s narrative and all the ludic possibilities it contains (cf. Froschauer

2017; Engelns 2014; Thon 2016). The Teacher and the Director are both buzzing with cues for the player to take up often however leading to a desecration of the synchronicity of the game and the story it derives from. Key characteristics and games in which the Shouter-figures play prominent roles are listed in the matrix below (fig. 1):

Shouter-figure	Characteristics	Game example
Teacher	Tutors the player how to operate the game	*Watch Dogs 2* *Call of Duty: Modern Warfare*
Director	Steers the player in the right direction according to the narrative	*Manhunt* *Zork II*
Developer	Combination of Teacher and Director—with an ironical twist	*The Stanley Parable* *GTA IV*

Figure 1: A (non-comprehensive) matrix of ludo-narrative Shouter-figures.

The three types of Shouter proxies are obviously analytical and idealized; when it comes to actual games and their interpretation, they merge in subtle ways. They allow us entrance to the cogwheels of the underlying machinery of games, and transcending mere narrators-by-another-name they are voices that discourse the discrepancy between player actions and the reason or meaning behind those actions. The Shouter in *Manhunt*, developed by Rockstar North and published in 2003 by Rockstar Games, is a violent force within the game as he literally yells and screeches at the player. The shouting is in fact a mixture of instructions in how to play the game and ditto in how to keep track of the narrative progression. The Shouter in *Manhunt* is both Teacher and Director. How does this double role of the Shouter play out?

Many computer games seem to disrupt the unfolding of narratives within game worlds to assist the player in how to control the keyboard, how to set up the buttons on the joystick, etc. Indeed, this is a mild or inevitable version of ludo-narrative dissonance since the functionality of the game and how it should be played, including knowledge about its operators, must be established prior to any potential immersion into the ‘story’ of the game. One needs to know how to play to get the full experience. Even *Manhunt*, perhaps the most violent commercial game of all time, acts out this functionality check both prior to the game and while the game is running at full throttle; then the player is taught how to perform multiple kills at once and checking her results on the menu.

From the outset the game can be read as a very thug comment upon so-called ‘violent’ games. Time and space allow only the highlights of a long and fuzzy debate: Does the violence lie within the game itself? Is it the violent reactions of the player by playing the game we should focus on? Or is violence rather, and more abstractly, to be situated in the context surrounding games as a cultural phenomenon? In continuation of this, do games simply cue right into a male, heteronormative socioeconomics of violent behavior *per se* (Keogh 2012; Consalvo 2012; Murphy 2016). Such positioning of issues of violence and ethics run the risk of either making the violence too ‘big’ to

fathom and analyze or too 'small' inviting the illusion that matters of ethics can somehow be fused into games, i.e., the attempt to deliberately design for ethics (Sicart 2013). As we shall see, *Manhunt* is neither about posing the grand cultural questions nor a result of intentionally coalescing the game with 'ethics'. Rather, it is a game filled with LND that may or may not force the player to reflect on the distance between gameplay (and having fun) and the inherent story.

In the game by Rockstar we play, in an intense third person perspective, the death sentenced James Earl Cash. The action is set within the fictional city Carcer City. Cash is saved from execution in the last minute and subsequently required to act in the disgraced snuff director Lionel Starkweather's megalomanic and very, very violent film production.[6] The title 'Manhunt' can easily refer to a) the label of the game itself; b) the 'hunt' for 'our man' (i.e. the avatar Cash); c) the 'hunt' which we are about to undertake (aka the snuff movie); and d) perhaps the title of the film we are shooting (which means that our gameplay from this point on will be the raw footing of said film). The game consists in navigating Cash through a morbid maze of traps and frantic antagonists, who act as high on crack or something, whom we better kill before they take down us (Cash). This killing should be done as brutally as possibly; the more brutal, the more points we get. Our spree is controlled by a designated *attack button*.

Manhunt is labelled as a stealth-based urban horror styled game, but one could also say that it is in fact a torture simulator designed to manipulate the player into feeling disgust and intrigue in the performance of sadistic acts. Already a direct link between the most efficient gameplay and the uttermost depraved morality has been established. It is the combination of the increase of our attack range, the upward trajectory of our multiple-kill percentage, and the continuous shouting of the director (the character); all of which serve as the plain and simple goal of the game: To reach the exit through most complex murders and graphical blood spills. The fact that Cash himself is playing a 'game', molded by the movie he is forced to take part in (and, of course, doubled by the player playing *Manhunt*), makes Rockstar's work not only very postmodern and self-aware, it also has the effect of clouding the sense of agency, or, as Gareth Schott remarks (2016), it emphasizes how a lack of agency undermines the nature of violence as violence (see also Klevjer 2018). Cash is not 'doing' violence; he just plays it. The question is of course whether within the twisted world of *Manhunt* an opening exists towards submissive resistance to the world created and upheld by a computer machine (Sicart 2018).

What is tricky, though, and perhaps a sign of contradiction amidst this hectic pursuit of shocking brutality, is the player's rational autonomy when stepping into the role of 'Cash'. It is he who decides for himself how intensively the killings should be acted out (which is to say, it's up to the player). Then the core question of gameplay immediately spirals from adding graphical details to murdering people to the question of whether one wants to be 'good' at playing the game—or 'good' at heart (cf. Zagal 2010). However, if the player desires to transcend the rules of the game; will they not then transgress the 'game' altogether? Ultimately, then, rather than *Manhunt* becoming a game to master, it turns into a game that torments the player to have the guts to resist playing it.[7]

One of the signs of the game's self-awareness, its performance of a game within the game, is the uncanny fictionalizing of the relation between the extreme poles of the

gameplay and the story weaved on top of and around it. Looking at the story that sets up *Manhunt* as the rationality behind Cash's actions there is really no justification to his deeds—other than the blind rage of a dead man walking, or the desirable 'fun' of the player. In his reading of *Manhunt* José P. Zagal writes: "The player is thus presented with a situation in which, narratively, there is no reason or motivation to opt for greater brutality in executions" (Zagal 2010).[8] It would be just as reasonable within the semantics of the narrative to envision Cash rebel against this fate that is being laid upon him by the tyranny of Lionel Starkweather. After all, the consequences of both of Cash's 'stories' are rather meek and bleak: Either he dies instantly already from the beginning by way of execution (in which case there is no game), or he suffers a quick death due to the 'game' he is trapped in, i.e., the movie he is obliged to take part in (he may be respawned, yes, but that makes the execution backstory bad storytelling: why is it not possible to respawn also from the fate of execution?). As a result—and herein may very well lie the true moral—he instead performs a 'movie', which is the scene entered by the player thus reverting the sad destiny of Cash to fun, adrenaline-packed gameplay.

The irony in *Manhunt*, curiously similar to the 'artsy' morale in *Stanley Parable*, is that the player is tricked into aligning her actions with both the gameplay and the underlying story. The gameplay becomes very violent; but that is simply, the player may insist, because of the projected resonance between this gameplay and the mission which the fictional character (Cash) is bullied into undertaking—the snuff film with its inbuilt horror game scenario. Since playing *Manhunt* is all about establishing *resonance* at all costs (players are forced to play the game violently because Cash is forced to play *his* game violently), players are cast in the role of 'game designers' diligently bridging the chasm between L- and N-sentences. If that is the case, we may further speculate (yet never know for certain) if the game indeed was created by its makers as a case of deliberate LND-design in the first place.

Cash:

L-sentence: Why do I kill?

N-sentence: Because I have to.

Player:

L-sentence: Why do I kill?

N-sentence: Because Cash has to.

Figure 2: Opting for ludo-narrative resonance (L- and N-sentences).

In *Manhunt*, the snuff director asserts not only that we (the player and Cash) should keep on doing what we seemingly do best, killing people in complex fashions, but further that we should make sure that Cash doesn't pause to reflect on the senselessness of his business. But the subtlety goes deeper: At first glance it would

seem, as we discussed earlier, that the Shouting within *Manhunt* is effectuated to make Cash shy away from the N-sentences. Shouting in this way would be a way for the game, within the game, to make sure that it does not fall prey to the LND trap. But that is clearly not the case—or, rather, it's not the whole truth. It is precisely *because* of the story that Cash himself, as fictional character, is dictated to steer clear of the realm of N-sentences—never asking why there is killing, but only relentlessly killing. For the player to replicate this, to play the game, they must do the same: momentarily block N-sentences the way Cash does and concentrate on 'gameplay'. At some point, this becomes a vicious circle, as it is infinite, dumb killing rather than enquiring about the semantics behind it. Yet, imagine the opposite: If Cash would indeed quit the 'game' *he* is playing he would also ruin the 'footage' *we* are making, player and Cash in tandem. Adding to that, it would definitively mean that there would be no game (the game of *Manhunt*) to play. No movie, no footage, no game. Ultimately, *Manhunt* starts out as LND—and *then* it plays out as a frantic race on behalf of the player to design their way out of the trap. *Manhunt* is an allegory of its own failure.

Conclusion

To summarize, the analysis of the causes of the LND shows that understanding this phenomenon in terms of a design flaw is a big oversimplification as the possibility of its occurrence is deeply rooted in the past and modern game design. As we claimed in the beginning of this article, storytelling is not always about reaching harmony and, thus, rather than a shambolic byproduct of bad design LND may (also) be interpreted as the fuel which energizes, in novels, television, and videogames, the fissures between gameplay and fiction, action and justification. In other words, the result of our argumentation in this paper is that instead of eliminating the tension of LND we should, in fact, embrace it as a poetic device rather than a flaw.[9]

As we saw, the clash between narration and simulation could be observed even in the case of early text-adventure games which shows that the phenomenon is much older than what is typically discussed in the literature. Heavily scripted linear games invoked the feeling of being controlled by the developers which can be acceptable in the case of the kind of Shouter whom we labeled the Teacher but becomes more problematic in the case of the Director. An overanxious Director may inspire resistance like the one generated by *The Stanley Parable*, even against the intentions of the developers. The moment we move to a more modern open-world design the game can no longer hide its inconsistent nature as the artificiality of a single Shouter is not enough to mask the incongruous nature of the game's possibility space. Also, as we saw in the analyses of GTA IV and *Manhunt*, the quest for the player to make the realm of gameplay and fiction *resonate* with each other, to align L- and N-sentences guided by a combination of Teachers and Directors, may be a token of fruitful LND design in contemporary games—whether intentional or not—that can be pushed and developed even further. Finally, the identification of the player and the avatar pushes the player to create a coherent overarching narrative. Even though this process can lead to creatively interesting results we need to remember that equally valuable results can also be obtained by forcing the player to disconnect from the character they are controlling. After all, who wants to be James Earl Cash in real life?

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Notes

1 This nomenclature of 'fixing' so hard to bypass in the ludology community rhymes very much with an increasing focus on 'game feel'—how to design it and how not to do it (Swink 2017; Walther & Larsen 2019).

2 The study of ludo-narrative dissonance has also extended into other disciplines; see Howe (2017) for analyses of conflicts experienced by sports participants between dominant narratives and self-generated interpretations of embodied experience.

3 A similar approach, though in films and tv series, is suggested and developed by Jason Mittell under the header of what he calls "operational aesthetics", places (or *loci*) where fictional characters are allowed entrance to the underlying mechanics of the fiction (e.g., the 'donkey wheel' in *Lost*) (Mittell 2007).

4 For the purpose of differentiation, and informed by literary studies, we propose to reserve the term 'poetics' for normative poetry doctrines (so-called rule poetics), while the term 'poetology' should be used for a particular poetic self-understanding or an individual style of writing (Wiele 2010). An interesting problem here is whether computer games are basically generic 'containers' for certain mediated activities, or whether they are 'floating' instances of play, or aesthetics of form, that can be appropriated and taken up by different content (and played by players). See Kirkpatrick (2011) for this (Gadamerian) discussion of what constitutes computer games as aesthetic form and material. Interesting questions on the hermeneutical nature of games' ontology are also raised in Aarseth and Möring (2020).

5 Although time and space does not allow for a full exploration of this, our argument about the intimate connection between narrative structure and spatial arrangement in games can be regarded as an extension of Henry Jenkins' analysis in his 2004 essay 'Game Design and Narrative Architecture' (Jenkins 2004).

6 As mentioned by David Leeson (2005) *Manhunt*'s plotline draws heavily on the short story by Richard Connell, 'The Most Dangerous Game', also entitled 'The Hounds of Zaroff', first published in *Colliers*, 1924. A contemporary, cinematic parallel would be *A Serbian Film*, an exploitation horror movie by Srđan Spasojević (2010).

7 José P. Zagal explains this combination of mechanic and point system in the essay '*Manhunt*—The Dilemma of Play': "Let's say Cash sneaks up behind a gang member with a plastic bag. Pressing the attack button will result in Cash yanking the bag over the victims [*sic*] head and suffocating him. If the player holds down the button for a few seconds, the execution is more violent and Cash might punch

the victim in the face in addition to suffocating him. The third, and most brutal, type of execution is carried out by holding down the attack button even longer. Thus, by deciding how long to press the attack button for, the player determines the degree of brutality of the execution" (Zagal 2010). The theme of *acceleration* is prevailing here along with the exaggerated iconography of sadism, as discussed by Gilles Deleuze in his *Coldness and Cruelty in Masochism* (1991). Cf. also Schubart 2001.

8 The increasing brutality of the gameplay corresponds to the point system and the level design of the game. The game has three levels of execution, with each level progressively more violent and graphic than the last: 'hasty' executions are quick and not very bloody, 'violent' are considerably more gory, and 'gruesome' are over-the-top blood-soaked murders.

9 We would like to thank one of the anonymous reviewers for a very insightful summary of the main thrust of our argument.

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Materiality, Nonlinearity, and Interpretive Openness in Contemporary Archaeogames

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MARCO CARACCIOLO

Abstract

Drawing inspiration from discussions on the relationship between archaeology and video games ("archaeogaming"), this article argues that contemporary games address three central concepts of archaeological theory: the uncertain materiality of archaeological finds, the way in which caring for artifacts complicates a linear or chronological understanding of history, and the open-ended quality of archaeological interpretation. The "archaeogames" I examine—which include *Heaven's Vault* (Inkle, 2019), *Outer Wilds* (Mobius Digital, 2019), *The Forgotten City* (Modern Storyteller, 2021), and *Elden Ring* (FromSoftware, 2022)—capture these concepts by implementing a variety of gameplay and narrative mechanics. In addition to embedding archaeological objects at the level of representation, these games turn archaeological theory into a gameplay practice—a process potentially leading to the emergence of collaborative and creative storytelling within what I call archaeological fandom.

Key words

Archaeology; history; narrative; environmental storytelling; uncertainty; objects

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Introduction

Archaeology has become a central metaphor and imaginative practice in an important strand of contemporary video games. Andrew Reinhard's *Archaeogaming* (2018) offers a comprehensive examination of this intersection of game studies and archaeology.[1] One of the takeaways of that book is that "archaeologists need to reach out to game studios to lobby for the inclusions of various archaeological mechanics [in games] without sacrificing the intended entertainment value" (2018, p. 17). My argument in this article is that video games have already started drawing inspiration from archaeology not only on the level of the simulated world but also through the formal and imaginative affordances of gameplay. I will call games that engage with archaeology both thematically and formally "archaeogames," and I will explicate how they resonate with contemporary archaeological theory and some of its philosophical underpinnings. In particular, I am inspired by New Materialist philosophy (Barad, 2007; Bennett, 2010) and by how it prompts a reconceptualization of material things as agential and potentially disruptive of human interpretation and appropriation.

My argument is two-pronged, moving from how archaeology informs the mechanics of gameplay (including those responsible for delivering digital narratives) to the excavatory practices that surround gameplay in online communities—what I will refer to as "archaeological fandom." In the games I will examine, both gameplay and the subsequent interpretation of gameplay can be viewed as "archaeological" in that they display a combination of characteristics: (1) an investment in and foregrounding of the simulated materiality of the game world, for instance through increased attention to objects and the instability of their meanings; (2) a historical logic of temporal stratification, which frequently aligns with innovative (nonlinear) ways of delivering a game narrative; (3) an openness to interpretation that fuels the player's imagination through gap filling or the creative extension of game narrative. I will first explore a number of recent archaeogames: titles like *Heaven's Vault* (Inkle, 2019), *Outer Wilds* (Mobius Digital, 2019)*, The Forgotten City* (Modern Storyteller, 2021) have developed innovative storytelling mechanics to probe notions of history and materiality. In the final section, I turn to the reception of FromSoftware games (particularly *Elden Ring* [2022]) to illustrate the exploratory engagements of archaeological fandom.

Before developing these ideas, I will contextualize my discussion vis-à-vis existing work in the humanities that embraces archaeological metaphors. I will also draw on recent archaeological and New Materialist theories to unpack the meanings of the word "archaeological" in my argument. As I will show in the following pages, archaeogames do not merely thematize archaeology but encourage gameplay and interpretive practices that tie in with archaeology as a discipline focusing on the entanglement of human societies and material things. From this perspective, which is inspired by Olsen et al.'s (2012) work, materiality provides a point of access into a past that can never be definitively explicated but only sampled in its multiplicity—hence the interpretive openness of archaeological objects that the games I will study seek to recreate within a digital medium.

Clearly relevant in this connection is the field of historical game studies, in which scholars such as Adam Chapman (2016) and Jeremiah McCall (2020) have started interrogating the value of video games for the imaginative exploration of the past.[2] While not explicitly framed in archaeological terms, this work also tends to highlight the

importance of both game mechanics and the player's agency in shaping access to the historical past. McCall, for instance, uses the concept of "historical problem space" to emphasize the way in which the historical questions raised by games, through their own ludic and narrative means, can remain interpretively open—an idea that resonates with my discussion below. Nevertheless, it is important to keep in mind that archaeogaming practices extend beyond historical games in the strict sense. Archaeogames need not deal with real-world history; even when they touch upon it (as in the case of *The Forgotten City*), they may favor a philosophical, speculative mode of engagement with the past over historical accuracy.[3]

Archaeology Between Metaphor and Material Practice

In the wake of Michel Foucault's seminal work in the 1960s, archaeology has become a generative metaphor in many areas of the humanities. Foucault's (1969, 1971) "archaeology of knowledge" was a method of discourse analysis that placed emphasis on the embedding of ideas and practices—including conventional disciplines—within historical contexts. It is hard to overstate the significance and influence of Foucault's thinking, but it is also hard to miss that the reference to archaeology remains loosely metaphorical in his work. When, for instance, he writes that "archaeology tries to define not the thoughts, representations, images, themes, preoccupations that are concealed or revealed in discourses; but those discourses themselves, those discourses as practices obeying certain rules" (1969, p. 138), it should be clear that the "archaeological" method he has in mind has little in common with archaeology as a set of practices that focus primarily on material artifacts, not on the rules shaping discourse.

Scholars building on Foucault's work have tended to revive the archaeological metaphor by shifting attention from discourse to materiality while retaining Foucault's interest in historical processes. This is perhaps most evident in discussions emerging within the field of so-called "media archaeology," whose history is helpfully reconstructed by Erkki Huhtamo and Jussi Parikka in the introduction to an edited volume (Huhtamo & Parikka, 2011; see also Parikka, 2012). As Huhtamo and Parikka point out, "media archaeologists have begun to construct alternate histories of suppressed, neglected, and forgotten media that do not point teleologically to the present media-cultural condition as their 'perfection'" (2011, p. 3). The archaeological dimension of this approach has to do with these researchers' ambition to "excavate" (to use another popular archaeological metaphor) media practices that are not mainstream by today's standards, combining an interest in the materiality of these media and in the discursive structures that surround them. Archaeology thus involves the uncovering of material practices obscured by the presentism of contemporary discourse, for instance in the form of surprising continuities between digital media and their analogue precursors. This is somewhat closer to archaeological methods, but the reference remains (as Huhtamo and Parikka acknowledge) partial and metaphorical.

To be clear, I don't see this metaphorical appropriation of archaeology as problematic. There is plenty of evidence that metaphors are essential cognitive tools and that they can steer the formation of new concepts, approaches, and areas of inquiry (Nersessian, 1992; Ortony, 1979). To some extent, my use of the concept of "archaeology" in this article is also metaphorical, an extension to digital games of some

of the core interests of archaeology as a discipline. However, in the games I will examine archaeology and its traditional objects of study (ruins, artifacts, etc.) also play an explicit role on the level of plot and theme. Thus, my category of "archaeological gameplay" is an extrapolation from the game's subject matter to the formal affordances of gameplay and digital narrative. This extrapolation is still a metaphorical gesture, but it is grounded in objects and environments that do resonate with an archaeological mindset in a non-metaphorical sense.[4]

Before detailing and exemplifying this notion of archaeological gameplay, I will spell out the theoretical and practical commitments of this appeal to archaeology. My main inspiration here is the archaeological theory presented by Bjørnar Olsen, Michael Shanks, Timothy Webmoor, and Christopher Witmore in a co-authored book (Olsen et al., 2012). For these archaeologists, the materiality of the excavated objects is central to the operations of their discipline. Drawing on Bruno Latour's (2005) actor-network theory as well as work in New Materialism (e.g., Bennett, 2010), Olsen et al. foreground the system of relations that binds together the researcher located in the present and the past as it is inscribed in the archaeological record. This system revolves around "care," which is another key concept in Olsen et al.'s discussion and can be defined as the "painstaking toll of cleaning, examining, and conserving artifacts by technicians and curators" (2012, p. 66). Care is a particular kind of attention brought to bear on the fabric of things in themselves: a work of conservation suggesting that, in archaeology, the materiality of an artifact is never dispensable or completely interchangeable with its interpretation.

This focus on materiality also involves a particular way of relating to the past. Olsen et al. acknowledge the benefits of chronological ordering, but they argue that any linear understanding of the past is necessarily a simplification, perhaps even a distortion. Instead, they suggest that "the past is amassed, aggregated, enrolled, mixed up, recirculated, unforgotten, or torn out. It is the exchange with things that gather the 'pasts' that is of importance and not an orientation with respect to a measured and passing temporality" (2012, p. 145). In other words, the archaeologist's access to the past is never direct but mediated by the meanings that coalesce around historical distance. Time is always relational and multivalent, a situation that Olsen et al. capture through the metaphor of "percolation" and that complicates more conventional stratigraphic metaphors: instead of each historical stratum being independent and sealed off, history seeps through the layers and influences, in often unpredictable ways, the present. Moreover, this entanglement is never merely epistemic but raises ethical questions—hence (again) the work of care as moral responsibility towards both things in themselves and the future human observers who will attempt to understand them.

Archaeological care involves preserving artifacts but also formulating hypotheses as to the artifacts' relations. This potentially introduces a sense of uncertainty and mystery, because some objects can never be accommodated within a coherent and complete historical narrative; even if they are, archaeological interpretation is subject to change over time, as new artifacts are brought to light or new theories are formulated. Put otherwise, materiality can never be completely "depleted" through human interpretation—a central theme in New Materialist thinking.[5] Concretely, this means that archaeological interpretation is defeasible and open-ended rather than a process admitting of final answers.

Orientation towards material objects, nonlinear view of history as "percolation," and interpretive openness: these are the main takeaways of Olsen et al.'s archaeological theory that can be extended to the gameplay of archaeogames. Again, it is worth drawing attention to the overlap with the field of historical game studies here: Holger Pötzsch and Vít Šisler (2019), for example, revisit concepts from film theory and memory studies to discuss the ways in which games use material artifacts to both build on and shape cultural memory. My examples differ from historical games in that they cultivate an imagination of materiality that remains relatively uncoupled from real-world history and nevertheless deeply resonates with an archaeological framework. These titles fall into a long history of games that engage with archaeological themes. The late 1980s and 1990s saw a slew of *Indiana Jones* game adaptations and other archaeologically inspired games, including the extremely successful *Tomb Raider* franchise, but also less familiar titles such as the science fiction game *The Dig* (LucasArts, 1995), which focuses on xenoarchaeology. Praised for their puzzles, cinematic qualities, and (especially in the case of the first *Tomb Raider* [Core Design, 1996]) level design, these games paved the way for the archaeological gameplay I discuss in the following pages. Contemporary archaeogames deviate from these forerunners in their self-consciousness and willingness to openly disrupt genre and narrative conventions. Games from the 1990s were largely tied to a linear model of puzzle-solving, combat, and storytelling; more recent, "indie" games do not hesitate to embrace nonlinearity and indeterminacy as centerpieces of archaeological gameplay.

Materiality

The concept of materiality has been theorized in two related but ultimately divergent ways in contemporary nonhuman-oriented philosophy. On the one hand, theorists such as Jane Bennett (2010) and Karen Barad (2007) have foregrounded the interdependency of material things and human societies: how the material is a frequently forgotten locus of agency—"thing-power," in Bennett's (2010, p. xvii) terminology—that is entangled with but also distinct from human agency. The man-made "debris" that Bennett draws attention to early on in *Vibrant Matter* (2010, pp. 4–6), and that embodies the strange agency of the material, is also a typical object of archaeological study. On the other hand, object-oriented ontology (e.g., Bogost, 2012; Harman, 2018) downplays human–nonhuman entanglement and instead highlights the inaccessibility of the material, how physical things elude human understanding: we can project human meanings onto the material world, but for thinkers like Harman our knowledge of things in themselves remains fundamentally limited. Materiality and mystery thus go hand in hand, in that material objects invite interpretation and contextualization vis-à-vis human practices, but such human-imposed meanings can never be considered definitive.

This double interest in material agency and mystery finds a variety of manifestations in contemporary games. Objects are, of course, everywhere in video games, where they can enhance the player's abilities (as temporary "buffs" or permanent upgrades), or they can help them solve puzzles and advance the story. In some instances, however, game objects can go beyond a merely utilitarian gameplay function, resonating with New Materialist ideas. My first example is *Heaven's Vault*, a science fiction game whose protagonist (a young woman named Aliya) is an aspiring

archaeologist in a galaxy known simply as the "Nebula." *Heaven's Vault* combines two separate mechanics: an interactive narrative in which the player makes a large number of choices through the game's dialogue system; and a decoding mechanic that involves translating inscriptions (found on ruins and artifacts) from a lost language known as "Ancient." This isn't the first game in which translation from a fictitious language plays a central role: already in *Sethian* (Duang! Games, 2016), the player is asked to decode an alien language by interacting with a computer—the only extant artifact of an alien civilization, whose history is gradually unpacked as the player's knowledge of their language deepens.

While *Sethian* is, largely, a puzzle game, the blend of language-based puzzles and interactive narrative in *Heaven's Vault* creates unique opportunities. First, the player's encounters with Ancient inscriptions in *Heaven's Vault* always take place in context, which guides their interpretation. We come across our first Ancient text when Aliya's advisor, Professor Myari, summons her in haste to show her an "eagle-wing brooch." This is clearly an important item, and it contains a two-word inscription, with the game interface suggesting two possible translations for each word: the first lexical unit, for example, could mean "friend" or "holy" (see Figure 1 for an example of the translation interface). It is not too difficult for the player to guess that this inscription means "holy emperor" based on the eagle symbolism and also on the importance of the task Aliya receives from Myari (finding the archaeologist who sent Myari the brooch and has recently gone missing). If the player got the translation right, Aliya will confirm their guess after leaving Myari's office, so that whenever the words for "holy" and "emperor" are encountered in an inscription their translation is shown automatically. Otherwise, Aliya will realize she has made a mistake and invite the player to revisit the translation.

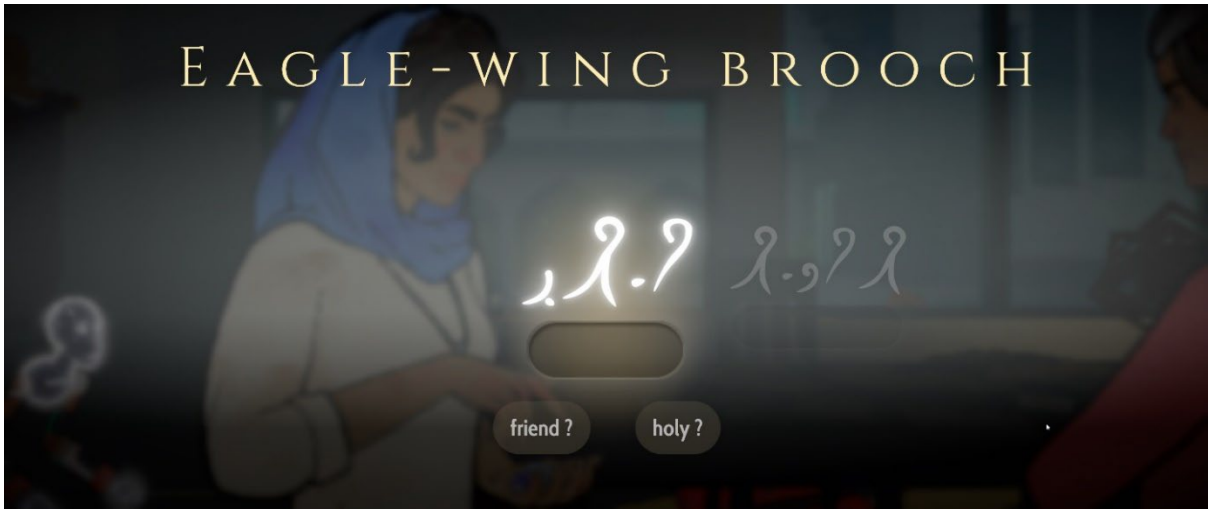

Figure 1: Translating the Ancient language in Heaven's Vault*. © Inkle.*

This, of course, is only the way the player is introduced to the translation mechanic: as the game progresses, the inscriptions become longer and more convoluted, with the player having to choose not from two but from a number of possible translations, and Aliya (or her robot Six) only occasionally confirming a given translation. Context remains an important factor in decoding inscriptions, and so is the visual resemblance

between certain words or glyphs. Nevertheless, it is impossible to decode all Ancient inscriptions by the end of a playthrough, so that a degree of uncertainty remains linked to the artifacts no matter how thorough the player was in exploring the game world: by the end of the game, not all of the player's questions will have been answered. The game even features a "New Game Plus" mode that allows the player to carry over confirmed words into their next playthrough: but here, the existing inscriptions change (including the language on key items such as the brooch) and become even more elaborate.

Translating the inscriptions isn't merely a puzzle minigame with no bearing on the game narrative. On the contrary, the Ancient language text, whether found on artifacts or on monumental buildings, is instrumental in making sense of the history of the world in which the player is located: in fact, the player will come to very different conclusions about the Ancient civilization based on the guesses they made while decoding inscriptions—many of which will never be ratified by the game. In this way, the language found on artifacts becomes a vehicle for an understanding of thingness that resonates with New Materialist insights: by destabilizing the player's attempts to decode the inscriptions once and for all, the material world of the Nebula eludes the player's grasp and creates a mystery that will not be dispelled by our interpretive efforts.[6] The sense of nonhuman agency that derives from the player's interpretive setbacks is, of course, enhanced by the algorithmic nature of the storytelling, which combines procedurally generated elements and an adaptive plot.

The text on some of the items collected by the player is procedurally generated, which introduces uncertainty and ensures that every playthrough is unique.[7] More importantly, the game world adapts to the player's translation decisions, with major locations receiving completely different names depending on the player's guesswork when attempting to read the inscriptions. For instance, one of the sites (known as the "Withering Palace") will be named "Early Empire-Period Moon" or "Dust-Blown Hospital Moon" for an entire playthrough if the player lands there without having correctly decoded a few key inscriptions beforehand. The adaptive nature of the game's narrative algorithm is a manifestation of what Ed Finn (2017, p. 36) calls the "magic" of computation, but in this case its primary function is to deepen the uncertainty and mystery that surround material objects and locations encountered in the game world. This is an example of how archaeogames can resonate with current archaeological theory: making sense of the material is an open-ended process that builds on the uncertainty and unpredictability of things—that is, the way they fall through the cracks of (current) historical narratives. *Heaven's Vault* doesn't merely embrace this idea at the level of subject matter but builds it into the mechanics that underlie digital narrative and gameplay.[8]

Nonlinear History

One of the many unanswered (and perhaps unanswerable) questions raised by *Heaven's Vault* is whether the temporal structure of the Nebula is linear, as the protagonist believes, or circular (as most of the Nebula's inhabitants insist). According to the doctrine of the Great Loop, history would repeat itself at regular intervals: the ancient past studied by Aliya is, effectively, the Nebula's future. The game interface seems to embrace Aliya's linear understanding of history, however: a timeline that fills

up as we play the game displays both the remote past (as reconstructed by Aliya through the decoding mechanic) and the choices made by the player in the course of the playthrough. This device integrates the Nebula's history and our interactions with the game within an explicitly linear structure. But if *Heaven's Vault* plays with a circular conception of time without realizing it on the level of gameplay, two other archaeogames adopt the time loop as a storytelling mechanic that challenges a chronological understanding of history: they are *Outer Wilds* and *The Forgotten City*.[9] Both games can be said to implement Olsen et al.'s metaphor of the "percolation" of archaeological time, but they do so in profoundly different ways: the former through a science-fiction scenario, the latter by revisiting real-world history in a speculative vein.

In *Outer Wilds*, the time loop is entirely predictable: every twenty-two minutes, the Sun explodes and destroys the known universe. Instead of dying, however, the player character is sent back to the beginning of the game, when they are about to set out on a journey of space exploration. The Solar System consists of five planets and a number of smaller astronomical bodies. The player's goal is to use the twenty-two-minute cycles to explore as much as possible of this universe and break the time loop. While the player's home base is an Earth-like planet, the rest of the Solar System is strewn with the remains of an ancient civilization, the Nomai, who disappeared after a mysterious cataclysm. Much of the Nomai's backstory is delivered through environmental storytelling, particularly scrolls and recordings scattered throughout the universe (and often in remote locations).[10] This text can be instantly decoded with a translation tool: *Outer Wilds* doesn't ask players to engage in the kind of guesswork we have encountered in *Heaven's Vault*.

Rather, the main challenge here has to do with locating and accessing the Nomai ruins that hold the key to this civilization's demise (and to game's time loop). Very few of these sites are on the planets' surface: the player can locate them only by visiting locations that are hidden deep inside the planets or not obviously visible at first glance. Finding these sites is made more complicated by two factors: first, operating the spaceship requires precise maneuvers and, second, the time loop returns players to the starting location at the end of each cycle, limiting time for the exploration of the outer reaches of the Solar System. This is a game that rewards patience and curiosity reminiscent of the archaeological "care" discussed by Olsen et al.: it is by paying close attention to the regularities of this game world that the player gains access to most of the key locations. For example, two planets—the so-called Hourglass Twins—are locked in a fixed cycle over the course of the time loop, with sand falling from the Ash Twin to the Ember Twin (see Figure 2). This means that the player only has a few minutes at the beginning of the time loop to explore a cave system on the Ember Twin before the planet starts filling up with sand; and, conversely, that the Ash Twin only becomes accessible after most of the sand has drained away. Because this miniature universe has the regularity of clockwork, making progress in *Outer Wilds* involves learning to predict and exploit the planets' movements in order to take full advantage of each twenty-two-minute cycle.

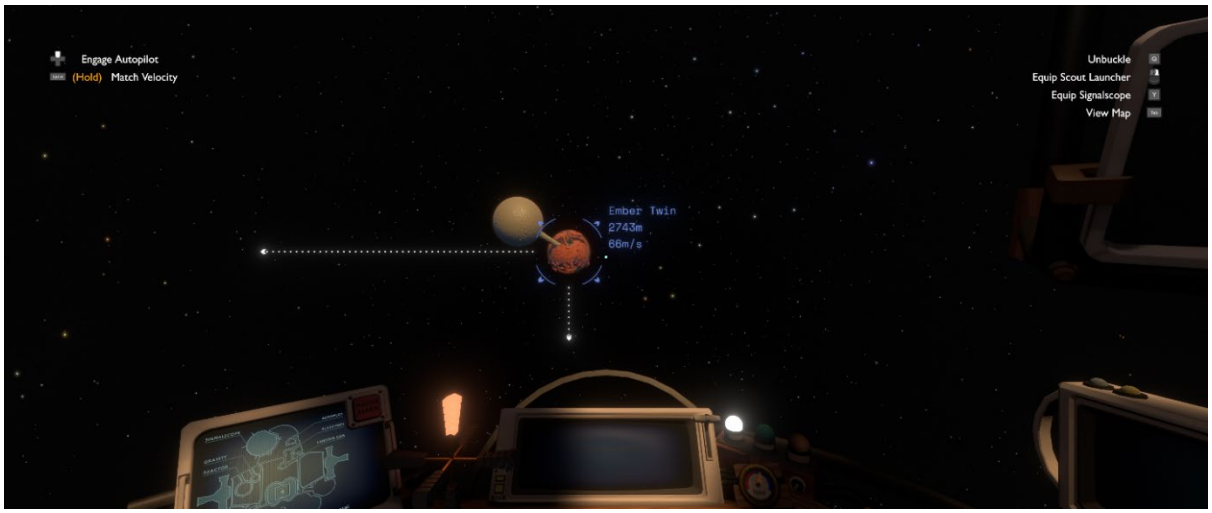

Figure 2: The Hourglass Twins seen from the spaceship of Outer Wilds*.*
© Annapurna Interactive.

The spaceship computer is the only object in the Solar System that is *not* reset at the end of each loop, allowing players to keep track of important information they have acquired in previous traversals of the game. One of the main findings is that the time loop has been initiated by the Nomai themselves, who were hoping to avert the supernova causing the end of the Solar System. The player discovers that the Nomai were looking for a mysterious location known as the Eye of the Universe, which would hold the secret to preventing the supernova, but they were unable to reach it. "Beating" *Outer Wilds* means completing the Nomai's quest, making one's way to the Eye by following a long series of carefully timed steps. Doing so breaks the time loop, bringing about the end of the universe, and sowing the seeds (as the credit sequence suggests) of a *new* universe. Knowledge from the Solar System's remote past, recovered through archaeological exploration, thus helps the player shape the fate of this game world, evoking the percolation of the past into the future, or the impossibility of drawing a clear-cut distinction between the player-archaeologist's observations and the realities that are being observed. Learning about the Nomai means determining (or at least having the power to determine) the course of this universe beyond the repetitive loop in which it is accidentally stuck. However, when this loop ends circularity isn't eliminated completely but rather "scaled up" to a cosmic principle: effectively, the player "resets" the known universe and paves the way for a new universe of which none of the game characters are part.

The time loop of *The Forgotten City* isn't tied to a fixed countdown but rather to a law known by the characters as the Golden Rule: "The many shall suffer for the sins of the one." Concretely, this means that whenever a sin is committed, everyone dies and the world goes back to its initial state (hence the time loop). If the player does *not* take any action or commit a sin themselves, one of the characters *is* going to break the Golden Rule in a way that inevitably leads to a new beginning, so there is a hard time limit to each loop (even if it is less stringent than the twenty-two-minute cycles of *Outer Wilds*). The setting is the titular forgotten city, a Roman settlement to which the player is magically transported at the beginning of the game. First developed as an *Elder Scrolls V: Skyrim* (Bethesda Game Studios, 2011) mod in 2015 and later released as a stand-alone game, *The Forgotten City* starts in the present day: while exploring some Roman

ruins, the player character falls through a portal that takes them back in time to the Roman period. Here, they are welcomed by the town's leader, a character named Magistrate Sentius, who lays out the Golden Rule for the player. Sentius also mentions his fears that one of the city's inhabitants will soon break the Golden Rule, asking the player to identify the potential sinner and stop them.

This becomes the player's primary goal, along with finding a way of escaping the city and returning to the present. Soon, the overarching mystery of the Forgotten City crystallizes into a series of leads to be found and puzzles to be solved by the player: for instance, tracking down the Magistrate's daughter, who has gone missing, or finding certain key items that give access to secret locations. Advancing the game involves exploring the game world, solving spatial puzzles, as well as learning what actions have an effect on the main characters and unlock new dialogue options while talking to them. Crucially, the game cannot be completed without restarting the loop a number of times, because knowledge of what is going to happen often provides the player with new leads on how to approach the game's mysteries. The time loop of *The Forgotten City* is also unlike that of *Outer Wilds* in that the player gets to retain more than information across loops: items picked up during a traversal will stay in the player's inventory after the loop is reset, unlocking new opportunities for interaction with the characters.

Just as foreknowledge of game world events, through familiarity with the loop, guides the player's puzzle-solving, so does the past of this Roman city. Hidden under one of the city's temples, the player encounters a character (referred to simply as the Hermit Philosopher; see Figure 3) who formulates the game's understanding of history, which is based on the layering of archaeological strata:

> Very few know this, but before the Romans came to this city, it was once entirely Greek. The architecture, the temples, and the people. When the Romans came, in typical fashion they claimed it as their own, built over everything that could be built over, and renamed the things that could not.

But even the Greeks didn't build the city from scratch. As the Hermit Philosopher explains, the existence of an "out-of-place Egyptian plaque among our people's possessions" points to an even older past. He continues: "we proud Greeks had thought the Roman beasts for stealing and corrupting our heritage… But it turns out this this game had been going on much longer than any of us imagined." In fact, as the player pursues this lead by exploring the city's catacombs, they discover an underground Egyptian temple. This vertical layering of the city reflects the chronology of the archaeological past, but the game invites the player to go beyond a merely sequential understanding of history. As the Philosopher articulates, the idea of civilizations following one another linearly is closely bound up with a logic of mastery, whereby every civilization erases or obscures the traces of past societies and therefore claims to have replaced them. The game is not framing this as a historical question in the strict sense: at stake here is not a particular conceptualization of the Roman world (or at least not primarily), since this is clearly a fantastical, speculative scenario. Rather, the game is pursuing a more abstract insight into the coexistence of cultures and versions of the past in conceptualizing *any* society, including this seemingly Roman city.

Figure 3: Talking to the Hermit Philosopher in The Forgotten City*. © Dear Villagers.*

The way in which this insight is delivered to the player (via dialogue with an anonymous Philosopher) may seem telegraphed and didactic. Yet the coexistence of multiple "pasts" isn't entirely detached from gameplay, as demonstrated most clearly by the quest linked to Priestess Equitia. This character reveals that the Golden Rule was created by Pluto, the god of the underworld, and that all the city's inhabitants are dead. Obtaining an audience with Pluto is a necessary step to achieve the game's most satisfying ending (the so-called 'Canon' ending). But for this conversation to take place, the player has to gain access to the Great Temple overlooking the city. As we learn from Equitia, the temple can only be unlocked by collecting four plaques dating back to Roman, Greek, Egyptian, and Sumerian times (the last one is initially referred to as the "mystery" plaque, but it bears a cuneiform inscription and it is later labelled "Sumerian"). Locating these items and placing them on the obelisk by the Great Temple is a gameplay puzzle with deep implications for the game's philosophy of history: it shows that the only way out of the city is through its past, and that this past should be understood as an interplay of histories rather than a single, teleological sequence from Sumerian to Roman times. This realization paves the way for the final confrontation with Pluto—a long dialogue scene in which the player's main task is to convince the god of the underworld that his Golden Rule is unjust and contradictory. The Hermit Philosopher's teachings are crucial in this conversation: if players pick the correct dialogue options, they can convince Pluto of his own double standard in applying the Golden Rule and trigger a chain of events that breaks the game's time loop and returns the player character to the present day. Thus, much like what happens in *Outer Wilds*, the game can end only when the nonlinearity of the gameplay loop is replaced by insight into the nonlinearity of archaeological time. History isn't partitioned into chronologically water-tight periods, but the past seeps through the layers of ancient civilizations, influencing present-day injustices (such as the existence of the Golden Rule) as well as the possibility of conceiving a future that isn't a mere linear extension of the past.

Interpretive Openness

As we have seen, *Heaven's Vault* uses the translation mechanic to bake a degree of indeterminacy into the plot, making it impossible for even the most dedicated players to fill in all the gaps at the end of a playthrough. FromSoftware games such as the *Dark*

Souls (2011–2018) series or, more recently, *Elden Ring* encourage players to engage in an even more radical form of gap filling, rewarding an archaeological approach not only to gameplay but also to game interpretation. This archaeological model underlies, as we will see, Internet-based practices of "fandom" directed at FromSoftware games.[11] On the level of representation, archaeology is evoked by FromSoftware's strategic use of ruins and secret passages throughout the games.[12] Perhaps most straightforwardly archaeological in *Elden Ring* are locations such as the "eternal city" of Nokron, an underground site that appears much better preserved than the ruin-strewn world of the surface. The player is thus transported to a time and a place predating the Shattering, a cataclysm in *Elden Ring* history that caused the devastation visible everywhere in the game world. The archaeological reference is intensified by the fact that the visual language of most FromSoftware environments (including Nokron) is heavily indebted to real-world historical sites: the architecture of this "eternal city," for example, is inspired by Renaissance elements, while other locations later in the game recall the Gothic architecture of the Piazza dei Miracoli in Pisa (see Figure 4). Through this combination of in-game lore and real-world art history, the foregrounded historicity of these spaces calls for an archaeological mindset—to use Bennett, Krupa, Minniti, and Vandewalle's (forthcoming) phrase—that values both visual and level design.

Figure 4: Gothic architecture in Crumbling Farum Azula, Elden Ring*.*
© Bandai Namco Entertainment

In *Elden Ring* and in other FromSoftware games, the archaeological imagination goes hand in hand with a fundamentally ambiguous narrative that requires constant input from the player. Not all players will be willing to put in the effort, of course: some will only value the challenging combat and pay little attention to the narrative.[13] But those who take an interest in the narrative face a particularly arduous task. As Hidetaka

Miyazaki, the creative director of *Dark Souls* and *Elden Ring* acknowledges in an interview, "*Dark Souls* is in some ways an incomplete game, and I like to think that it has been completed by players, by their discoveries, as they moved along" (quoted in Blain, 2015). The world of FromSoftware games abounds in narrative cues, but few story connections are spelled out. These cues are delivered through a combination of environmental storytelling, dialogue, cutscenes, and artifact descriptions. The locations visited by the players contain multiple spatial elements—for instance, a corpse-strewn battlefield, dilapidated village, or charred landscape—that point to a glorious past now in ruins. The dialogue and cutscenes are highly suggestive but ultimately rather sparse, whereas the most sustained narrative cues can be found in item descriptions that are entirely dispensable (from a gameplay perspective) but that convey most of the games' 'lore.'[14] The world of FromSoftware games thus requires the player's interpretive efforts more substantially than other games (including the archaeogames examined so far): instead of guiding the player through a largely predetermined story, these games function as a narrative sandbox allowing willing players to extrapolate a narrative from the scant information they receive (through gap filling), or even to come up with their own stories—a strategy that recalls Marie-Laure Ryan's discussion of "do-it-yourself" storytelling.[15]

For an example of basic gap-filling, consider the description of a quest item in *Elden Ring*, the "Black Knifeprint." It reads: "On the Night of the Black Knives, someone stole a fragment of Death from Maliketh, the Black Blade, and imbued its power into the assassins' daggers." The Night of the Black Knives is a key moment in the *Elden Ring* backstory also referenced by the opening cutscene, which sets the stage, introduces the main characters, and establishes a link between this Night and the Shattering of the Elden Ring. The Maliketh mentioned by this item description is one of the powerful enemies ("bosses") we fight in the latter half of the game, and we also learn here that a "fragment of Death" was stolen from Maliketh and used to enchant the assassins' daggers on this fateful night. From other narrative cues in the game, the player finds out that this "fragment of Death" (elsewhere referred to as "Rune of Death") was stolen by Ranni, a sorceress and another of the game's main characters introduced in the opening cutscene. By piecing together these disparate leads, the player can work out the game's backstory, but this is a slow process that requires thorough attention to both the physical features of the game world and the items that are richly described by the game's interface.

Some areas of the *Elden Ring* narrative call for even more player participation. Here the indeterminacy is so profound that the story cannot be pieced together in any conclusive way. Instead, players are encouraged to "do it themselves" (to use again Ryan's terminology) and tell their own stories inspired by the *Elden Ring* world and characters. On platforms such as Reddit and YouTube, players share and discuss a variety of "lore" stories that are certainly grounded in the games but also build on a good deal of speculation: these are frequently referred to as "theories" to flag their imaginative nature, how they go beyond what can be reasonably deduced from the games. YouTube user VaatiVidya, for example, has gained considerable following for releasing polished and well-written videos that explore, in a creative mode, the stories of FromSoftware games' major and minor characters.[16] Another YouTuber explicitly highlights the archeological dimension of his engagement with the game, promising "investigative archaeology in the service of *Elden Ring* lore hunting."[17] The popularity of these narrative practices within a significant subset of the FromSoftware player base

points to the openness of the games' underlying narrative. As a result, new forms of collaboration emerge as players share and debate their creative interpretations of the games.

One may compare this phenomenon to what Jason Mittell calls "forensic fandom" in a discussion of contemporary TV narrative: "Much of complex television fosters a mode of forensic fandom in which viewers are encouraged to solve […] high-concept puzzles, to ask 'why?' and presume that there is an answer to be found by drilling down and analyzing" (2015, p. 65). In FromSoftware games, however, there are *both* answers to be found (when the story allows for gap filling) and narrative suggestions that cannot be simply "solved" but rather need to be shaped into new, player-created stories (the do-it-yourself approach). In that respect, Mittell's "forensic" metaphor for these narrative practices is less apt than the archaeological parallel I am exploring here. Archaeology, as Olsen and his colleagues discuss, is certainly a discipline invested in answers, but it remains aware of the defeasibility of any given answer: the past isn't simply a puzzle to be solved once and for all, but a multiplicity of "pasts" whose openness and ambiguity should be preserved even as the archaeologist attempts to fashion coherent stories out of what they know. Content creators like VaatiVidya and their audiences are thus engaging in what I call archaeological fandom: their shared interest in item descriptions and their meticulous attention to the details of the game world pursue a computer-mediated equivalent of archaeological care. This archaeological reading is, as I mentioned, supported by FromSoftware's foregrounding of ruins, which evoke a glorious past that can only be imagined by players (or tentatively experienced when visiting locations like Nokron).

Some of the practices surrounding FromSoftware games can be considered excavatory in an even more straightforward sense. Several players have taken to examining the source code to reveal cut content that complements (or in some cases contradicts) the narrative cues present in the games (see, e.g., Litchfield, 2022). The efforts of well-known dataminers such as Lance McDonald offer insight into the backstory of existing characters or even disclose how a given quest line would have progressed, had the developers decided to keep it in the game.[18] While this activity tends to fall into the gap filling category, it can also feed into the more speculative engagement of users like VaatiVidya. In different ways, FromSoftware games resonate with the archaeological imagination by using narrative ambiguity as a springboard for various practices specifying and enriching the game world's history.

Conclusion

Positioned within the growing field of archaeogaming (Reinhard, 2018; Bennett, Krupa, Minniti, and Vandewalle, forthcoming), this article has examined the ways in which the gameplay of contemporary games can be geared towards three concepts emerging from archaeological theory. These concepts are materiality, nonlinear history, and interpretive openness. I have shown how a variety of contemporary archaeogames address these ideas and integrate them not only thematically but at the level of their gameplay mechanics, including their narrative mechanics. This conceptual focus both defines the gameplay afforded by archaeogames and distinguishes them from games with a historical agenda, where the representation of the actual, real-world past takes center stage. Instead of raising questions about historical accuracy, archaeogames

foreground material artifacts and spaces that echo the uncertainty of the archaeological object—how it calls for but also resists interpretive appropriation on the part of the researcher. Further, they challenge a conventionally chronological understanding of history, evoking instead the way in which a plurality of "pasts" extends into the present and informs the future of human societies. Finally, archaeogames can build on a strategic lack of narrative determination to encourage participatory practices, from basic gap filling to the creativity of what I called archaeological fandom.

In these discussions, my use of the concept of archaeology has stretched from the representational level of games to the formal and imaginative affordances of gameplay. It is worth noting that my examples negotiate these concepts in different ways and, arguably, with varying degrees of success. While *Heaven's Vault* and *Outer Wilds* manage to capture archaeological concepts almost entirely through their formal mechanics, *The Forgotten City* raises questions about the philosophy of history in a dialogue sequence that can come across as heavy-handed, an attempt to spoon-feed the player instead of engaging them on the level of gameplay. Keeping these differences in mind, the innovations adopted by my case studies can become a blueprint for future applications of archaeogaming, including the use of "serious" or educational games in archaeology. Moreover, these devices demonstrate the game medium's ability to translate complex ideas into an interactive practice that is not only philosophically engaged but also, potentially at least, collaborative: as the FromSoftware game community demonstrates, some archaeogames call for sophisticated creative and interpretive efforts in dialogue with other players.

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Notes

1 See also this website, which was created by Reinhard and is now maintained by Kaitlyn Kingsland: https://archaeogaming.com/.

2 See also a comprehensive collection edited by Alexander von Lünen, Katherine J. Lewis, Benjamin Litherland, and Pat Cullum (2021). I would like to thank my colleague Alexander Vandewalle and one of the journal's anonymous reviewers for bringing to my attention this scholarship in historical game studies.

3 McCall (2020) already distances himself from concerns over accuracy in his discussion. For more on the difficulty of understanding and establishing "accuracy" in historical games, see Copplestone (2017).

4 For more on the phrase "archaeological mindset," see Bennett, Krupa, Minniti, and Vandewalle (forthcoming), whose discussion of environmental storytelling converges with many of my claims here.

5 See, e.g., Bennett: "*objects* appeared as *things,* that is, as vivid entities not entirely reducible to the contexts in which (human) subjects set them, never entirely exhausted by their semiotics" (2010, p. 5).

6 See, for instance, this discussion of "Ten Big Questions" raised by *Heaven's Vault* that, as the posts attest, many players could not answer definitively: https://steamcommunity.com/app/774201/discussions/0/1681441347871574341.

7 For more detail on the game's procedurally generated artifacts, see a blog post by the programmers (Inkle, 2017).

8 See also the discussion of uncertainty and digital narrative in Caracciolo (2022, Chapter 6), which includes a more sustained reading of *Heaven's Vault*.

[9] See also Linda Lahdenperä's (2018) discussion of the time loop as a ludic strategy that is frequently remediated into contemporary film.

[10] "Environmental storytelling" is the influential concept introduced by Henry Jenkins (2004) for narrative cues distributed in a game environment, instead of being delivered through introductory text or cutscenes. For a more recent approach to narrative meaning-making in game environments, see Thon (2016).

[11] See the collection edited by Swalwell et al. (2019) for an introduction to the practices of video game fandom.

[12] See Dunstan Lowe's (2012) helpful discussion of ruins in video games. FromSoftware's ruins would fall into what Lowe calls the "fantasy" category (2012, pp. 72–83).

[13] For a phenomenological approach to competing values in video game experience (gameplay vs. narrative), see Caracciolo (2015).

[14] Tanya Krzywinska offers a seminal discussion of lore, which she defines as "past events that constitute the world's current state of affairs, to which the player character is subject" (2008, p. 127).

[15] See Ryan (2006, p. 671): "If the text is a game, it is less a puzzle to be solved than a construction kit that inspires free play with its elements".

[16] See https://www.youtube.com/c/VaatiVidya/about.

[17] See https://www.youtube.com/@tarnishedarchaeologist/about.

[18] See Lance McDonald's videos at https://www.youtube.com/c/WarpChair/videos.

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FREDRIK RUSK, MATILDA STÅHL AND SOFIA JUSSLIN

Abstract

We, as researchers of situated game play from players' perspectives, may be overlooking aspects of how players, in-and-through their actions, actively orient to the complex interconnectedness of interactional resources when playing multiplayer games in teams. This study analyses, from an ethnomethodological (EM) participant perspective, video data of several screen recorded *Counter-Strike: Global Offensive* (CS:GO) matches being played by two teams that were geographically dispersed, to understand how teams choreograph their game play as part of larger sequences of situationally emergent tactics. We incorporate an understanding of expanded choreography developed within the field of dance to understand the interconnectedness of the interactional resources available to the participants to collectively, and situationally, choreograph their team play. The EM participant perspective provides a focus on what players, micro-interactionally, orient to and make relevant to each other by making each other accountable for own and others' actions that are interconnected to the 'basic elements' of movement. The main findings are that the choreographing is done collectively and, largely, based on the information gathered in-and-through callouts that function as a choreographing device. However, the choreography is not based on verbal communication (alone), but on the interweaving and interdependence of each player's movements and actions on-screen in-and-through interaction with the basic elements of movement.

Keywords

Teamplay; multiplayer; ethnomethodology; choreography; collaboration; coordination; competitive gaming

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Introduction

The multiplayer first-person shooter (FPS) game genre, the game context of this study (*Counter-Strike: Global Offensive*, CS:GO), is popular and continues to be one of the main genres within both esports and the competitive gaming scene. Unlike game genres where in-game communication primarily is "having people to talk to while off doing solo adventures" (T. L. Taylor 2009, p. 39), the growing multiplayer FPS competitive gaming scene has put an even larger focus on teamplay and coordination. Therefore, players in the FPS competitive gaming scene value functioning cooperation, communication, adaptability skills and knowledge of community-shared understandings of game play (Gibbs et al. 2004; Halloran et al. 2003; Kiourti 2019, 2022; Manninen 2001; Rambusch et al. 2007; Rusk & Ståhl 2020, 2022; Rusk, Ståhl, and Silseth 2020, 2021; Tang et al. 2012; T. L. Taylor 2015; Wright et al. 2002). In these game contexts, players are geographically dispersed, and in-game actions are carried out by players' in-game avatars (Reeves et al. 2009). Further, players often communicate through a shared voice channel and this voice channel, in concert with the in-game actions, become their principal points for constructing a shared understanding of actions and events in-game (Manninen 2001); that is, choreograph their play (Rambusch et al. 2007; Rusk and Ståhl 2022; Tang et al. 2012; T. L. Taylor 2015).

This study analyses several screen-recorded CS:GO matches being played by two teams, in an attempt to, from an ethnomethodological (EM) participant perspective (cf., Reeves et al. 2017), understand how teams choreograph their game play as part of larger sequences of situationally emergent tactics. This article contributes to the discussion on finding new ways to examine in-game interaction. We display the interconnectedness between the actions and understand how geographically dispersed participants interweave actions onto, and into, each other as they coordinate their team play in-and-through their on-screen actions and a Discord voice channel. To do this, we incorporate an understanding of expanded choreography developed within the field of dance (Hildebrandt 2016; Østern 2018; Rouhiainen and Østern 2020) and draw on the structural possibilities of choreography to understand the actions, collaboration, and coordination in the players' game play. Understanding individual players' actions and team actions as part of a larger, emergent, choreography may help us to better realize how CS:GO players orient towards the rich and complex audio-visual contexts in-game as they reach a mutual understanding with their team regarding their current and next actions. In other words, we may better understand how players in a team, intersubjectively, construct a situational awareness of current and next actions.

Players in fast-paced competitive multiplayer FPS games, such as CS:GO, have small windows for doing actions and recognizing others' (both teammates' and opponents') actions. Therefore, they appear to orient to effective communication and community-shared known-in-commons when, both individually and collectively, making split-second decisions (Colón de Carvajal 2016; Kiourti 2019; Mondada 2013; Piirainen-Marsh and Tainio 2014; Reeves et al. 2009; Rusk and Ståhl 2020, 2022; N. Taylor 2009, 2012). One fundamental part of the effective communication appears to be callouts (Rusk and Ståhl 2022), which are community-shared and community-constructed situated practices that are contextually dependent on in-game on-screen actions and verbal communication. They are used to coordinate moving as a team

(Duell 2014; Halloran 2011; Manninen 2001; Tang et al. 2012) and most often they are English, known-in-common, words that refer to specific locations in the game map. However, the voice communication is not necessarily distributed evenly among, or between, the players. There are serious issues with regards to the inclusiveness of women, non-straight, non-binary, and non-white participants in the (voice) communication between players (see, e.g., Gray 2020; Janish 2018; Kelly et al. 2023; Oliveira et al. 2018; Ratan et al. 2015; Zhu 2018), especially when these players play with random teammates and against random opponents online. The flourishing misogyny and racism of gaming communities creates a silencing effect for players marginalized by the norms of technomasculinity (Johnson 2018). This is unfortunate not only to players othered by this norm, but to the detriment of all players, since information and communication are fundamental for good teamplay in fast-paced FPSs. This is an important point to keep in mind when reading this study (which is based on screen recordings from two all-men teams of players that know each other from before) and other studies on collaboration and coordination in online gaming. If players are marginalized and harassed when using the voice channel and refrain from using it, this will limit the value of communication presented earlier for the whole team.

In this study, we propose an approach to understand how players, situationally, interact in-and-through a multiplayer FPS game, while being geographically dispersed. Players employ all, and whatever, interactional resources that are available to them to play together as a team, and, as an analyst, it may be hard to observe how all the small, coordinated actions of individual players are oriented to by teammates and opponents in a fast-paced multiplayer FPS. Additionally, players, from their perspective, might not necessarily be able to verbalize or conceptualize these actions. Consequently, for research on social interaction in-and-through game play, the next step is to embrace the potential of data collected from the participants' points of view at the very moment of the event. Therefore, by using video data of the actual game play that can be viewed repeatedly we can achieve a greater empirically grounded understanding of the systematics, structure, and social organization of the interaction in fast-paced multiplayer contexts.

Ethnomethodology and Video Game Play

As an alternative to studies that are produced through an application of standardized methodologies, ethnomethodology (EM) studies participants' practical methods for meaning-making; that is, the methods in-and-through which participants concertedly produce actions, activities, and practices of everyday life in an actual, and not hypothetical or theoretical, setting. It provides for studying the details of social situations, and its practices for reporting and analyzing adapt to whatever is being studied (Reeves et al. 2009). Here, we draw on EM to study the practical methods of players to choreograph their team play while geographically dispersed (Garfinkel 1967, p. 31). It provides the tools to analyze, empirically, how teams choreograph their game play in-and-through the context of the game and which interactional resources they appear to orient to when doing these activities. The details of members' methods reveal the taken-for-granted structures that are oriented to as players arrange their game play, which are often "susceptible to be […] ironized or exoticized in academic work" (Reeves et al. 2009, p. 207). Therefore, EM research strives to provide insight into the

detailed ways in which participants provide accounts to each other and how these accounts are tied to the activities that they are part of (Reeves et al. 2017).

The study of multiplayer video game play is steadily becoming a legitimate topic in EM studies (cf., Aarsand 2010; Aarsand and Aronsson 2009; Baldauf-Quilliatre and Colón de Carvajal 2015, 2020; Bennerstedt 2013; Hung 2011; Mondada 2011; 2012; 2013; Piirainen- Marsh and Tainio 2009a, 2009b, 2014; Reeves et al. 2009; Reeves et al. 2017; Sjöblom 2011). These studies share an interest in attempting to understand the practical methods used by gamers when playing. In this article, we argue that EM informed approaches (Garfinkel 1967; Sacks 1995) can be utilized to systematically study players' social practices in CS:GO matches with a focus on the *sequentiality* and *accountability* of actions in-game, as well as members' use of *devices* (Reeves et al. 2017; Sacks 1995). Devices are members' constructs, which they use in making sense of and acting in the world (Garfinkel 1967). They may, for example, be interactional resources that are oriented to and used for specific practices that are trans-situational. That is, they are devices for performing certain actions (Clayman, Heritage, and Maynard 2022) and can be understood as products of a larger interactional machinery, instead of practices of a particular interaction done by particular people (Sacks 1984, p. 26). Sequential organization entails that social interaction is organized and orderly. The series of interactional turns can be tracked for which interactional resources that appear to be oriented to and what participants may be doing through them, which responses may be relevant or possible, and where the sequence is going, that is, what outcomes the participants seem to pursue (Sacks, Schegloff, and Jefferson 1974). The concept of accountability entails that players analyze, using the available interactional resources, their own and others' conduct in-game to determine what the possible, or relevant, next turns or actions are (Bennerstedt and Ivarsson 2010; Brown and Bell 2004). Players do things in a way that makes their 'doings' recognizable to others (Bennerstedt and Ivarsson 2010). These findings are of special interest to studies of game play in which the players are not physically co-present and can only interact in-game, such as the context in this article. Most notably, some EM studies that focus on the social organization of the in-game interaction, such as the players' avatars displaying them to each other in-and-through the gameplay on screen, find that actions on-screen are organized and sequential, similarly as in non-digital social settings (e.g., Baldauf-Quilliatre and Colón de Carvajal 2015; Bennerstedt and Ivarsson 2010; Brown and Bell 2004; Laurier and Reeves 2014; Reeves et al. 2009; Reeves et al. 2017; Rusk and Ståhl 2020, 2022).

An EM participant's perspective, together with video data of the actual game play, can provide a new understanding of how players, themselves, orient towards the team coordination. Playing the game in a coherent way (orienting towards a common goal and choreography) is known-in-commons (expected actions, activities, and events) and therefore often referred to implicitly (Garfinkel 1964; Sacks 1995). As these interactions evolve sequentially, participants seamlessly relate their actions to previous actions or events and make each other implicitly and explicitly accountable for events and activities done in-game. It is here that the notion of expanded choreography can help us in understanding how accountability and known-in-common actions are situationally emergent and set in motion, as a team.

Expanded Choreography to Understand Communication and Coordination in Online Multiplayer FPS Video Games

Choreography originates from the field of dance and its roots stem from composing movements for dancing and the human body. The combination of game play and dance may seem farfetched, but Kirkpatrick (2011) suggests that all video game play is a form of dance. In fact, the notion of choreography has been discussed as being 'expanded' for already over a decade (Hildebrandt 2016; Østern 2018; Rouhiainen and Østern 2020) and the structural possibilities of choreography has moved beyond the dance field into, among other fields, game studies (Birringer 2006; Kirkpatrick 2011; Snowdon 2019). Additionally, there are game studies using a notion, or closely related notion(s), of choreography to analyze and/or discuss diverse collaborative and coordinative phenomena, for example, the choreography between players, on-screen actions, off-screen actions and contexts of play (Bennerstedt and Ivarsson 2010; Giddings 2007; Giddings and Kennedy 2008; Linderoth and Bennerstedt 2007; N. Taylor 2009, 2011, 2012), as well as callouts (N. Taylor 2011, 2012) and spectator's camera movements (Elam and N. Taylor 2020).

In this article, we use the notion of choreography to make sense of how players orient to their own and others' conduct in the rich and complex audio-visual space that they share through each of their own perspectives. That is, we use the notion of choreography to understand the situated and emergent team actions that players enact and set in motion in-and-through the in-game environments and resources that are available to them. Choreography is, then, not a fixed entity, a tactic and way to move that has been previously agreed upon, but, instead, choreography is the moment-to-moment actions done by team members to create and develop emergent tactics, on-the-go. Additionally, speaking to the situatedness of emergent tactics, following the notion of choreography, the players (all potential choreographers) can move on a horizontal line, instead of on a vertical one. This approach relieves us from the analytical categories of having to find who the 'leader' is and see the choreography and the orientation to who choreographs what and how as dynamic and fluid, and the situations as unfolding collectively (Butterworth 2018).

We draw on reiterations (Glad 2002; Smith-Autard 2014) of Laban's (1975) movement theory to understand what players orient to as they choreograph and perform movements in the in-game spaces. Laban's framework has been used extensively to describe and analyze movement in diverse disciplines, such as psychology, health, sports, and STEM areas (see, e.g., Bernard et al. 2019). The movement theory states that the basic elements are the participants' own movements in-and-through interaction with the *body*, the *space*, the *dynamics*, and the *relationships* for creating activity, expression, and experiences (Glad 2002). Movements are done in relation to these elements in all spaces and contexts, and next, we elaborate on these elements and operationalize them within the context of our analysis of teamplay and coordination in CS:GO.

The *body* is the instrument of the movements. In fast-paced multiplayer FPS games, it is often the movements and actions that the player creates on-screen by enacting movements with the avatar. In FPSs, players use their bodily situational awareness to, moment-to-moment, calculate how and where their avatar is visible and how it is moving in-game, although they cannot see the avatar per se. In this way, the

relationship between player and avatar is understood as instrumental (see, e.g., Ash 2014, Giddings 2007). Players are continuously, and creatively, exploring what the avatar can do (e.g., turn, run, jump, throw, manipulate objects, shoot, stab, or crouch).

The *space* (in CS:GO, both the in-game environment and the map with its symbolic representations) directs what the players can and cannot do. Utilizing the space shows intuitive and conscious choices. Language use indicates how the space plays a big role, which relates directly to the importance of callouts in CS:GO. In choreography with others, it is also an important part to understand how and where others move, because it affects the space and your space. What others do is read by you and it makes sense based on how you understand the space and the actors in the space, including materials that can be manipulated in the environment (e.g., diverse grenades).

Dynamics refers to the degree of energy you put into the movements in the space. Dynamics give the movements personality and expression, such as 'fast', 'slow', 'quick' or 'quiet'. A varied bodily register provides diverse dynamics to use in the movements. That is, knowing how and when to move fast, slow, quietly, or to stand still is essential to playing the game, as well as when to hold the grenade for longer and when to throw it short, long, fast, or slow. Additionally, dynamics also refers to weapon skill in how to shoot (e.g., spray, burst or single shots). In other words, a more competent player uses a more diverse range of dynamics. All of this is, then, also interconnected with the body (own and others') and the space.

Relationships indicate that we express ourselves in relation to communication partners; who and what can we move in relation to? In our CS:GO data, these would be in-game environment and map with its possibilities and constraints, in-game music and sounds, information on the HUD (heads-up display), teammates, opponents, health, role as terrorist or counterterrorist, and so on.

Expanded choreography can support in understanding complex, fast-paced and collective coordination in a multiplayer FPS game by providing an analytical framework originating from a field that has as one of its primary aims to produce structured understandings of intensely complex movement(s) by 'bodies' in relation to both human and non-human actors, as well as diverse soundscapes. These are basic elements that help the understanding and analysis of situations where verbal communication is scarce and where participants rely more heavily on a plethora of other modes of communication, including a deeply rooted expectation of common-ground expertise. Moreover, callouts are related to these four categories, depending on player actions, use of space, dynamics in movements, and relationships to others and the environment.

In this article, the aim is to study team coordination through an analysis of the ways participants deal with the projectability and contingencies of upcoming team and opponent actions. That is, how do players agree on a choreography for the round, and how do they change the main choreography mid-round, using a host of collaborative practices, including callouts, as a choreographing device.[1] The EM perspective, together with an understanding of expanded choreography, provides us with analytical tools to understand the complex situated coordination and collaboration that teams engage in when playing CS:GO in a sequential and accountable manner. That is, how

the players understand how others are interpreting a situation, not only from their explicit (often verbal) communication (which is scarce during CS:GO rounds) but from what they do through their movements.

Context and Participants

The data used in this study, participants' own screen recordings of CS:GO matches, was collected for one year (from May 2017 to May 2018) in collaboration with a Swedish-speaking vocational school in Finland and the participants (two teams, Finnish-Swedish bilinguals who are proficient in English, 17–18 years old, all men) who studied esports as a minor subject. The esports program functions, for the study, as an access point to a setting with serious gamers that are playing a competitive game with a goal of becoming better at gaming. The students volunteered to participate in the study through a teacher. Participants used Swedish as the language of instruction at school, and Swedish with some Finnish and English codeswitching with each other both inside and outside of the gaming context. All participants were geographically dispersed and used a Discord voice channel to communicate with each other during the matches. The all-men group of participants was not a choice made by the researchers but supposedly a result of the predominantly male game culture resulting in few female students in the esports program (Kinnunen et al. 2020; N. Taylor 2011). The authors discuss the implications in more detail elsewhere (see Rusk and Ståhl under review; Ståhl 2021). In the data, participants presumed all players to be men unless a gamer tag or their voice hinted that the participants needed to re-evaluate such an assumption. While the participants stated to welcome female players, they did note that the online game culture in CS:GO might not be supporting of female-identifying players. There were efforts made to include the esports program's only female student. However, she played a different multiplayer game and dropped out of the data collection before submitting any material.

The game under scrutiny, CS:GO, is an online FPS multiplayer game (Valve Corporation and Hidden Path Entertainment 2012). Two teams with 5 players each play for several rounds in one match. The first team to win 16 rounds wins the match. Rounds are approximately 2 minutes long and matches are played for approximately 20–45 minutes. You start as either a counterterrorist (CT) or a terrorist (T) and then switch. The game is played on different maps that have different goals depending on if your team is CT (e.g., defusing a bomb) or T (e.g., detonating a bomb). Your team wins a round if you succeed in your goal or stop the opposing team from achieving their goal. If you die during a round, you must wait until the round ends, then you start again. During this time, you function as a spectator. In this mode you can watch the rest of the round from the points of view of your remaining teammates.

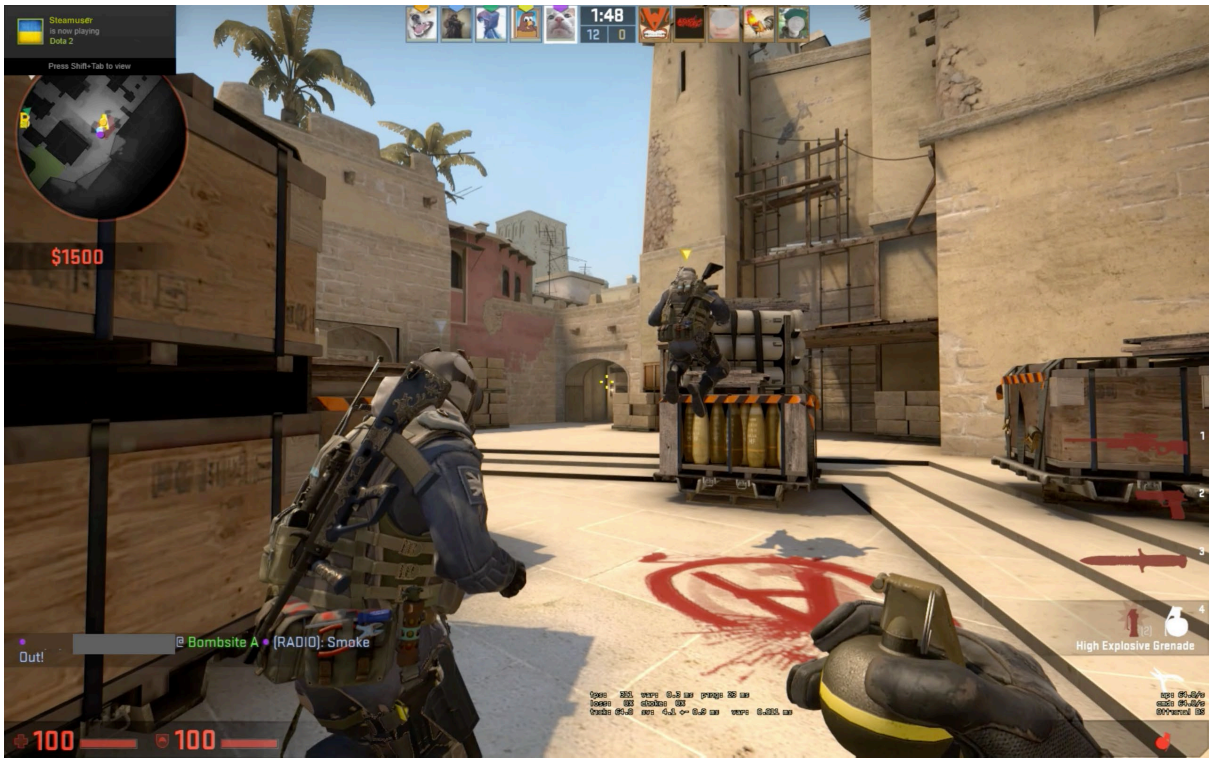

Figure 1: Screenshot from the Counter-Strike: Global Offensive *screen recordings. © Valve Corporation.*

Data Collection and Analysis

The use of EM to analyze in-game interaction places certain demands, or requirements, on the data collection (Giles et al. 2015; Meredith and Potter 2014; Meredith 2015). EM's aim to study the actual organization of practices in human interaction requires recordings of naturally occurring activities, including naturally occurring digitally mediated interaction (Giles et al. 2015; Mondada 2012). Implementing these requirements means that data should be collected, at least, as screen recordings of one participant's screen as the interaction occurs. The data collection was organized as a tight collaboration between the researchers and the focus students (Team 1 has 4 focus students and Team 2 has 3 focus students), who screen-recorded their matches and shared them with the researchers for one year (see Table 1). The data is of the two teams playing CS:GO matches against random opposing teams in competitive mode. The students handled the screen recording software and thereby decided which matches to send to the researchers. Apart from access to the material they agreed to share, we have very limited insight into these negotiations as they took place outside of the recordings. However, one such negotiation (focused on sharing wins or losses, match 1, Team 2) was documented and helped us to clarify that both wins, and losses were relevant to us. Both teams sent recordings of seven matches and the analysis is based on all shared recordings (see Table 1, 14 matches in total).

	Team 1				Team 2		
	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5	Participant 6	Participant 7
Match 1	X	-	X	O	O	X	X
Match 2	X	O	X	O	O	X	O
Match 3	X	-	X	X	O	X	X
Match 4	X	X	X	X	O	X	X
Match 5	X	X	X	O	X	X	X
Match 6	X	X	X	O	X	X	X
Match 7	X	X	X	-	X	X	X

X = submitted a screen recording to the researchers

O = participated in the match, did not submit a screen recording/issues with participant file

- = did not participate in the match

Table 1: Overview of screen recordings.

Another methodological consideration for the study of multiplayer in-game interaction from a participant's perspective is that the participants are geographically dispersed and are using their own computer screens (Heath and Luff 2000). Hence, an immediate argument would be that for a better understanding of participants' social actions and for an emic analysis from all participants' perspectives, all participants would need to record their screens. However, when recording several participants' perspectives, the issue of an emic perspective becomes apparent; that is, which participant's perspective is the one to be analyzed and how to 'gather' all perspectives into how participants structure and do their collective social organization? If one had video data of all participants' points of view, how would the analyst explore 'a participant's perspective' on in-game online interaction when, in fact, all participants each have their own distinct perspectives on it (Heath and Luff 2000; Luff et al. 2003; Rusk and Pörn 2019)? In this study, we do not have every player's recording of every match. Firstly, we do not have the recordings of the opponents' game play, we only have recordings made by participants from our focus teams. Secondly, we do not have recordings of every focus team player's perspective of every match (see Table 1). This has implications on the analysis, in that we do not have 'complete' data to understand every player's full individual participation in the situations. Thanks to the voice channel and visible on-screen actions viewed from other players' perspectives (including the mini map with colored dots for each player on the team), the analysis can include aspects of other players' actions, nevertheless, not completely. With these caveats in mind, the data is still robust and rigorous enough to conduct an EM analysis of the game play. We propose that the analysis can be considered rigorous and robust even with only one participant's point of view, if the analysis pays detailed attention to the EM concepts of

accountability and sequentiality by analyzing how the participants communicate that they have, so far, had a common (enough) understanding of the situation and that they orient towards a “reciprocity of perspectives” (Heath and Luff 2000), which they base on what is available to them at their end of the connection.

Following an EM analytical approach, none of the phenomena and practices analyzed in this study were preconceived prior to data collection. Instead, they were, and became, emergent in the data as a result of repeated “unmotivated looking” (Psathas 1995). This unmotivated looking led us to understand that players, although not having played as teams for long, appeared to rely on all kinds of interactional resources that are available to them to play together as a team without, explicitly, verbalizing what they do and why. Players just seemed to know what to do and coordinate their actions according to how they understand the situations in a very unproblematic manner. These observations led us to focus on how participants collaboratively choreograph the start of rounds and how they (may) change the choreography mid-round. That is, how do they orient towards the rich and complex audio-visual contexts in-game as they reach a mutual understanding with their team regarding their current and next actions. Therefore, we needed to include, in the initial data selection, the starts of rounds and the situations mid-round in which players oriented towards changing the first oriented to choreography. This generated a vast body of situations and we realized that we needed to acquire some level of competence in understanding the map and the intricacies of the game to be able to discover how participants choreograph their team movements. Hence, we focused on the map that we have most data of: Mirage. This, still, generated a large collection of situations: approximately 16 hours of participants’ screen-recorded data. With this better understanding of how participants generally choreograph their game play, we then focused more on how the team, collectively, choreograph the start of rounds and later modify or change the choreography as the round progresses. The transcription system builds on Jefferson’s (2004) system which is the most used system in both EM and conversation analytical (CA) studies (see Appendix 1 for explanations of symbols used).

Evolving online research methods from participants’ perspectives places new demands and ethical challenges on the researcher, especially regarding online content (Ståhl and Rusk 2022). Several steps were taken to avoid the research being perceived as an intrusion into the students’ privacy (Murphy and Dingwall 2001). The recordings are deemed to be sensitive data; therefore, they are stored on encrypted external hard disks and are not shared or made openly accessible outside of the project group. Additionally, we use faux names instead of the students’ real names and we have informed students, parents, and teachers of the study’s aim and what participation entailed. The screen recordings were sent over an encrypted and secure file sharing service and all gamertags (the players’ in-game names) have been removed and changed to the colors that players are provided in each match to secure the participants’ privacy. The participants were given as much control of the data as possible (Murphy and Dingwall 2001): (1) they volunteered to be part of the study; (2) they handled the screen recording software and decided which matches to send; and (3) before showing any in-game data to an outside audience, the data was sent to the participants to acquire consent to show it. For the most part, the excerpts have been translated into English by the researchers, except for statements originally in English.

Results

Before presenting how the starts of rounds are choreographed and how choreographies are changed mid-round, we need to acknowledge the differences in playing as counterterrorist (CT) or terrorist (T). In our data, when playing as CT, providing a clear choreography in the start of a round does not seem to be as essential as when playing as T. This is, partly, because our data only includes 'sabotage' in which T is the aggressor (must plant the bomb at one of two bomb sites within the time frame) and CT is defending the bomb sites. The different team goals, in themselves, place different demands on choreographies because of the difference in the relations between the basic elements of choreography and movements.

In our data, teams playing CT usually divide the team to key positions (*site A*, *site B*, and, possibly, *mid*) to get an overview of the map and where the opponent is attempting to plant the bomb. The basic elements of space and dynamics are oriented to as central, because of the need to understand what the opponents are attempting. CT team members, collectively, listen to and orient to the callouts and change the choreography accordingly. Playing as T, the teams employ callouts as a choreographing device to be able to read the basic elements from the whole team's perspective. They use callouts to determine, collectively, how the choreography plays out and how it relates to the opposing team's choreography. The basic elements of relations and body appear to be oriented to as central for teams playing as T, because they need to read, collectively, who and what they can move their bodies in relation to. They are more dependent on being flexible from the start, because of their role as aggressors and, therefore, need to express themselves in relation to how the defending team has positioned themselves.

In the following, we outline how participants choreograph the start of rounds and how they orient to the projectability and contingencies of upcoming team and opponent actions when they change or modify the choreography mid-round. The results section is divided into (1) how teams, collectively, choreograph the start of rounds and (2) how they use callouts as a choreographing device to modify and change the main choreography based on the basic elements that indicate upcoming team and opponent actions. The first two excerpts focus more on the collective nature of choreographing that appears to be part of how the teams coordinate their play. The final two excerpts exemplify how the basic elements are part of the moment-to-moment choreographing of team play, with a focus on callouts as a choreographing device.

Choreographing the start of a round

In-between rounds, there is a temporal position (15 seconds) for explicitly negotiating and agreeing on a choreography that will be used for the round. These negotiations, if held, are very short and are usually solved by either someone providing an explicitly stated starting choreography for the round and others adding to and/or modifying that proposal, or with no explicit proposal and each participant reads the situation based on previous expertise and expected known-in-commons.

The first excerpt (1) displays how an explicit starting choreography may be given in the start of a round playing as T and how others have agency over the choreography and can modify it.

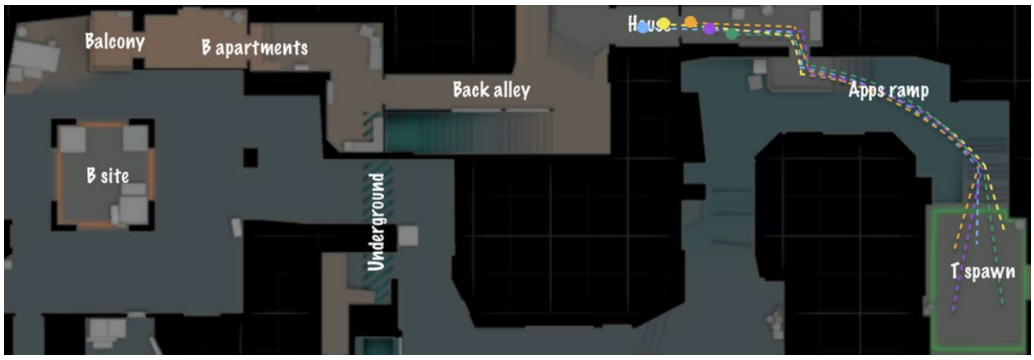

Figure 2: Team movement in the beginning of the round in Excerpt 1 (the dots indicate end positions of players).

```
01 Blue:   >ska vi fa    be<
           >are we going be<
02 Purple: där uppe: (.) nån  (märke)=
           up there. (.) some (mark)=
03 Yellow: =contact be
04         (1.0)
05 Blue:   >ja(h) (nå)=o:kej   co[ntact be<]
           >ye(h) (well)=o:kay co[ntact be<]
06         (3.0)
07 Purple: [contact be: (   ) jå=jå    (.) nå då f- då fungera: de]
           [contact be: (   ) yes=yes. (.) well then i- it worked ]
08 Orange: [jå:jå: där-  (.) jå där e sådän märken                ]
           [ye:ye: ther- (.) yea there are those marks            ]

09         ((round starts and all start running towards B site through
           house, see fig 2))

10 Orange: >okej okej<=
           >okay okay<=
11 Purple: =contact be: om [nå(n)-
           =contact be: if [anyone-
12 Orange:                 [(nån)
                           [(anyone)
13 Green:  å control ji: så stänger du av din mick
           and control jay you turn off your mic

14         ((team starts walking when approaching back alley))

15 Purple: [ja ta: u:ge:
           [I take u:ge:
16         [((runs for two steps and jumps before walking again))

17         ((Purple walks down the stairs towards underground))
18         ((rest of the team walk towards B apartments))

19 Green:  >(.hhh)sjo<
           >(.hhh) ye<
20 Orange: steppa lite mer(a) pliis
           step   some more please

21         [((Purple engages opponent, see fig 3))
22         [((rest of the team walk towards B apartments, see fig 3))

23 Purple: ((dies)) pusha: uuge: en
                    one pushing uuge:
```

```
24 Orange: [okej vi [fa: då
           [okay we [go then
25         [((team runs onto B site, see fig 3))
26 Purple:          [(backa)   backa
                    [(back up) back up
27 Yellow: >ja hoppa ut<
           >I jumped out<
28 Blue:   uppå  balcony
           up on balcony

29         ((Green kills opponent on balcony))

30 Purple: ni[ce
31 Green:    [han [e död
             [he  [is dead
32 Orange:        [han e död
                  [he is dead
```

Excerpt 1: Contact B.

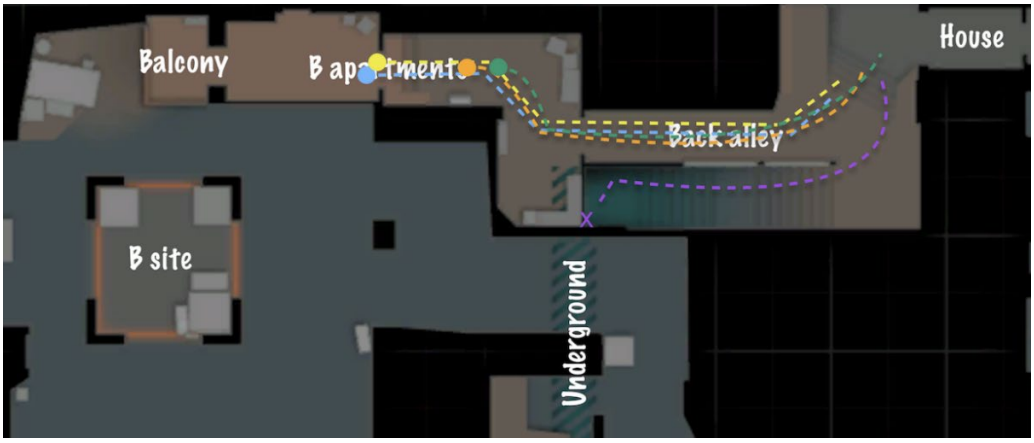

Figure 3: Team positioning as Purple dies and they rush B site *in Excerpt 1.*

In excerpt 1, Blue checks what they are going to do this round (line 1). The team is, at the same time, discussing how to start the screen recording (lines 2, 7, and 8). Yellow confirms to Blue that they are going to *B site*, but that it is "contact B" (line 3), which entails (loosely), that they run through *apps ramp* towards *B site* and start walking at *house*, so that the opponents will not hear them as they approach *B site*, and push when there is contact with the opponents (there are other variants of this, but this is how this team plays it here). Purple confirms and repeats, twice, for everyone to hear (lines 7 and 11). The round starts and the team moves towards *house* (lines 9–13, see figure 1). When they are close to house, they start walking, almost simultaneously. As the team has started walking (line 14) and move towards *back alley*, Purple announces that he is going to go to *underground* (line 15) and modifies the original choreography (see figure 2). When he says it, he runs for a couple of steps and jumps (line 16), which leads to him making stepping noises that opponents can hear, before he again walks down the stairs towards *underground* (line 17). Green acknowledges Purple's re-choreographing (line 19). The rest of the team is walking towards *B apartments* and Orange comments sarcastically on the fact that Purple made stepping noises (line 20). Next, Purple engages an opponent in *underground*, dies and provides a callout (lines 21 and 23). Orange orients to the situation and tells the team to just run onto B site

(line 24) and they do it (line 25). Overlapping Orange's comment to run, Purple says that they should back up (line 26) and Yellow, orienting to that, says that he jumped out (line 27). Blue provides a callout (line 28) and Green kills the called out opponent on *balcony* (line 29). Purple, who is spectating, provides a positive assessment and Green and Orange call out the kill to everyone (lines 30–32).

The choreography has (from what the screen recordings indicate) been agreed upon before start. Blue checks and others confirm, and Purple verbally repeats the suggested choreography to make sure everyone has heard. However, Purple modifies the choreography and diverts from it, Green acknowledges it explicitly and Orange is only annoyed by Purple making stepping sounds. Both the choreographed run-walk-run that the entire team does and the (accidental?) noise that Purple makes, indicates that the dynamics of this choreography are very important for the team. There are also divergent choreographies being called at the same time when Orange gives a cue for when to rush B site and Purple creates another choreography (retreating), but there are no disputes regarding this. Yellow orients to Purple's alternative choreography by calling out that he has already taken an action that indicates that it was too late. In other words, they hear the choreographies and have agency regarding both modifications and choosing which choreography to follow. Nevertheless, these situations seldom lead to conflicts regarding what to do.

Excerpt 2 shows how players playing as CT choreograph the start of rounds without anyone providing a main choreography. Before the round starts, there is no explicit choreography of how they will divide themselves in the next round, but as the round starts, everyone seems to 'know' where to go (line 1 and figure 4).

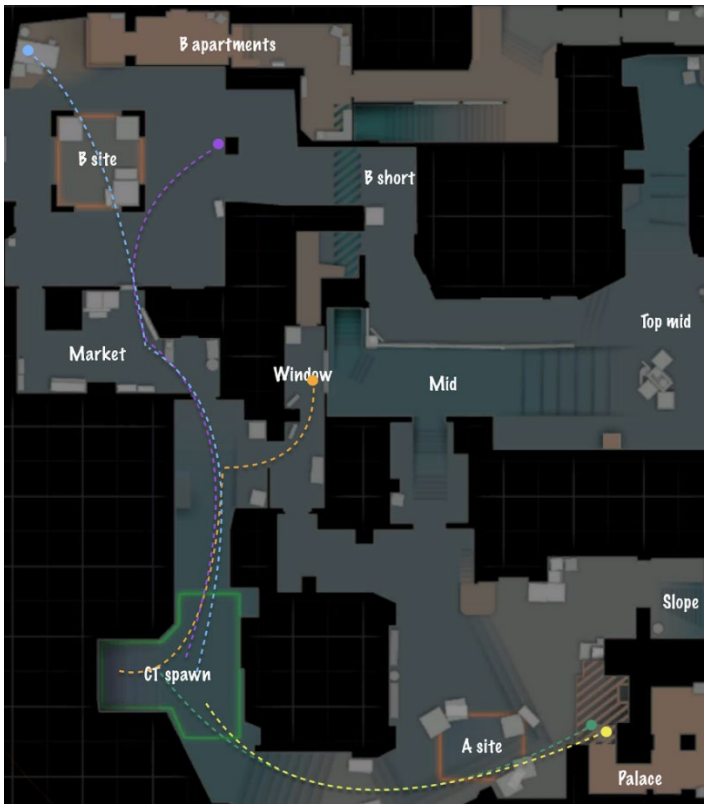

Figure 4: Movement and positioning in the beginning of the round in Excerpt 2.

```
01          ((round starts, Orange goes window, Purple and Blue goes B, Yellow
            and Green go A, see fig 4))

02 Orange: [en  topmid ren      [(    )
           [one topmid already
03          [((Purple continues running from B site towards B short and A
             site, see fig 5))
04 Green:                      [slope pushar en (typ)=
                               [one (guy) pushing slope=

05 Yellow: [=jå:   (.) palace (.) [tre   typer palace
           [=ye:s. (.) palace (.) [three guys  palace
06          [((Blue checks B apartments
07                                [((Orange runs towards A site, see fig 5))

08 Blue:   [>bomben e a bomben e a<
           [>bomb  is a bomb  is a<
09          [((Blue runs towards A site via market, see fig 5))
10 Orange: de e  a
           it is a
```

Excerpt 2: It is A.

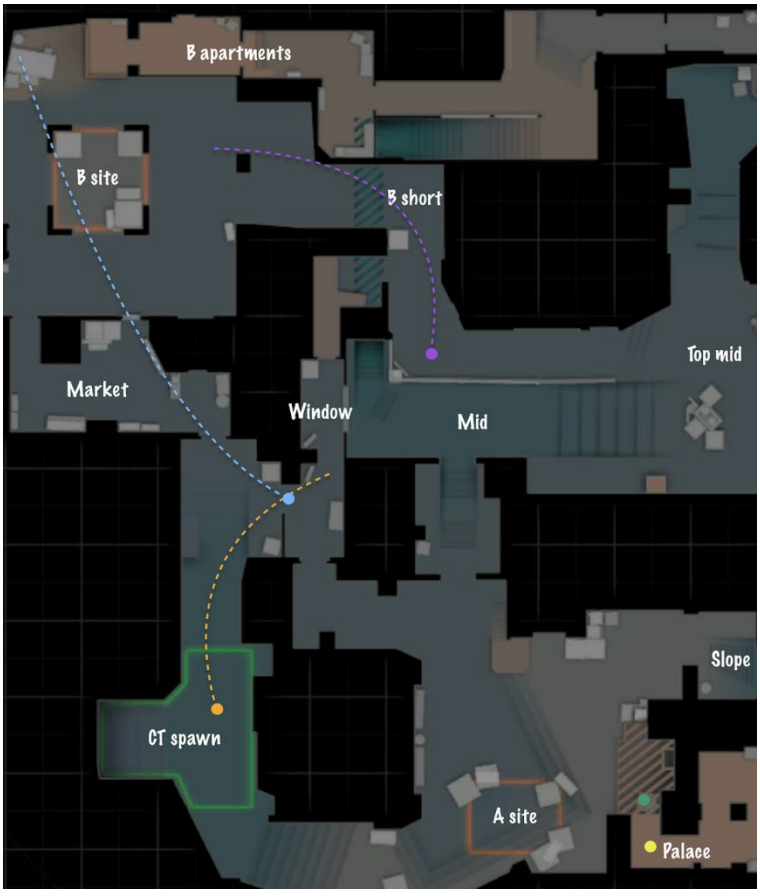

Figure 5: Responding to the call and moving towards A site *in Excerpt 2.*

They see opponents within seconds of the round having started, which is indicated by the callouts being provided on lines 2–5. Orange concludes, based on the information that the team gathered and shared, with a callout that the opponents are going for a plant at *bombsite A* (line 6). As soon as it becomes clear that there is much opponent activity at *A site*, everyone from the team (who is not at *A site*) starts running there from their positions (lines 6, 7, and 9, see figure 5).

There are seldom conflicts regarding how participants choreograph the start of rounds, even when no main choreography is provided, which indicates that the players take for granted that they 'know' the settings in which they operate, as well as that they 'know' their teammates, and that they count on and make use of these known-in-commons as they improvise their choreography. One interesting part of the choreographing of the start of rounds is that there appear to be no explicit leaders. Some participants more often propose a choreography in the start of rounds, but there is no rule or norm that participants orient to that indicates that some specific participant is the leading choreographer. Additionally, the fact that all participants can also modify the choreography, based on the basic elements, without creating conflicts, indicates that they have agency over the choreography and that choreographing team movements is a collective exercise.

Callouts as a choreographing device mid-round

Next, we exemplify the use of callouts as choreographing devices in situationally emergent tactics. The final excerpts (3–4) display how teams change the choreography mid-round. Excerpt (3) exemplifies how two players (Purple, carrying the bomb, and Yellow), after splitting up with the rest of the team at the start of the round (see figure 6), change the choreography mid-round because of situational contingencies (see figure 7). That is, their movements in interaction with the basic elements of relations (sounds and callouts) and space (their possibilities are slim when cornered in that area of the map) leads them to retreat and join the rest of the team at the other side of the map. The round starts with Purple and Yellow going to *top mid* and the rest of the team going towards *A site* (line 1, see figure 6).

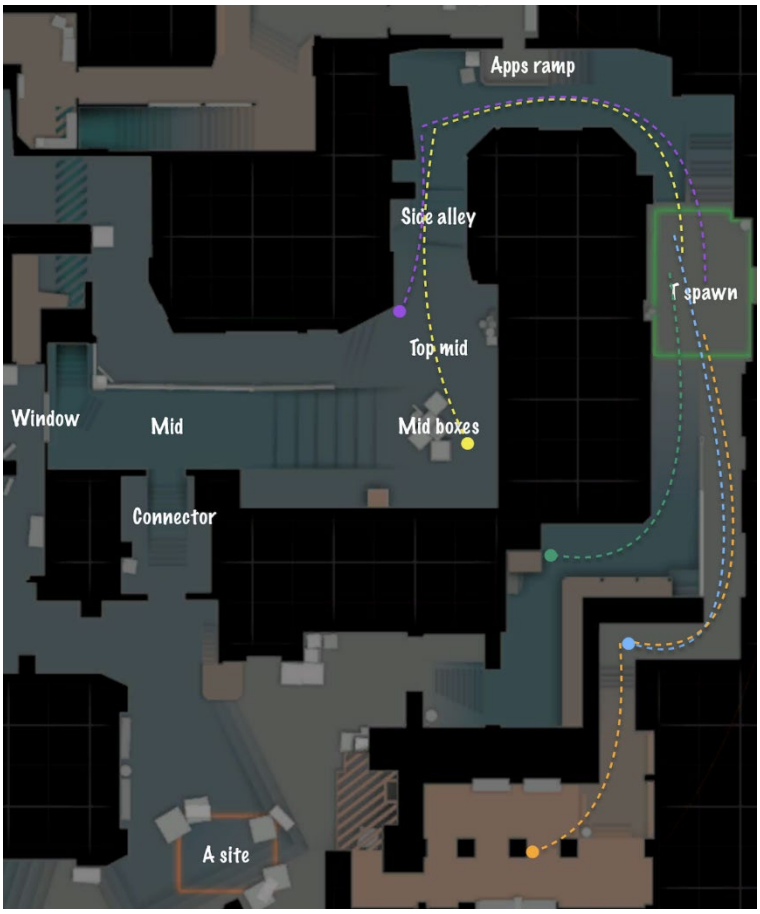

Figure 6: Movement and positioning in the beginning of the round in Excerpt 3.

```
01          ((Purple and Yellow go to mid, rest go to A, see fig 6))

02          ((Purple throws flashbang as they approach top mid))

03          ((Yellow rushes out behind the boxes and Purple stays behind the
            corner and scopes connector, see fig 6))

04 Purple:  så inget    mitt(en)
            saw nothing mid
05 Yellow:  en  e-   ((shoots)) window ((shoots))
            one is-             window

06          ((Purple moves and scopes window, Yellow shoots))

07 Purple:  var   där
            where there
08 Yellow:  he- vänster
                left

09          [((Purple deploys grenade and throws, Yellow shoots))=
10 Purple:  =[åj (vi-)
              [oh (fu-)
11           [((opponent becomes visible in the window, Purple turns and goes
12           behind the corner again))

13 Green:   [ja tror dom  e   på en eco
            [I think they are on an eco
14          [((Purple turns back towards top mid))
```

```
15 Purple: [ja tror at dom e bak mig        (.) ba- [kom tillbaka
           [I think that they are behind me     ba- [come back
16         [((turns around and retreats))           [((Yellow retreats))

17 Purple: tror at en e där uppe
           think one is up there

18         ((Purple retreats to T spawn and scopes apps ramp, Yellow stayed
19         behind at side alley, but is retreating while Purple scopes, see
           fig 7))

20         ((When Yellow is at T spawn, they go towards A, where Green and
           Blue are))
```

Excerpt 3: Come back.

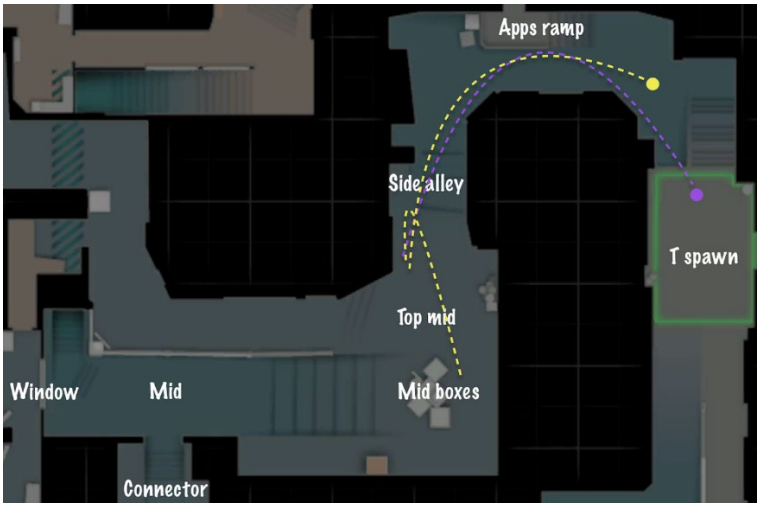

Figure 7: Purple and Yellow retreating in Excerpt 3.

Purple throws a flashbang to cover Yellow's rush behind *mid boxes* (line 2 and 3) when they approach *side alley*. Purple stays behind the corner to *top mid*, calls out that there are no opponents at *mid* and scopes *connector* (lines 3–4). However, Purple has not checked *window* and Yellow calls out (in the next turn after Purple has said that *mid* is empty) an opponent in *window* and he shoots several bursts at the opponent (line 5). Purple scopes *window* and asks for additional information on where in *window* (lines 6–7), which Yellow directly provides (line 7). Purple deploys a grenade to throw into *window* as Yellow keeps shooting (line 8). However, just as Purple throws the grenade, the opponent appears and Purple's throw is interrupted and he turns around quickly behind the corner again (lines 9–11). Green, who is at *A ramp*, speculates that the opposing team may be on an 'eco'-round (meaning that the opposing team has not bought expensive weapons, armor and equipment, line 12) and at the same time Purple turns back towards *top mid* (line 13). However, next he orients towards having heard steps nearby, behind him, and calls out to Yellow that he thinks they are behind him and that they should go back (line 14). Both Purple and Yellow start retreating (line 15) and Purple provides more precise info that an opponent may be at *house* or *apps ramp* (line 16). Purple positions himself at T spawn so that he can cover Yellow's retreat back to *T spawn* (lines 17–19). They both then move on towards *A site* and join the rest of the team there.

Yellow and Purple are, collectively, covering specific angles (they have their sights on points in the map where they expect enemies to appear) and providing callouts to each other that are based on the relationships between the basic elements that they orient towards. Additionally, they are sensitive to each other's callouts to be able to achieve a mutual understanding of the situation. They appear, based on the relationships between body, space, and relations, to realize that the opponents might be able to flank them (attack them from the side) and that they may not be able to break through with the bomb that Purple is carrying. Therefore, they, in that specific situation and with that specific information, choose to change the ongoing choreography while they still can, and move back to join the rest of the team and regroup. When they retreat, they choreograph their movements clearly and overtly to each other. Purple indicates (aims at) the place where he thinks he heard an opponent and shows to Yellow that he stays behind to cover his retreat as well. Only when Yellow is back at *T spawn* does Purple turn around and follow him towards *A site*.

The following excerpt (excerpt 4) displays how the team changes the choreography according to the information on opponent movements that they gather. The team has spread out to get an overview of the key positions on the map (line 1, see figure 7). The idea is to provide information to each other regarding opponent presence at their locations and players appear to orient towards them being accountable for giving or not giving information on the relationships between the basic elements that involves opponent movements and actions. In excerpt 4, the opponents take a long time to show themselves (line 2), which leads to the team speculating about what the opponents are up to (lines 3–4).

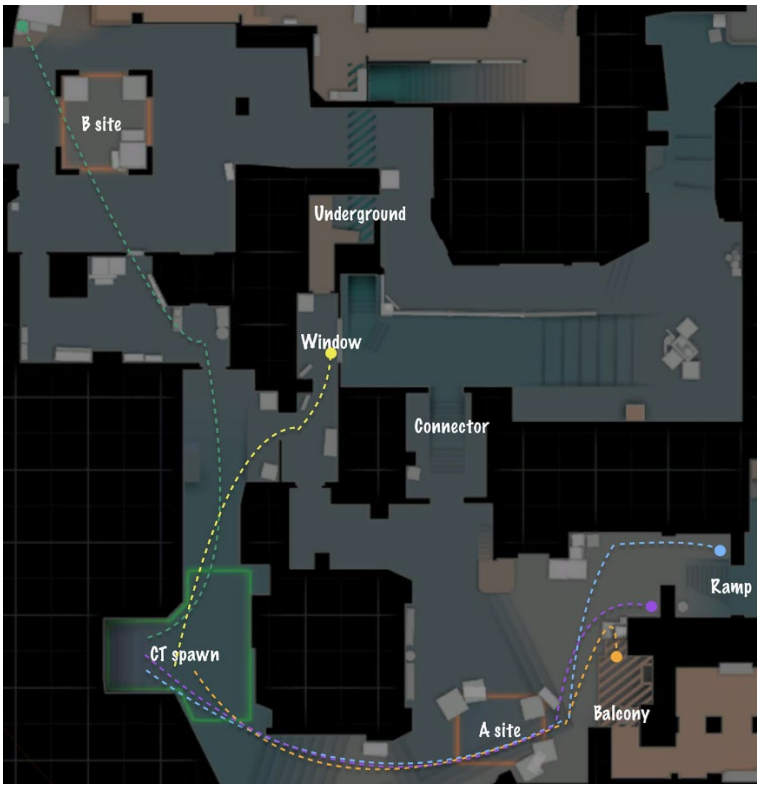

Figure 8: Team movement and positioning in the beginning of the round in Excerpt 4.

```
01          ((round starts, Green goes B, Yellow goes window, Orange, Purple
            and Blue go A, see fig 8))

02          ((15 seconds into the round, Purple checks ramp, Orange checks
            balcony, Blue goes inside ramp, Green holds B, Yellow holds
            window, see fig 8))

03 Purple: ja tro: ba: at dom kommä be: ja
           I think that they are coming on be:
04 Blue:   ja tror de också
           I think so too
05 Green:  [men ja siir ingen  be:
           [but I  see  no one be:
06 Yellow: [alla under=alla under=alla under
           [all  under=all  under=all under
07         [((Purple, Blue and Orange move towards connector and
            Underground, Green checks B apartments, see fig 9))

08 Purple: under=[okej
           under=[okay
09 Green:        [UNder
10 Green:  (o)kej
           (o)kay
```

Excerpt 4: I think B.

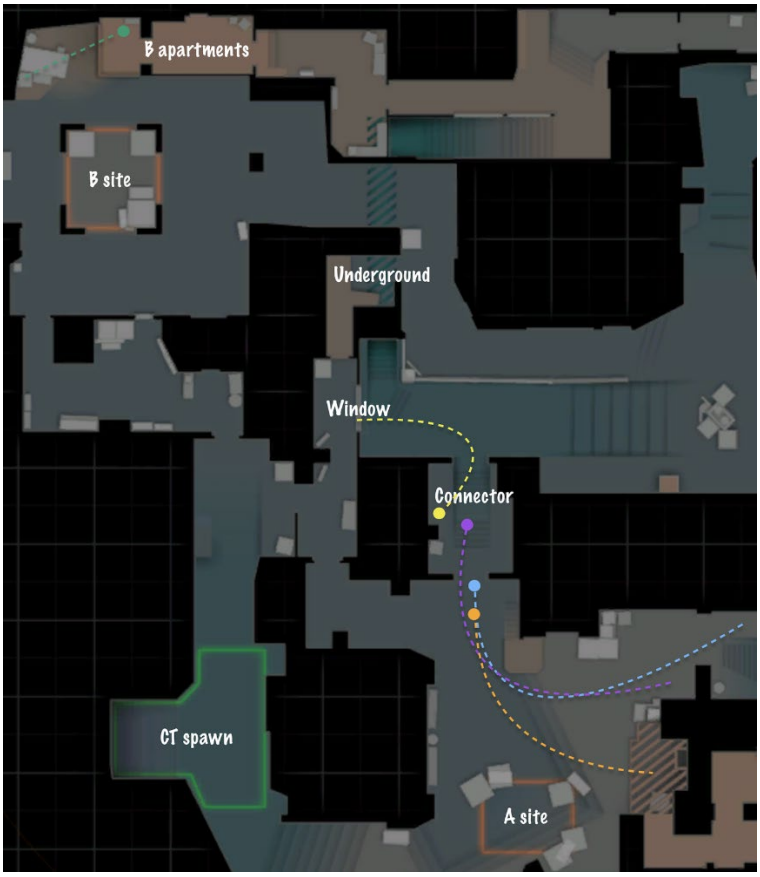

Figure 9: Responding to the call and moving towards under *in Excerpt 4.*

Green and Yellow provide information in overlap with each other (lines 5–6). Green responds to the speculation before and says that he cannot see anyone (opponents) at B site. Yellow sees several opponents in underground and provides a callout that he repeats two times to indicate urgency (line 6), which everyone responds to and start moving towards *connector* and *underground* or *B apartments* (line 7). As they act on the provided information and move towards a new position, they also indicate that they are surprised about the opposing team's choreography (lines 8–10).

Excerpt 4 shows how the teams usually play when playing as CT. They spread out to key positions and wait for the opponents to make themselves seen or heard. When they observe movement or sounds, they call it out for the rest of the team to know. In some rounds, the opponents split up and the information given in callouts in the CT team will be spread out. In excerpt (4), the opposing team stayed together and walked from *back alley* and through *underground* towards *connector*. Yellow, who was positioned at *window* saw them and called out. As soon as Yellow called the opponents' presence out, the CT team started moving quickly towards new positions that were relevant to the callout information (*connector*, *underground* and *B apartments*). There was continued speculation or questions before moving. Those were posed while moving, so they did not question the callout, they adhered to it.

Callouts are oriented to as strong choreographing devices that have an immense contextual and situational meaning that is only graspable and understandable in context. Additionally, callouts build on knowledge and information that the players perceive with regards to the relationships between the basic elements. For example, where and how they are moving their avatar in relation to the space and its possibilities with regards to both human and non-human actors, and what kind of movements are the opponents making (fast, strong, quiet, big, small, etc.) in that current space where the player is moving their avatar, which speaks to the relationships between the player's perceived possibilities and constraints of the in-game situation and environment. To make use of the relationships between the basic elements, players need to rely on previous experience, historical knowledge of the map and an expected known-in-commons regarding shared common-ground expertise on how to play the game in different situations. In excerpt (3), the callouts regarding *window* and the opposing team's possible presence behind the players led them to retreat, regroup and change the entire primary choreography that they chose to do in the start of the round. In excerpt 4, the callout was a single signal, based on information that one player gathered from the surroundings, that was provided with enough urgency to mobilize the entire team and change everyone's choreography.

Summary

Participants appear to orient to and choreograph their team movements based on their own and others' interaction with the body, the space, the dynamics, and the relationships between the basic elements in situated spaces and contexts. One specific verbalized action that relies on the interaction of the relationships of the basic elements is the callout, which is based on how participants orient towards the unfolding relationships of the basic elements. These relationships are oriented to by participants in an interconnected way and all participants that may have information of interest for the team's choreography express it in a sequential and accountable manner to achieve and uphold a mutual understanding of the current situation. That is, the choreography is not based on verbal communication (alone), but on the interweaving and

interdependence of each player's movements and actions on-screen in-and-through interaction with the basic elements.

The main findings are that the choreographing is done collectively and, largely, based on the information gathered in-and-through callouts that function as a choreographing device that does not explicitly provide instructions, but instead is a device for sharing information and, hence, implicitly makes the next actions accountable with regards to the information that was provided in the callout. The fact that much choreographing in the game is done by other means than verbal, is also part of why participants orient towards efficient and effective communication (see, e.g., Kiourti 2019; Rusk and Ståhl 2020). Choreography, both verbal and non-verbal, regarding own and others' next and upcoming actions is much faster to provide building on the expected known-in-commons and the basic elements; that is, the participants' own movements in-and-through interaction with the body, the space, the dynamics, and the relationships (Glad 2002; Smith-Autard 2014). As such, callouts are permeated by elements of body, space, dynamics, and relationships, both forming and being formed by these elements to collaborate and coordinate the game play.

Discussion

In and through conducting a study, from a participant's perspective, on online multiplayer game play by combining the methodological and analytical possibilities of EM with the theoretical notions of expanded choreography and Laban's movement analysis, we find that future studies may benefit from addressing team play from a choreographic and microsocial interactional perspective. This combination creates new possibilities for stepping beyond individualistic perspectives and studying coordinated collective human agency on the gameplay and the game environment. Analyzing team play through a focus on body, space, dynamics, and relationships made such agency observable, graspable and analyzable. The use of choreography for analyzing game play where the primary, instinctive, purpose for playing may be winning, might not be the sole purpose of choreography (although it can be executed in competitive purposes, see Schupp 2019). Nevertheless, there is, and can be, choreography without dance (Hildebrandt 2013; Monni 2018; Østern 2018) and we argue that the expanded notion of choreography enables us to utilize the structural possibilities of choreography to explore movements that otherwise might be taken for granted or overlooked when studying team play in multiplayer games. Choreography provides analysts tools for understanding the movement qualities and improvisation that participants do, as well as the tools to understand choreography as collective and not track from where the choreography began. Choreographing is dynamic and fluid, because of the complex interconnected relationships between the basic elements and, therefore, who choreographs is also in a constant flux, without creating (great) chaos and disarray.

The analysis of the choreography of in-game actions that take place in a fast-paced, complex social context, with information provided both on-screen and through the voice channel simultaneously, would not be possible without video data that captures the actual game play. Video provides us with the possibility of analyzing the situations repeatedly and, through that, understand how many events, activities and actions that may appear miniscule nevertheless, on aggregate, create what essentially is the

gaming experience. To get to a detailed and structured understanding of these actions through other means would be challenging, since the participants are (simply) playing the game and may not be able to explicate the mundane details of what they do, whereas doings and actions are directly observable (repeatedly) in-and-through video recordings. Nevertheless, although players might not make (all) their game play choices explicit verbally, they still manage to create intricate coordinated choreographies in a fast-paced game, suggesting that a shared knowledge and known-in-commons is foundational for doing the implicit choreography in-game. Video recordings alone cannot provide an all-encompassing final answer to the amazing machinery that is the choreography of game play in fast-paced multiplayer FPSs, but they can, combined with an analytical approach such as EM, greatly support our understanding of online team play by providing a detailed, empirically grounded account of players' actions. Accordingly, for the future of game studies, we suggest the use of video data of in-game interaction as situated contexts are "where we find our richest understandings of what computer game play is, and means" (T. L. Taylor 2015, p. 249). Thereby, we can continue exploring and adding to frameworks that offer a better empirically grounded understanding of situated in-game interaction as it is done then and there by the participants.

Conclusion

Situated strategy and tactics in CS:GO are a collective and (often) implicit endeavour. Participants share the responsibilities and leadership, as well as who is allowed to choreograph. This way of choreographing would not be available to the teams and the participants if they would not uphold and share a mutual understanding of what the known-in-commons are when playing the game in a coherent manner. They rely on having a common enough understanding of how to interpret situations that may be based in a community-shared understanding of how to play the game. This study does not directly engage with the problem of some players being silenced because they do not conform to the technomasculine norm of gaming communities. In addition to the discussion on social issues (marginalization and exclusion), we hope that we by showing the importance of sharing callouts and situational information can highlight the stupidity of not letting everyone on the team speak and thereby provide relevant information efficiently and effectively. Based on the results of this study, silencing players is detrimental to the team play, period. No one on a team where players do not dare to speak because of a real possible threat of harassment gets to experience the full experience of choreographing game play, collectively.

Acknowledgements

We wish to thank the participants that willingly shared highly personal data with us so that we, as researchers, better could understand what online gaming was to them. We wish to thank the Swedish Cultural Foundation in Finland and Högskolestiftelsen i Österbotten for research funding and travel expenses on behalf of Rusk and Ståhl during the process of writing this paper.

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Notes

[1] Here, we use the concept of device in an ethnomethodological sense. That is, devices are members’ constructs, which they use in making sense of and acting in the world (Garfinkel 1967). They may, for example, be interactional resources that are oriented to and used for specific practices that are trans-situational. This way of employing the concept of devices is not to be mixed with the concept of choreographic device as used within dance studies (Smith-Autard 2014).

Appendix 1

The transcription system used in the article is based on the Jefferson (2004) system.

(.)	a micropause less than 0.2 seconds
(0.5)	a silence indicated in tenths of seconds
[text]	overlapping talk or co-occurring embodied actions
TEXT	louder talk than normal
text-	cut-off or self-interrupted talk
>text<	faster talk than surrounding talk
<text>	slower talk than surrounding talk
:	Prolonged sound
((text))	non-verbal/embodied activity/transcriber's description of events
(text)	likely hearing of talk
(Sam) / X	the identity of speaker is not clear
( )	inaudible
=	talk/embodied activity latches on previous turn
hh (hh)	hearable exhale
hh (.hh)	hearable inhale
text	English translation in italics
text	Callout

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Categorizations of World War II in Videogames

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Categorizations of World War II in Videogames[1]

ESTRID SØRENSEN AND JAN SCHANK

Abstract

WWII remains a popular adaptation for videogames seventy years after its end, yet, what kind of war is depicted through these games? With inspiration drawn from ethnomethodology, this article asks which cues WWII first-person shooters, strategy games and flight simulation provide players with to categorize WWII. Eight different categorizations are identified. Even though preferred categorizations are found in each of the three genres analyzed, each game invites players to categorize WWII in several different ways. Moreover, it is shown that the sequentiality of these different categorizations is crucial for the way in which players are led to engage in virtual military engagements. They are offered varied moral orders and varied moral engagements.

Keywords

Categorizations of war; ethnomethodology; moral orders; Second World War; sequentiality; wargames

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Introduction

The Second World War was already adapted in the early history of videogames: In 1985 the WWII submarine simulator *Silent Service* (Microprose 1985) was released, and the classic first-person shooter (FPS) game *Castle Wolfenstein* (Muse Software 1981) was embedded in WWII. The recent continuation of the *Wolfenstein* series and popularity of *Red Orchestra 2* (Tripwire Interactive 2011) are evidence of the enduring appeal of WWII games.

Academic studies on WWII games are often preoccupied with their historical authenticity, ideological aspects and psychological effects. What about WWII itself as it is depicted in videogames? This paper analyzes how WWII is categorized in games about this war. It shows how varied WWII categorizations are, not only across games, but also within games. Why this variation? Instead of seeking answers from outside of the game playing activity, for example in ideology or the psychological effects on the player, we seek the answer in the games themselves. For this, we draw on membership categorization analysis (Schegloff 2007; Sacks 1992) and inquire how each of the different ways in which WWII is categorized in videogames invites players to participate in a different way in the depicted WWII and in the activity of playing the game.[2]

Many studies of WWII games examine their representation of historical events, while another large portion of studies focuses on the *military–entertainment complex*. Research of the former kind is variously preoccupied with the question of authentic depictions. While some studies evaluate the historiography of videogames (objectivity and differentiated representation) (Bender 2010, 2012; Kee, 2009; Kee et al. 2011), others discuss the potential of WWII games for counter-factual historiography (Bredel 2010). Due to their immersive potential, Kingsepp (2006) emphasizes that WWII games create an "atmosphere of being personally involved in a re-enactment of history" (p. 61; see also Gish 2010; Salvati and Bullinger 2013). Crabtree describes modding[3] communities as digital re-enactment groups. He says that like "traditional reenactment groups, modding is facilitated through rich networks guided by a strong sense of creative spirit, personal achievement, authorship, and at times an obsessive desire for the authentic" (Crabtree 2013, p. 207). Furthermore, the game studies discussion on authentic depiction often refers to WWII games (e.g., Galloway 2004).

Central to the military–entertainment complex literature is the critique of videogames as a tool for the (US) military and government to subliminally implant militaristic ideology into society[4] (Lenoir and Lowood 2008; Virchow 2006, 2007; Möller 2006; Castillo 2009). While this literature mainly centres on current (US) wars, WWII is also discussed. For example, Gish (2010) notes that WWII games "employ culturally specific notions of individuality and heroism that privilege the United States' role in the Second World War" (p. 168). With reference to Herz (1997), who first described the military–entertainment complex, Breuer and colleagues (2012) define this as "collaboration between the military and the entertainment industry" (p. 216). Various themes are discussed under this rubric, such as military training through videogames (e.g. Galloway 2004; Höglund 2008), wargames as military recruitment instruments (King and Leonard 2010; Lenoir and Lowood 2008), funding of videogame production through the military (Nieborg 2010; Nichols 2010), and military videogames as tools of political propaganda (Bogost 2007; Höglund 2008) disseminating military ideology

(Allen 2011; Løvlie 2008; King and Leonard 2010; Lenoir and Lowood 2008; de Graaf, Hoeken, Sanders, and Beentjes 2012; Gieselmann 2002; Breuer et al. 2012; Mantello 2012).

Overall, the literature on WWII as a historical representation and as embedded in the military–entertainment complex tends to emphasize *general* characteristics of WWII videogames, such as the generally heroic narratives of games (Power 2007), their authentic framework (Baron 2010) and their generally American perspective (Gish 2010). These studies raise important issues about the potential of wargames to create immersive historicity or political propaganda. As social scientists we research the complexity of unfolding practices through which general characteristics of society and culture are accomplished. In this paper, we aim to contribute to the existing literature on WWII games an analysis of the practical methods that games use to enable players and researchers alike to achieve such and other categorizations of WWII in games.

Method

When approaching ludic activities, the question arises how to take into account the several different ways people play computer games. In game studies, these considerations have led to suggestions that any analysis should apply different perspectives by acknowledging the different ludic activities resulting from different types of players (Bartle 1996), or that analyses should adopt multiple play strategies (Aarseth 2003). Such advice challenges researchers to vary their analysis endlessly, as there is no end to the variations of how individuals play games.

Instead of attending to individuals and their unique or average perception of WWII games, ethnomethodology (Garfinkel 1967) encourages us to examine the cultural methods that enable the playing of a WWII game. Regardless of the unique approach individual players may apply to a WWII game, for its practical accomplishment players are largely left to cues provided by the game during play. Such cues work as *practical tools* for the player's accomplishing of the game. Sacks (1992) described one of the challenges participants are confronted with when accomplishing everyday practices as the "problem of categorization": there are several possible categorizations of WWII and the player has to decide which they apply in order to continue the game. They must continuously find an answer to the questions "what WWII is this?" and "how can I take part?".

The categorizations are thus *practical activities* accomplished in and by the games, which are in turn intimately tied to the practices of playing the games. Fisher (2011) notes that playing a WWII FPS game affords the player the chance to potentially learn "how to be" a WWII game player. In this paper we do not discuss whether players actually learn this, but simply acknowledge that if the player cannot find an answer to the questions of "what WWII is this?" and "how can I take part?", she will neither know what she sees on the screen nor what she has to do with it, and therefore the game cannot unfold. Our notion of participation thus includes any and all ways of relating to or engaging with the game—"taking part" may mean sympathizing or having empathy with characters or nations, as well as more strictly behavioural types of activities, such as shooting, running, or managing. In order to answer the questions "what is this?" and

"how can I take part?", the player must look to the participation cues in the game (Keating and Sunakawa 2010), and the game must concurrently provide cues that the player recognizes as enabling her to solve the problem of categorization. The problem of categorization is thus solved through interaction between player and game. This interaction unfolds on both the narrative and ludic levels of gameplay. While the scope of our analysis here prevents us from providing detailed analyses of the game rules, it should become clear that the ways in which players can "take part" in the games depends, inter alia, on game rules and similar ludic structures.

Following these analytical principles, and with our particular interest in how the categorization of WWII is accomplished in and through videogames, the analyses below on the one hand describe the participation cues the games predominantly provide for the player—i.e., the preferred participation cues—to answer the question "what WWII is this?" and "how can I take part?". On the other hand, the analysis asks how the answers to these questions—i.e., the preferred categorizations—work as resources for continuing the playing activity. This way of using the approach expands its analytical domain. Traditionally, membership categorization analysis (MCA) has been applied to analyze how humans categorize other humans in the course of accomplishing their everyday activities. Although this has not been developed in detail, it seems that Sacks envisaged the applicability of MCA to include at least people categorizing "conversational objects" such as lies (Sacks 1992, p. 557–565) or jokes (Sacks 1972b, p. 46–47). Additionally, there are a few works analyzing categorizations accomplished in and by (written) texts, usually focusing on the categorizations of people they accomplish (Jayyusi 1991; Lepper 2000; Smith 2001; Schank 2013). Our analysis takes these precedents one step further by applying MCA in the spirit of the "principle of generalized symmetry" (Latour 2005) to include both humans and non-humans as doing the categorizing as well as being what's categorized (cf., e.g., Law 2002).

In order to understand how the problem of categorization is solved, the analysis follows the same sequential order through the game as do players—i.e., first analyzing the introductory non-playing parts and subsequently the playing part of the games. It then becomes possible to point out how the particular sequential order of the different categorizations of WWII in the games contributes to the ongoing practical accomplishment of the playing activity.

Game Sample

Table 1 lists the games sampled for the study. Singleplayer wargames centre in general more on the narrative of the historical endeavours than their multiplayer siblings. The latter either invite players to stalk each other within virtual environments or to group together to compete against other groups, as Morris (2002) states. Even if several multiplayer games exist that unfold in historical sceneries of WWII, this backdrop is generally less relevant than in singleplayer games. For these reasons our analysis focuses on WWII games in singleplayer mode. Additionally, we have concentrated on three genres most often adapting WWII: first-person shooters (FPSs), strategy games (SGs) and flight simulations (FSs). A number of games were first selected based on our own expertise and on rankings of most popular WWII games on gamers' blogs. The number of games was subsequently limited, based on sales volumes[5] and after consultation with a games sales manager about the popularity of WWII games in Germany. We excluded games published before 2000 to achieve a

reasonably recent sample. We sampled games that, based on the mentioned criteria, fall within gamers' general understanding of WWII games of the mentioned genres. This does not mean that an extended sample would not reveal other categorizations. However, by focusing on categorizations that appear in all the games at least of one genre of the sample, we expect these also to appear in other WWII games of the same genres.

Title	Genre	Released	Developer	Publisher
B-17 Flying Fortress: The Mighty 8th	Flight Sim	2000	Wayward Design	MicroProse/ Hasbro Interactive
Combat Wings: Battle of Britain	Flight Sim	2009	City Interactive	CI Games
Heroes over Europe	Flight Sim	2009	Transmission Games	Ubisoft
IL-2 Sturmovik: Birds of Prey	Flight Sim	2009	Gaijin Entertainment	Iceberg
Birds of Steel	Flight Sim	2012	Gaijin Entertainment	Konami
Medal of Honor: Allied Assault	FPS	2002	DreamWorks	EA
Call of Duty	FPS	2003	Infinity Ward	Activision
Call of Duty 2	FPS	2005	Infinity Ward	Activision
Call of Duty 3	FPS	2006	Treyarch	Activision
Red Orchestra 2	FPS	2011	Tripwire Interactive	Tripwire Interactive/ 1C Company
Sudden Strike	Strategy	2000	Fireglow	CDV/Eidos
Blitzkrieg	Strategy	2003	Nival	CDV
Hearts of Iron 2	Strategy	2005	Paradox	Paradox
Company of Heroes	Strategy	2006	Relic	THQ
Company of Heroes 2	Strategy	2013	Relic	THQ

Table 1: Sample of games analyzed.

Analysis

The analysis was conducted either by playing the games or observing how they were played in Let's Play videos. Searching for the cues the games provided for answering the questions "what WWII is this?" and "how can I participate?" we first coded transcriptions of the games, following the principle of *open coding* described by Glaser and Strauss (1967). The codes were compiled in a *Citavi* (Swiss Academic Software 2013) database. For each coding we noted its context in the game (its place in the game) and the genre of the transcribed game. Through an iterative process of comparing the content of the codes (the cues) and specifying and adjusting them, we finally ended up with eight categories of WWII, each with different cues for categorizing WWII. These are described in the following three parts of the analysis.

The categorizations in the data from the non-playing parts of the games showed systematic similarities across games. Accordingly, the first part of the analysis, which presents the categorizations of WWII found in the non-playing parts of the games (*historical WWII*, *emotional WWII* and *WWII of subjects*), presents the findings of the compound sample. The second part of the analysis deals with the categorizations in the playing parts of the games. Systematic differences in the preferred participation cues appeared across genres in these parts of the games, and accordingly, part two of the analysis is organized into three sections, each presenting the preferred categorization of one of the three genres analyzed (*acting out WWII*, *aesthetic WWII* and *managing WWII*).[6] The third section of the analysis presents the final two categorizations, which appeared throughout the games in both the non-playing and playing parts (*technological WWII, heroic WWII*).

After completing the analysis, we realized that the systematic descriptions of the categorizations poorly conveyed how the cues provided by the games for these categorizations are presented to the player. For that reason, and based on the analyses we had generated, we formulated short, stylized descriptions of what Aarseth (2007) calls an implied player's experience of a game sequence that we found particularly illustrative for the categorization discussed. Each section begins with one such short description. Along with screenshots, we hope these provide readers with a more profound understanding of the character of the categorizations and of the analyzed empirical material.

Non-Playing Part of the Game

Historical WWII

Backed by dramatic orchestra music, a male voice states "June 4, 1940. Nazi forces enter Paris". A flag with a swastika sags down from the Arc de Triumph, tanks lined up alongside (Figure 1).

Figure 1: Call of Duty 3*, (Treyarch 2006), Saint-Lô, introductory video. © Activision.*

The date alone could refer to all kinds of events, but together with “Nazi”, “forces enter”, “Paris”, and with the computer-animated footage, these words may be heard as referring to WWII. “If you can hear it as WWII, then hear it as WWII”, to paraphrase Sacks’s (1972a) *hearer’s maxim*. This maxim points to a method members of a culture apply to bind predicates, activities and persons together. His famous example was the two-part sequence “The baby cried. The mommy picked it up.” Even if the sentences do not indicate if the mommy was the baby’s mother, members of our culture hear them as if this was the case. Also, the sentences say nothing about why the mother picked up the baby, but still, we hear this action as evoked by the baby’s crying, and we even hear this, Sacks emphasizes, as the morally right thing to do. All this is due to the *membership categorization device* (MCD) “family” that brings together “baby”, “mother” and certain expected activities and predicates of each of them in relation to the other. Similarly, WWII works as an MCD in the introductory video of the first mission of *Call of Duty 3* (Treyarch 2006) that allows us (if we can) to hear “June 4, 1940”, “Nazi forces”, “enter”, and “Paris” together with the described images as belonging to WWII. These sentences, as well as the introductory videos of the games in general, present “Nazis”, “fascists”, and “Germans”[7]—or those carrying the symbols of these groups—as the aggressive ones and the Parisians, the Russians, the Dutch and all others as their victims. As a solution to the player’s initial question “what is this?” the game invites the player to activate the MCD WWII, indicating a moral division of evil Nazis and pitiful others. In this way, “these videogames engage contemporary understandings of history and manifestations of nationalized collective memory” (Gish 2010, p. 168).

How does the game respond to the player’s question “how can I take part?” It is standard for WWII games to start out with black-and-white video footage resembling materials from the time and place they stage, or similar computer-simulations (such as in Figure 2). The dating and localizing, combined with a generalized overview and authentic looking video footage, indicate to the player that what she sees is observed (and filmed or simulated) by someone else, and shown to her afterwards: it is a description. The introductory videos only allow the player to take part by watching and listening to descriptions, not by interacting. The introductory videos are unable to register any response from the player in the form of talk or interaction. Instead they

offer players the opportunity to take part as second-hand recipients of information, as distant observers of a state-of-affairs described by the videos and by sympathizing with a nation, preferably a non-German one. We label the WWII thus categorized *historical WWII*.

Figure 2: Birds of Steel *(Gaijin Entertainment 2012), introductory video. © Konami.*

Baron (2010) observes how "indexical archival footage from World War II" (p. 303) is used in *Call of Duty: World at War* (Treyarch 2008) to create a historically authentic framework and immersive historicity.[8] Gish notes that the result of this "is the incorporation of the player not only within the interactive and sensorial world of the game itself, but also within a grand historical and nationalist narrative that exceeds the historical focus of the individual game titles" (Gish 2010, p. 169). Alison (2010) extends this to be a more general characteristic of WWII FPS to grant the games authenticity through black-and-white footage, tones of voice, etc. associated with the 1940s. In this way, the categorization as *historical WWII* achieves its "selective authenticity" (Salvati and Bullinger 2013). This authenticity is (necessarily) selective, since games (like other cultural products) cannot claim convincingly to represent all details of past events faithfully. The authority of the documentary form is one means among others for the games to achieve authenticity (the others being a representation of technological artefacts, which we also discuss below, and an overall reliance on cinematic conventions, which we have also noticed but cannot discuss in detail here). Apart from creating authenticity, attention to historical detail also invites players to engage beyond the game in the authenticity and historical correctness of the way in which the game depicts WWII.

Emotional WWII

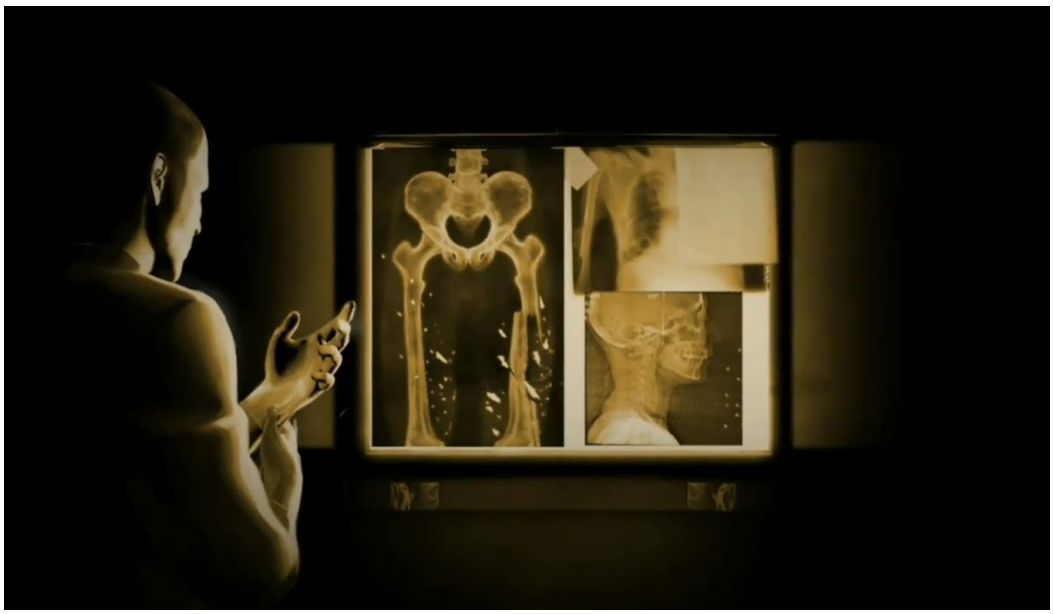

Figure 3: Heroes Over Europe *(Transmission Games 2009), introductory video. © Ubisoft.*

The introductory black-and-white video footage transforms as a male voice introduces himself with name and place of birth along with details from his upbringing. The video turns into colour. A doctor inspects a peculiar X-ray photo (Figure 3). The voice continues:

> Don't remember much about the night of the Blitz. I woke up in a repat bed with a shattered pelvis and two shredded femur. Doc said he pulled so much shrapnel out of me legs I should go into the scrap metal business. For the next two years I passed the time teaching meself [sic] how to walk. And how not to scream. (*Heroes Over Europe* [Transmission Games 2009], 'Operation Cerberus', introductory video)

As is often the case in our sample, the sequence after the introductory historical video depicts personal experiences as presented in the FS *Heroes Over Europe* (Transmission Games 2009), rather than detached historical observations. The person (male without exception) talking about his experiences presents himself by name and discloses his personal background. Contrary to the nameless soldiers the player observed at a distance in the historical video, he is now given personal details about a specific, named subject. This enables the player to become intimate with the game character by caring for and empathizing with him. Indeed, he is offered quite a few emotional details that contribute to such feelings of empathy (cf. Figure 4). The game now provides a different answer to the player's question "how can I take part?" He is no longer invited to participate as a distant observer, as was the case in the introduction. Instead, he is encouraged to take part as a caring relative, friend or comrade. In this way a new categorization of WWII is achieved, which we label *emotional WWII.* This categorization is crucial in establishing what Pötzsch (2017) calls the "character filter", inviting players "to align with and ally themselves" (p. 5) to the

main character(s). At the same time, by way of the references to “Blitz” in the excerpt above and to “Germans” and “fascists” in the diary in Figure 4, along with their aggressive category-bound activities and the clear moral preference against the Germans, the *historical* categorization of *WWII* discussed above also continues on.

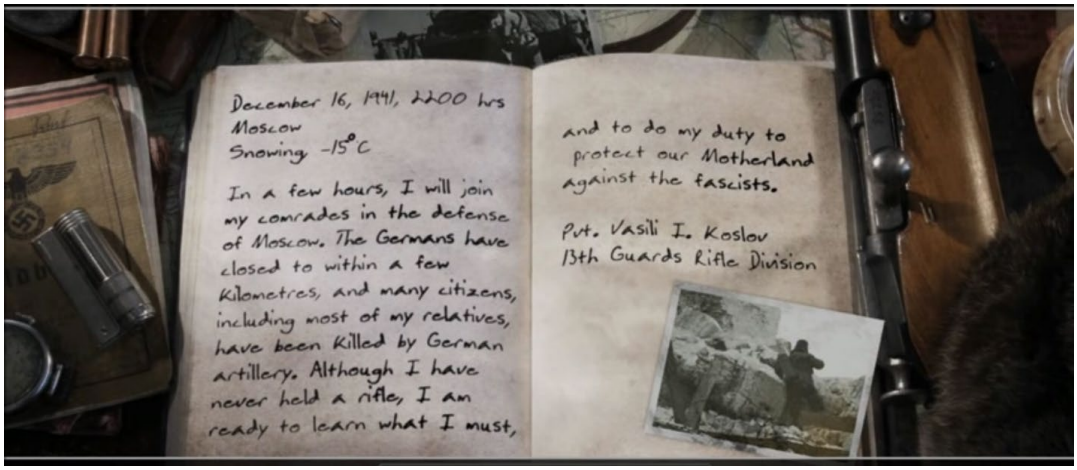

Figure 4: Call of Duty 2 *(Infinity Ward 2005), introductory video. © Activision.*

The sequential move from *historical WWII* to *emotional WWII* is important. The player’s distant relation to the *historical WWII* facilitates an easy entry into engaging with war. It keeps the player at a morally safe distance from the events. He is not engaging, just witnessing the observations of anonymous others. It lays out the state of affairs of nations and quite literally prepares the stage for a drama to take place. Moving to the *emotional WWII*, the player is offered the opportunity to take one step closer to the unfolding events, now relating to a person actually suffering from the state of affairs. This “simultaneously provides the player with a spatio-temporal localization for the coming military encounter, and a personalization of the conflict’s stakes and meanings” (Gish 2010, p. 170). Referring to the WWII FPS *Brothers in Arms* (Gearbox Software 2005), Rejack (2007) points out that:

> Pre-scripted cutscenes and [the main character] Baker’s voiceover narration provide the main avenues for emotional involvement with the characters. The emotional identification with the characters (if there is any) happens – as it does in cinema – by witnessing, not by interacting. (p. 420)[9]

The consequence of taking this step is very clearly formulated in *Call of Duty 2* (Infinity Ward 2005) (Figure 4) and just moments after the excerpt from *Heroes Over Europe* (Transmission Games 2009) above: you are morally obliged to fight back. A similar sequence is discussed by Hess (2007) with reference to *Medal of Honor: Rising Sun* (EA Los Angeles 2003), whereby “the meta-narrative sets up the larger scope of the personal narrative and its interaction with history” (p. 345). While *historical WWII* suggests a moral preference against the Germans (or the Japanese in the case of *Rising Sun*), the *emotional WWII* adds personal legitimacy to fighting the Germans.

WWII of Subjects

Most of the games are introduced through three stages of categorization. Two are the ones discussed above: *historical* and *emotional*. Mission briefings constitute a third stage and prepare the player for the game. Here is how she may experience the mission briefing for the first mission 'Lighting the Torch' of *Medal of Honor: Allied Assault* (2015, Inc. 2002):

From a perspective that makes me see the hands as 'mine' I see them receive and open a secret letter while a male voice says, "you've been assigned for a mission few would qualify for" (see Figure 5). Later and from the centre of a room I see maps and slides shown on a canvas while a mission is explained. The male voice introduces the briefing by "Lieutenant Powell, I'm Colonel Hargrove".

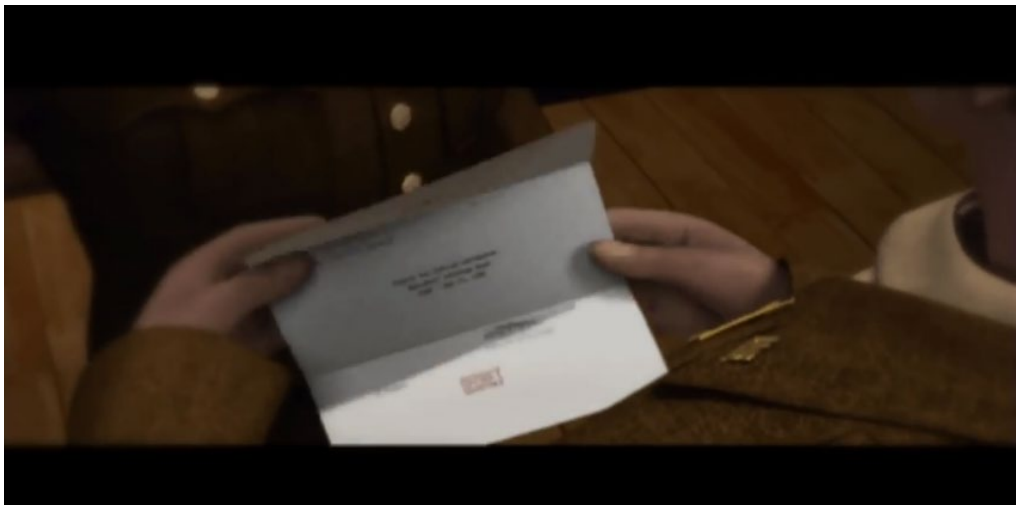

Figure 5: Medal of Honor: Allied Assault *(2015, Inc. 2002), 'Lighting the Torch', introductory video. © Electronic Arts.*

The introductory video offered the player the position of a distant spectator of a *historical WWII*, and the personal presentation invited her to get emotionally involved by caring for the game character, the latter being directly addressed as "you" in the mission briefings. At the same time, the situation becomes blurred as to whether the character on the screen ("Lieutenant Powell") or the player sitting in front of the monitor is addressed. This blurring unfolds through the almost complete merging of the character's and the player/viewer's points of view. The player is invited to feel (almost) addressed by Colonel Hargrove. The duality of player and role, which all theorists of play have emphasized (e.g., Huizinga 1971; Winnicot 2005), is thus introduced.

In the mission briefings, the character—and the player—are given orders by a superior military person. The player is thus invited to take the position of a subject. She is subjected to the officer's commands, which at the same time subjugate her and grant her agency. For the first time in the game she is addressed as a subject involved in the unfolding events. For this reason, we identify this categorization as a *WWII of subjects*.

The objects shown at this point in the game are typically maps, flags, military and national symbols, pin-up girls, guns, radios, headphones, telephones, cigars,

compasses, and so forth. (cf. Figure 4 and Figure 7), all recognizably similar to the style of the introductory videos (cf. Figure 6). The media, quality, genre and style of the information the player receives in the mission briefings, also point back to the introductory videos: radio-transmitted voices, crumpled maps, and so on. These "references to the overarching conflict as a closed event, albeit brief, provide an historical basis for the ensuing missions and incorporate the individual game's forthcoming play within a genuine past occurrence" (Gish 2010, p. 170). As Salvati and Bullinger (2013) point out referring to the *Medal of Honor* and *Call of Duty* series, such visuals and sounds indicate a continuation of the *historical WWII*, even though the player is now offered to participate differently.

Figure 6: Heroes Over Europe *(Transmission Games 2009), mission briefing. © Ubisoft.*

Figure 7: Sudden Strike *(Fireglow Games 2000), Allied Campaign, tutorial mission briefing. © CDV Software Entertainment.*

Thus, the *WWII of subjects* functions as a bridge from the non-playing to the playing part of the game. Furthermore, the tension between being interpellated as an active subject and the inability to interfere actively with the course of the game, leads the player to expect an imminent dissolution of this tension, probably by providing the player with this ability.

The Sequence of WWII Categorizations in the Non-Playing Part

The flow diagram below (Figure 8) illustrates how the player in the non-playing part of the game generally moves through a sequence of the three categorizations of WWII discussed. *Emotional WWII* is bracketed in the figure because some strategy games move directly from *historical WWII* in the introductory videos to the *WWII of subjects* in the mission briefings. The diagram displays the sequence of the narrative, i.e., the way in which the categorizations are ordered in the story told in the non-playing part. This differs from the narrated sequence, which is the order in which they appear on the screen.

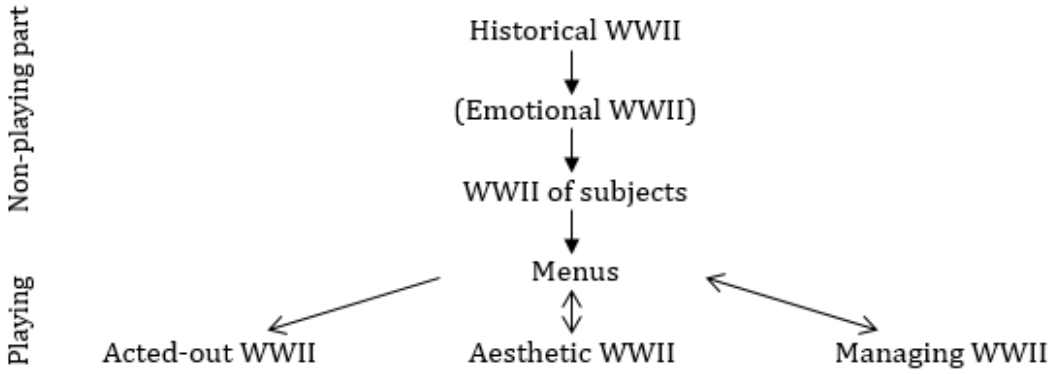

Figure 8: Sequences of WWII categorizations throughout a game.

The sequence through which the categorizations of WWII are presented one after the other, provides the player with cues to solve the problem of categorization and thus to accomplish the game. It offers the player a guide through the (non-playing part of the) game. First, the player is offered a position at a safe distance from which they can observe war at second hand. At this point the player is not encouraged to do more than sympathize with the morally preferable side. Second, they are introduced to a named person and now invited to care for a person from the morally preferred side. Third, the player is addressed as a subject actively involved in military activities.

In their sequential order, the categorizations work as practical tools for the stepwise interactive accomplishment of the development of the (non-playing part of the) game. The sequence of categorizations gently guides the player through three stages from a distant spectator's perspective to close involvement with the war. Hess (2007) discusses a similar logic of player involvement in *Medal of Honor: Rising Sun* (EA Los Angeles 2003), albeit with some variation in the sequence of categorizations. In this case, the categorization as *historical WWII* is still achieved mainly in and through the

non-playing parts (newsreel images and interviews with veterans), but follows upon the levels just played. Aside from this slight variation, however, Hess also shows how historical narrative and gameplay are bridged by the main character's personal narrative, adding personal to patriotic legitimacy for the fighting and creating a double moral obligation to fight back against the aggressors.

Playing Part of the Game

The playing parts of all games start with a menu. Here, the player can select a mission and, depending on the genre, configure her aircraft and pilot, decide on the industries, weapons and infrastructures to prioritize, or similar. Menus present knobs, slides, buttons, etc. that seem to be made of metal or wood, or sited on instruments resembling objects presented in the non-playing part of the game (Figure 9). Thereby, the menus create a visual continuity throughout the game, reminding the player that the categorizations introduced through the non-playing part of the game are still partially in place.

Figure 9: Medal of Honor: Allied Assault *(2015, Inc. 2002), menu. © Electronic Arts.*

Acting-Out WWII – First Person Shooters

Our task is to attack a church. The others start running. I run after them. They go in various directions. Explosions. Shouting and growling all around me. I'm hit, my vision is blurring. I stumble down a slope. All is grey. Gunshots. My vision is restoring. I look around. More gunshots, shouting: "Back, Back!". A soldier falls to the ground next to me. I rush back. (*Red Orchestra 2: Heroes of Stalingrad* [Tripwire Interactive 2011], game opening.)

After the game has loaded, the player of an FPS finds themself in the here-and-now of the heat of action of WWII. The *historical WWII* sets the moral order of the game narrative, the *emotional WWII* provides the reasons for going to war, and the *WWII of subjects* encourages the player to take upon himself the role of a military person. Now, in the FPS's playing part, the larger or smaller distances from the course of events and degrees of involvement of the player in the non-playing parts have collapsed entirely. He is in the midst of the videogame WWII, a hectic, feverish place under continuous threat of bodily harm. This is the WWII FPS's answer to the player's question of "what is this?".

Bender (2010) notes that in FPSs, soldiers most often act from an inferior position. They are left to themselves with no one to turn to, and in this situation, the only thing left to do is to act. In the confusing scenes of WWII FPSs, the player may not know exactly what to do, but the continuous attacks create a pressure to do something, to move on. What the avatar in FPSs can do is centred on the armed human body: walk, run, jump, turn, climb, hide, flee, load and change weapons, target, shoot, bomb, and die (cf. Deterding 2008). An urgent pressure to act is almost permanent in the playing parts of FPSs. There is no time to plan, think about or dwell on strategy or logics of war, or in other ways consider and reflect upon events or experiences (cf. Hess 2007). The categorization of WWII thus accomplished is a WWII of the body, of actions. Or as Allison (2010, p. 192) puts it "the World War II game attempts to be a visceral immersion in the activity of history". In the words of Gish (2010, p. 172), "the narrative of historical progress during game play is presented from a first-person perspective, experienced through a realistic temporality, and participated with interactively". We label it *acting-out WWII*.

The moral economy in the *acting-out WWII* is not about sympathizing or antipathizing as in *historical* and *emotional WWII*, it is about *acting*. The morality of *historical WWII* of differentiating between good and evil, in *acting-out WWII* is replaced by an economy of performance. Actions must be executed and the values of *acting-out WWII* are measured in terms of success and failure of action. Tactics are developed through drilling and through continuously repeating missions until excellence is achieved (cf. Reeves, Brown, and Laurier 2009).

Because the actions of the avatar/player are so much in focus in the playing parts of WWII FPSs, the answer to the question "what is this?" overlaps with the answer to "how can I take part?" The player can take part by acting (virtually) bodily through the avatar in a WWII that is hectic, intense and threatening. The missing time to consider what is going on is not simply a lack, it is defining for the moral order of *acting-out WWII.* A good player/soldier does not hesitate to consider what they do, and they do not dwell on his emotional experiences.

These findings square nicely with Rejack's (2007) diagnosis that (in particular shooter) games, in their playing parts, are rather limited in their ability to realistically model human interaction, and thus to create sympathy for the characters. Also resonating with our findings concerning *historical* and *emotional WWII,* he then points out that it is other "elements [that] contribute to the game's narrative and increase the potential for the player to engage with the history being explored" (p. 415). Significantly, these elements are found in the *non-playing parts*, specifically in the cut-scenes between levels and the extra materials included with the game.

The Aesthetic WWII – Flight Simulation games

Figure 10: Birds of Steel *(Gaijin Entertainment 2012), 'Battle of the Santa Cruz', game opening. © Konami.*

I am alone in the cockpit of a small aircraft. In front of me are an instrument panel and a pair of leather gloves holding the control column (Figure 10). The gloves are in strong colours and extreme detail, as are the instruments and nuts and bolts of the aircraft cockpit. With the soft sound of the rotating propeller filling the space, I let the aircraft roll down the runway ahead of me. Shortly after, I float in the large, open and tranquil space of a beautiful sunny sky. The moving shadows of the cockpit's metal frame stroke across the aircraft, while bolts and instruments gleam in the changing angles of the light (*Birds of Steel* [Gaijin Entertainment 2012]*,* Battle of the Santa Cruz, game opening).

What the player sees on her screen when entering the playing part of FSs is an artfully composed scene. In *Birds of Steel* (Gaijin Entertainment 2012), the edges of the image are smoothly faded, like a framed picture. The game answers the player's question of "what is this?" with well-composed pictures, hyper-realistic renderings of the artefacts, a seeming obsession with details and an altogether high degree of aestheticized imagery. WWII is categorized as an *aesthetic WWII*. The prior non-playing steps she has gone through have prepared the player for a mission and a battle to complete the mission. Now she finds herself in an environment that is above all aesthetically oriented in the sense of offering pleasant experiences purely for the sake of their pleasure and beauty. Whenever the aircraft is directed slightly southwards, the sun appears in the picture, most often at the margins where rays shine benignly across the 'airscape'.

When hit, aircrafts fall to the ground burning in beautiful yellow and orange nuances. This "carnivalesque death" (Kingsepp 2007) is brought to its extreme in *IL-2 Sturmovik:*

Wings of Prey (Gaijin Entertainment 2009). Whenever the player has hit another plane, a small window opens showing the burning aircraft on its long descent to the ground, allowing the player to move on while still enjoying the vision of the burning aircraft she just destroyed (Figure 11).

Figure 11: IL-2 Sturmovik: Wings of Prey *(Gaijin Entertainment 2009). © 505 Games.*

The aestheticized imagery suggests an answer to the player's question "how can I take part?" by inviting her to pay attention to the material character of the metal, the wood, the leather, etc. It invites—maybe even seduces—the player to feel (virtually) corporeally intimate with these materials, while immersed in the clear blue sky and the soft sound of the propeller. The game suggests the player takes part by relaxing and feeling good. She is addressed by the game as someone enjoying herself and paying attention to her own experiences of perceptual aesthetic pleasure.

There are also periods of *acting-out WWII* in FSs, but contrary to FPSs these are not permanent, but often interrupted by longer periods of smooth calmness.[10] While the periods of *acting-out* require the player to forget herself and to direct her attention fully to the activities in the game, the aesthetic periods of FSs invite the player to submit herself to the experiences of the game—to 'take in', so to say, rather than 'act out'. Jenkins (2015) describes what he calls the "economy" between these two poles as follows:

> [P]layers expect realism from games, to encourage immersion into the game-action, predictability in response, and identification with characters. However, they want spectacular feats, astounding scenes, and breathtaking visuals. (p. 15)

WWII FSs offer ample experiences of the latter kind.

Managing WWII – Strategy Games

The country's industrial production is running and demands further raw materials, diplomatic relations insist on meetings and agreements, intelligence must be organized, governmental decisions are urgently needed and continuous research and education must be ensured, while the necessity to mobilize the military is pressing and unbroken recruitment must be guaranteed along with ongoing production of consumer goods and the control of political developments. These processes are interdependent, and changes in one area will change developments in others. All this while the country is under increasing threat (*Hearts of Iron 2* [Paradox Entertainment 2005], game opening).

This plethora of needs and demands presents itself as the answer to the player's question "what is this?". It suggests it to be a WWII in urgent need of organisation and management, in military as well as in all manner of other societal terms. In Apperley's (2006) words, players of SGs are urged to mobilize "a constant engagement with overwhelming amounts of information" (p. 14). Menus play a crucial role in the playing part of SGs, providing the player with a vast range of parameters to regulate. They are the main tools through which the game is played. The player needs to keep a cool head to consider the effects of regulating parameters. Deterding (2008) gets to the heart of the matter when describing SGs:

> You stare at the maps. You reason, calculate. You relocate units, hesitate, pull back again. You speculate, exchange ideas and congratulate one another on the clever move. You wait for new data on the screen about enemy movements and about the effects of your decisions. (p. 108, our translation)

Compared to the rather (virtually) bodily acts of FPSs and the aesthetic undertakings of FSs, SGs emphasize cognitive tasks. The degree to which the game offers the player resources to actually control the tasks they encounter in SGs vary with the temporal structures of SGs. The pressure on action is higher in conventional real-time SGs (such as *Company of Heroes*) than in a grand strategy game (such as *Hearts of Iron*) wherein the player has more control over the temporal flow of the game and of their actions and decisions.

Taking part in a WWII of multiple events and variables that are to be managed, suggests that the player maintains an overview over war activities and thus keeps a distant relation to the acts of combat. When the player issues orders to his troops in *Sudden Strike* (Fireglow Games 2000), a voice announces, "ready to attack", "let's go", and the like as verbal expressions of his adjustments. Because these utterances are bound to the player's adjustments, they may interpret them as responses to their own (or their avatar's) commands, addressing soldiers, pilots and troops, etc. The suggestion is that they act from a superior position (cf. Deterding, 2008). The replies of the troops to orders often sound as if communicated through the radio, emphasizing not only the hierarchical but also a physical distance between the player giving the orders and the units carrying them out.

The distant relation to acts of combat is also suggested graphically. In general, strategy WWII games are graphically less exciting than FPSs and FSs. Vehicles are seen from far above, infantry troops are stylized, and the resolution and colour palette reduced (cf. Figure 12). The player may take these visual components to indicate that this WWII

is not about experiencing details and the perceptual pleasure of individual units, landscapes or events, as in FSs. Rather, it is about the cool overview and rationality of the task at hand. These various aspects answer the player's question of "how can I take part?" with "manage WWII, take the perspective of a general, keep a distanced overview and keep your mind cool".

Figure 12: Sudden Strike *(Fireglow Games 2000), Allied Campaign, tutorial mission. © CDV Software Entertainment.*

Recurrent Categorizations of WWII

In this section we turn to two categorizations of WWII that are accomplished throughout both the playing and the non-playing parts of the games, and very similarly in all three genres (for graphical clarity these are not included in Figure 8).

Technological WWII

In a seemingly endless, forward-moving stream, tanks, planes and troops rush ahead scene after scene. The mechanical sound of soldiers marching in columns blends into the rumble of the passing airplane turbines in a seamless continuity of humans and machines (*Call of Duty 2* [Infinity Ward 2005], Moscow 1941, introductory video).

Similar to the machinic character of WWII conveyed by the *Call of Duty 2* (Infinity Ward 2005) introductory video, all the games in our sample have a strong focus on technological aspects of warfare from the beginning. *Blitzkrieg* (Nival Interactive 2003) foreshadows technology with its close-up imagery of steelworks and the forging of metal (Figure 13). In FSs boats and planes are destroyed, not pilots and sailors. Even in FPSs and SGs, in which human figures are killed, the focus is not on the killed human, but the reduction in the number of opponents and on enemy casualties as repositories for weapons and ammunitions that can be picked up and used by the player-character. In these various ways, the games draw the attention of the players

to technology and suggest a *technological WWII* to be the answer to the problem of categorization.

Figure 13: Blitzkrieg *(Nival Interactive 2003), introductory video. © CDV Software Entertainment.*

Technological WWII is often accomplished in parallel with other categorizations. Even when a diary excerpt is in focus and providing cues for the categorization of *emotional WWII* in *Call of Duty 2* (Infinity Ward 2005) (Figure 4), weapons, ammunition and navigational tools are littered around the diary page, providing cues for categorizing *WWII* as *technological*. Similarly, as discussed above, the categorization of *aesthetic WWII* is often accomplished through drawing attention to visual and acoustic details of weaponry, vehicles and other technologies. The aesthetics introduced through representations of equipment and other artefacts in the playing parts, as well as the documentary-style video footage in the introductory parts, thus reinforce the categorization of *historical WWII* (cf. Salvati and Bullinger 2013).

Already the attention on enemy casualties as technological repositories provides the player with an answer to the question of "how can I participate?" Other participation cues are provided. In the FS *Birds of Steel* (Gaijin Entertainment 2012), more than one hundred aircraft are available to choose from, and in strategy games the decision as to which units to deploy must often be taken on the basis of their technical capabilities. The excess availability of technological artefacts and the necessity of engaging with these in order to progress with the game, calls upon players to participate in the game as knowledgeable about the technical details of WWII warfare: the speed of vehicles, the handling and firing rate of weapons, their firing range and power, how many hits specific units can take, about the altitude of aircrafts and colourings which fit the war practice, and so forth. Similar to *historical WWII*, *technological WWII* makes available an extra layer to the player, to engage with military technology not only within, but also beyond the game, in internet communities and the like. Indeed, representations of technological artefacts in the games are often referred to in players' discussions of the games' historical merits, as Salvati and Bullinger (2013), among others, report.

Heroic WWII

> You have been assigned to a mission few would qualify for... A mission only few would survive. (*Medal of Honor: Allied Assault* [2015, Inc. 2002], 'Lighting the Torch', introductory video)
>
> Better to fight for something than live for nothing. (*Call of Duty* [Infinity Ward 2003], 'Pathfinder', end of mission [quote of General George S. Patton])
>
> You have all it takes to become a real ace. (*Birds of Steel* [Gaijin Entertainment 2012], end of tutorial mission)
>
> Excellent job, men. (*Company of Heroes* [Relic Entertainment 2006], 'Omaha Beach', end of mission)

Utterances like the ones above are often heard in WWII games. Introductions inform the player about the difficulty of missions and the superior skill of the soldiers and pilots chosen to complete the missions. Pointing to the activity as one "only few would survive" turns whole missions into a test of the individual. During the playing parts of the games the player is invited to experience herself as a hero. In *Company of Heroes* (Relic Entertainment 2006), badges are gained for accomplishing additional mission goals. In FSs, battles are not concluded with relief over the end of suffering, but by awarding the pilot a trophy or advancing his rank. "The eyes of the world are upon you. The hopes and prayers of liberty loving people everywhere march with you" (*Medal of Honor: Allied Assault*, 2015, Inc. 2002). This quote of President Eisenhower paints an image of the individual visible to the whole world and illustrates particularly well how the games elevate soldiers, pilots and players to the dimension of heroes through recognition from a distance.

And so the games answer the player's question of "what is this?" by proposing the categorization of the war as a *heroic WWII.* It comes with a moral obligation—and pleasure—to participate by winning the admiration of (virtual) others. Power (2007) notes that: "Games […] can provide a (heroic) experience of winning a war single-handedly" (p. 268). *Heroic WWII* is also categorized by way of continuous glorious background music and encourages the player to feel good about her past achievements.

The categorization of *heroic WWII* is closely linked to other categorizations of WWII, as has also been pointed out by Hess (2007) when he describes the intertwining of heroism, historical accuracy, and personal involvement in *Medal of Honor: Rising Sun* (EA Los Angeles 2003). The *emotional WWII* categorization of soldiers or pilots as vulnerable and of high morality, forms a ground for the categorization of *heroic WWII*. *Heroic WWII* furthermore supports *acting-out WWII,* categorizing WWII as being about achievement and victory.

Conclusion: The Complex Moral Orders of Videogame War

The aim of this paper was to inquire how WWII is categorized in and through videogames as an accomplishment of players and games. We did so by looking at which participation cues the games provide for the player to answer the questions "what WWII is this?" and "how can I participate?". Our analysis pointed to eight different

categorizations of WWII in our sample of WWII FPSs, FSs and SGs: *Historical WWII*, *emotional WWII*, *WWII of subjects*, *acting-out WWII*, *aesthetic WWII*, *managing WWII*, *technological WWII*, and *heroic WWII*. As discussed throughout the paper, several aspects of these categorizations have already been identified in the literature as characteristics of WWII games and of wargames more generally. Similar to the works of Gish (2010) and Salvati and Bullinger (2013), the contribution of this paper has been to identify where cues for these categorizations appear in the games and how the categorizations are accomplished through imagery, sound, dialogue, menus, etc. While we have not analysed specific ludic structures in detail (mainly owing to constraints of space), the concept of 'genre' used here combines both narrative and ludic conventions. The conventional game rules of FPSs, for example, play a large part in accomplishing what we have termed *acting-out WWII*, even if they do not do so by themselves. We are confident that the framework proposed here will lend itself to further, more detailed analyses of ludic structures alongside narrative elements. The specification of where and how particular categorizations of WWII are accomplished in and through WWII games provides grounds for discussing design solutions at particular points in the games rather than accepting or rejecting these games *in toto*, due to their general depiction of WWII. Moreover, our analysis has shown that many different moral orders are at play in WWII games that cannot be easily subsumed under a single general rubric such as 'historical accuracy' or 'military logic' etc.

Discussions of specific design solutions and thus of specific cues for categorizations of WWII in the games are important because they relate to moral judgements about them. Each different categorization of WWII described in this paper implies a different moral order of engagement with WWII in the videogame. The appropriate way of participating in *historical WWII* is as a distant observer, deciding upon the truth or falsity of representations. In *emotional WWII* players are supposed to mobilize care and empathy for a particular person. The *WWII of subjects* expects of the player (and/or the role he plays) to take military tasks upon himself. In *acting-out WWII*, a good player is one who efficiently executes given tasks without further reflection, and who focuses on tactics, not on strategy. Appropriate participation in *aesthetic WWII* requires appreciation for the beauty of destruction and engagement in one's own individual pleasure of immersion. *Managed WWII* requires rational, distant and composed involvement. Finally, *technological WWII* urges the player to focus on the technical, non-human aspects of war, while *heroic WWII* expects players to focus on their own achievements and those of others. These results are helpful as resources in the current discussions of the ethics of computer games (e.g., Sicart 2009; Zagal 2012; Pötzsch 2017), to look in more detail at how we would like players to engage with WWII in and through games, or, in Pötzsch's (2017) terms, how we would want players' experiences of war (games) to be "filtered".

This paper has emphasized the importance of the sequentiality of categorizations of WWII within a game for such discussions, and thus of the moral orders of games. Our analysis has pointed out that the categorizations of WWII suggested by the games, do not simply convey several different ideas of WWII, nor ideas about moral orders. These are not only ideas about WWII, but are also *practical tools* for progressing in the game. We showed how the cues provided by the games help players eventually accept orders from a military officer to carry out armed acts, by gently leading the player through a specific sequence of categorizations of WWII. *Historical WWII*, *emotional WWII*, and *WWII of subjects* provide important resources for the activity of play. They establish a

moral order and personal legitimization, and offer the player a position as a subject who is morally prepared for the military and violent activities in the playing parts. The combination of *aesthetic WWII* and *technological WWII* also creates what Kingsepp (2007) calls the "extremely clean and sanitized media representations" of death (p. 371). The specific sequential combination of different categorizations of WWII draws the attention of the players away from human victims. Together, the categorization of WWII in the computer games makes up a specific sequence that offers the player cues as to how to accomplish the acts of the game smoothly. Allison (2010, p. 190) describes beautifully how action is the core of WWII FPS and even in these games, "the meaning *is* the action". Comparing WWII FPS with WWII movies, she notes that "[p]roducing a sixteen-hour film of pure combat would be a piece of avant-garde cinema, not a popular narrative film, but this is exactly what a combat video game aims to do" (p. 190). As we mentioned above, Rejack (2007) points out a structural dilemma in WWII shooters. In their playing parts, their ability to achieve authenticity and sympathy is severely limited, providing a need for constant negotiation between gameplay on the one hand and authenticity and sympathy on the other. Our analysis has shown something different. Even though *acting-out WWII* is dominating in WWII FPSs, their accomplishment also depends on the categorizations in the non-playing parts of FPSs. By sequencing the categorizations over the playing and non-playing parts, they achieve the negotiation of the different moral orders involved. These *historical*, *emotional*, and *subjective* categorizations of WWII are crucially preparing for and framing *acting-out WWII*. Also, the other genres analyzed offered particular sequences of cues for specific and varying categorizations of WWII. The games do not only offer cues for multiple different ideas and categories of WWII and their accompanying narrative and moral orders. Due to the sequential arrangement of these cues, the categorizations also provide players with cues as to how to practically accomplish the game. The cues do not only suggest ideas about WWII, they also shape how the game is played and experienced.

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Notes

1 Julian Meyer has contributed to parts of the analyses and co-authored previous versions of this text. We gratefully acknowledge his contribution.

2 For the analysis of games, we have modified membership categorization analysis to apply to the categorization of WWII. Usually, membership categorization analysis is only applied to analyze the categorizations of humans.

3 Modding means that players create new levels or import new weapons into an existing videogame. With regards to WWII mods, Crabtree describes this practice "as a significant opportunity for players to act in a creative and fertile space for the imagining of war" (Crabtree 2013, p. 205).

4 The most prominent example is the online shooter *America's Army* (MOVES Institute 2002) designed with and published by the US Army.

5 Sales figures available online are not directly comparable, just as their reliability is questionable, their source being most often commercial. For this reason, they only constitute one of our means of identifying relevant titles for analysis.

6 These participation cues were found in all genres. Yet, for the purpose of clarity, we present the categorizations in relation to the genres in which they most often appeared, i.e., the preferred categorizations.

7 An exception is provided by the first campaign of *Red Orchestra 2*. Here, the player starts as a German soldier who has the task of invading the Soviet Union to end the communist plague that "threatens all of Europe" (*Red Orchestra 2* [Tripwire Interactive 2011], German Campaign introductory video). As in the other FPS's historical narrative, the German Army is described as very well-equipped and very well-trained and therefore superior to their enemies. The longer the campaign as well as the battle of Stalingrad last, the more the German soldiers are described as disillusioned in order to illustrate their own strength. At the point where the German Army has conquered most parts of the city, the German Campaign ends and the Soviet Campaign starts. Now the player has to fight against the Germans and "will remind every single one of them that they are going to die trying to take Stalingrad" (*Red Orchestra 2* [Tripwire Interactive 2011], Soviet Campaign introductory video). And here we are back to the classical narration of WWII FPS.

[8] Incidentally, Rejack (2007) reports on the very interesting case of the History Channel documentary *Dogfights*, which uses a reverse version of this technique. Here, classical techniques of documentary historiography (interview and archival footage) supplement the more immediate visual experience provided by computer graphics.

[9] Rejack (2007) also discusses a very interesting example from the game's unlockable extra materials, which fuse computer graphics and historical pictures of the very spot where (in-game) the main character's friend is killed in the same image. Although we have found nothing immediately similar in our sample, this is a very neat device intertwining *historical* and *emotional WWII*. More relevant to our argument here is the placing of this device in the game's extra features, which must be unlocked and can therefore only be accessed after playing the entire game. This seems to indicate that the sequencing of the categorizations is indeed necessary to get players 'into the game' in the first place.

[10] See, however, Hess (2013, p. 352) who describes similar alternations between what we have termed *acting-out* and *aesthetic WWII* in *Medal of Honor: Rising Sun* (EA Los Angeles 2003).

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I Am… Bothered About D&D

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I Am… Bothered About D&D

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Abstract

Is *Dungeons & Dragons* receiving too much attention in game studies compared to other tabletop role playing games? And what, if any, are the issues with this?

In this commentary the author creates an overview of the overwhelming focus on *Dungeons & Dragons* in game studies journals and puts it in relation to the cultural and economic position of the popular role playing games. The author calls for a more diverse and critical approach to tabletop role playing games in game studies, and the need to take into account the different playstyles fostered by different mechanics and the communities that form around the games.

Keywords

TTRPG; D&D; WotC; game studies

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Introduction

Imagine going to a game studies conference and every presentation was about the *Mario Bros* games. The history of *Mario Bros*, queer readings of *Mario Bros*, ethnographies of *Mario Bros* players, comparative analysis of mechanics in different *Mario Bros* games and so on. This is how attending tabletop tracks on conferences can feel like. It's all about this one single game: *Dungeons and Dragons* (D&D, or DnD) (Gygax and Arneson 1974).

When attending DiGRA 2022 in Krakow, I made a point out of attending as many tracks that as I could that included analogue, tabletop gaming, since this is a field that has been of growing importance to me. In the sessions I attended,[1] whenever there was talk of tabletop roleplaying games (TTRPG), it concerned *Dungeons & Dragons*.[2]

One particularly engaged presentation referred to the difficult calculations of D&D as a threshold that prevents inclusion and for this reason should be handled by software. I asked whether or not the solution could instead be picking another system or game. The response didn't thrill me. Apparently, the presenter claimed, no other TRPG had reached mainstream audiences, and they named *Pathfinder* (Bulmahn 2009) and *The World of Darkness* as examples; the former an immensely popular derivative of the 3.5 edition of D&D; the latter a multimedia phenomenon that changed roleplaying games in the 90s and spawned computer games, novels and even a short-lived drama series produced by Aaron Spelling (Conway et al. 1996).[3] Hardly out of the mainstream, even if not the juggernaut that D&D is.

Two presentations stood out in the program as being not about D&D, one about *Mörk Borg* (Nilsson 2020), a game derivative from the classic D&D playstyle, and another on *Thieves' World* (Arneson et al. 1981), a multi-system publication. Also in these talks, however, classic D&D asserted itself, as the focus was on how the two titles discussed influenced D&D.

Dungeons and Dragons is a massive beast with few commercial rivals, and its owning corporation Wizards of the Coast (WotC) and their corporate owners Hasbro have financial interests in monopolizing the roleplaying hobby. Along with the extremely successful *Magic: The Gathering* (Garfield 1993), D&D makes WotC's portfolio one of the most influential in tabletop gaming. Like Games Workshop's attempt at establishing the *Warhammer* hobby as a synonym for the wargaming hobby in general, WotC has been successful in mainstreaming the idea that D&D is roleplaying and roleplaying *equals* D&D. Looking at mainstream journalism on the hobby would give the impression that the hobby and the game are one and the same. The plethora of roleplaying games out there that are compatible with the series' latest instalment *Dungeons & Dragons* 5th edition (more commonly known as *5e* [Mearls and Crawford 2014b, 2014a]) seems to confirm this, giving the impression that 5e compatibility is a prerequisite of commercial and popular success.

A sizable number of large and small rivals do exist, however, drawing growing numbers of passionate players and consumers. Some of them are even written by game scholars. Why are these alternatives still underrepresented in game studies? And where is the critique of WotC's business practices and their strategy of cultural monopolization? As critical researchers, we owe tabletop roleplaying games, game culture, and game studies such (self-)critical approaches.

The Importance of D&D

It is hard to overstate the historical significance of *Dungeons & Dragons*, and how it established and cemented the concept of tabletop roleplaying games. This is a history that has received well-deserved academic scrutiny (Peterson 2012, 2021, 2022; Zagal and Deterding 2018). It is however important to keep in mind that, when Gary Alan Fine did his fieldwork for the seminal study *Shared Fantasy: Role-Playing as Social Worlds* (Fine 1983) in the late 70s and early 80s, alternatives to D&D were already preferred by his informants as they were players in a campaign of *Empire of the Petal Throne* (Barker 1974) ran by the game's author himself. The histories of these early games, some of which are still alive and well, have received little attention from game scholars.

Take *Empire of the Petal Throne* (Barker 1974) as an example. The game was self-published by professor M. A. R. Barker the same year that saw the first official release of *Dungeons & Dragons*, *Empire of the Petal Throne was published* by TSR the following year (Barker 1975). As mentioned earlier, according to Fine's study, many of his informants preferred this game to D&D, and its history is fascinating.[4] Likewise games such as *RuneQuest* (Perrin 1978) and *Tunnels & Trolls* (St. Andre 1975) deserve mentions. The latter are also included in Shannon Appelcline's first volume of *Designers & Dragons* (Appelcline 2014b)—a four volume series that deals specifically with the publishing history of tabletop roleplaying games (Appelcline 2014a, 2014b, 2014c, 2014d).

It is equally hard to overlook the cultural significance of D&D. From its appearance in *E.T. The Extra-Terrestrial* (Spielberg 1982) to *Stranger Things* (Duffer and Duffer 2016), D&D has been visible in popular culture and media. There have been attempts at creating television and movie franchises from the game (Daley and Goldstein 2023; Gibbs et al. 1983; Solomon 2000),[5] and the classic movie *Krull* (Yates 1983) also suggested connections to the franchise. The Tolkienesque fantasy of D&D has undoubtedly been an inspiration for how fantasy and roleplaying has been portrayed in music, films, and the media.

Dungeons & Dragons was also a focal point of the Satanic panic taking off in the US in the 1980s. Here, concerned conservative Christians such as Pat Pulling would accuse D&D of causing suicides and being a gateway to occultism, Satanism, and, drugs (Stackpole 1990; Martin and Fine 1991). One of the better known stories, is that of the aforementioned Pat Pulling who started a crusade against D&D after her son, according to her, shot himself just "hours after a D&D® curse was placed on him during a game conducted at his local high school" (Stackpole 1990). Pulling would go on to found the organization BADD—Bothered About D&D—and her crusade is well documented in the so-called *Pulling Report* by Michael Stackpole (1990).

With the popularity of the web series *Critical Role* (Mercer et al. 2015)[6] and further mediatization of D&D (Švelch 2022), the game has seen a radical upsurge of interest and popularity, further entrenching the notion that roleplaying is D&D, and D&D is *the* roleplaying game. It should come as no surprise, then, that D&D is of primary interest to both journalists and game researchers, and to many the game is the first and only experience they have with tabletop roleplaying games.

Of course, this has to be seen in context with the financial interests of WotC and its parent company. This is their bread and butter. Monopolizing the field of tabletop roleplaying games guarantees them a steady trickle of profit, which is why they have been able to leverage the cultural weight that comes with owning two of the most popular tabletop games in the world in order to have other publishers start using their system, whether it was named D&D, D20 or 5e. The popular gameline *Pathfinder* (Bulmahn 2009) started out as such, and companies such as Kobold Press, Troll Lord Games and Frog God games base their business model on producing compatible material. Other publishers, such as Cubicle 7, release D&D-compatible versions of their games in order to tap into this market segment.

For this reason, critical games researchers should not just be able to study how consumers (or players) relate to the game and how WotC relate to its customers, but should also be aware of how our research focus on *Dungeons & Dragons* aids a multinational company in achieving its cultural and economic aims.

Dungeons & Dragons in Game Studies

To investigate my suspicions that *Dungeons & Dragons* is disproportionately represented in game studies, I skimmed through the contents of the journal *Analog Game Studies* that were tagged to be about 'tabletop role-playing games'[7] and the 237 papers in the *Sage Journals* database, including *Games & Culture* and *Games & Simulation*, that were tagged with 'role-playing'. A minority of the latter dealt with actual tabletop roleplaying games. Additionally, I skimmed through the currently 12 issues of the *International Journal of Role Playing*, four issues of the *Japanese Journal of Analog Role Playing Games Studies*, as well as the 257 papers in *Game Studies* that came up using a site search, though only very few of those papers were about *tabletop* roleplaying games.

	References to D&D
Analog Game Studies	25
Games and Culture	4
Simulation and Gaming	3
Game Studies	18
International Journal of Role Playing	30
Japanese Journal of Role Play Studies	7
Other Journals	3

Table 1: Number of references to D&D by journal.

For every paper skimmed this way, I made note of which tabletop roleplaying games were mentioned, thus providing an overview of how frequently D&D was featured compared to other games in the hobby. Many of these mentions were parts of lists of available games and offered no analysis of them, but they were all included and noted in my spreadsheets. This approach showed clearly that D&D was by far the most mentioned game in the journals.

Counting other games mentioned in these journals, I found over 130 individual games, but most of these only got a single mention in one or two journals. The spreadsheet was a long list of ones. The only other games whose combined mentions entered the double digits were *Call of Cthulhu* (Petersen 1981) with 16 mentions, and *Vampire: The Masquerade* (Rein-Hagen 1991) with 13 mentions in all the journals listed in the table. That is compared to the total of 90 mentions of D&D across the board.

In the 34 papers in *Analog Game Studies*, there were 25 mentions of D&D, and it was more often than not the sole focal point or case in the paper. Sometimes other games would be mentioned. A very few papers dealt mainly or solely with other games. Games that stood out were *Fiasco* (Morningstar 2009) and *Apocalypse World* (Baker and Baker 2010) and some of its derivatives which seemed to be of particular interest to some of the contributors. *Fiasco* gets at least one mention, if only because Jason Morningstar, the designer, contributed a paper on it (Morningstar 2014). In total, 55 different tabletop roleplaying games receive mentions in *Analog Game Studies*, but the vast majority of these only receive one mention, thanks to especially two papers dealing with the history of tabletop role-playing games (Stenros and Sihvonen 2015; Zagal 2019).

Other TTRPGs in Game Studies

Although some may disagree, it is not that game studies is generally inattentive towards analogue games. Game studies seems very much focused on what we can learn from live action roleplaying games, but we also have a lot to learn from tabletop roleplaying games—both about player interaction and about rule systems that govern play. And there is a fair bit of work being done on tabletop roleplaying games, and while I argue that the majority focuses on D&D, this is not an exclusive focus.

If I were to call out some works, I would for instance mention Ashley M. L. Brown's chapter on the "fourteen-inch barbed penis" (Brown 2015) and how players used the roleplaying supplement *Freak Legion* (Brown 1995) for *Werewolf: The Apocalypse* (Rein-Hagen 1992; Rein-Hagen et al. 1995), to explore the boundaries of play in tabletop roleplaying games.

Another example would be Karl Bergström's (2012) paper, 'Creativity Rules. How Rules Impact Player Creativity in Three Tabletop Role-Playing Games' in the *International Journal of Role Playing*, which shows the importance of differentiating between different tabletop roleplaying games in our research.

I would also recommend the expertly and thoroughly edited volume *Role-Playing Game Studies: Transmedia Foundations* (Zagal and Deterding 2018), which not only covers the many forms roleplaying takes, but acknowledges many different

expressions and games of roleplaying and serves as a good starting point for research intent on looking beyond the invisible confines of D&D.

And, of course, Appelcline's work also deals with the history of several publishers and games alongside D&D (Appelcline, 2014a, 2014b, 2014c, 2014d). These works stand as examples for why it is important to look at more games and communities in order to create a fuller impression of roleplaying games. They are still in danger of being overshadowed by D&D, a situation caused by the critical economic and cultural position of D&D.

Three Criticisms

I have three areas of criticism of D&D's position in game studies: (1) D&D as a cultural dominant, (2) WotC and Hasbro as corporate institution, and finally (3) the mechanics of roleplaying games. First of all, a continued hyper focus on D&D in academic literature adds to the weight of D&D overall, also outside of academia. And while its popularity and cultural significance make it an important object of study, we are also missing out on a large part of the roleplaying community that does not primarily play D&D, and who have developed norms, practices and terminology separate from those specific to this one game. Furthermore, there are game designers out there with an oeuvre of interesting games that deal with subject matters beyond the dungeon crawls and high fantasy of D&D that deserve to be included in game studies' understanding of role playing games.

As someone with a vested interest in tabletop gaming, I think it's great that more and more people are discovering roleplaying games. At the same time, I fear that the almost exclusive attention on D&D makes people miss out on all the great games that are there to be played, and that this hurts the smaller publishers and game developers who are left in the shadow of WotC unless they start publishing 5e versions of their games. Publishers and developers who, in turn, might end up having to pay WotC for the privilege.[8] This could not have been made clearer than in the early days of 2023, when attempts to changing the Open Gaming Licence not only caused an uproar in the community, but endangered the livelihood of publishers and content creators who have made themselves dependent on the feigned benevolence of a corporate machine that is motivated to maximize their profits (Evans-Thirlwell 2023).

This brings us to the second criticism: that of the financial position of D&D. As game studies scholars we have a moral obligation to be aware and critical of the position of D&D and its owners in the marketplace of roleplaying games. Hasbro and WotC profit from being considered the largest or only game in town and foster the image of being synonymous with the roleplaying hobby. It is in WotC's interest that as many games as possible use their system, and that D&D becomes *the tabletop roleplaying game*. Game studies should question and criticize this position, and the economic motivations behind it.

The cultural and financial dominance of D&D is for all practical purposes a monopoly. Game studies should engage critically and discuss what this monopolization of the tabletop roleplaying space does to the hobby. The more attention D&D gets from game

studies or from the media, the larger it gets, potentially overshadowing or even out-competing other, smaller games.

Furthermore, and thirdly, when focusing solely on D&D, we risk losing sight of the variety of playstyles and rule mechanics that exist within the greater hobby of role playing, including the valuable discourse that follows from this. The work done by White (2020) on The Forge is an indication of how discourses surrounding mechanics in role playing can be studied.

As a games researcher I believe that what games we play matters, and the mechanics of these games matter for how we play them, even *how* we *can* play them. There's an ideology at work in game mechanics that is being reproduced as we play them. To quote Nicholas J. Mizer for his reason of choosing the Old School Renaissance (OSR) communities and D&D for his ethnography:

> While I sought variation in the regions I studied, I pursued a narrower focus in the type of games I studied. Different types of role-playing games represent different traditions of experience, different techniques of the imagination. (Mizer 2019, p. 11)

Dungeons & Dragons is designed for dungeon delving (Trammel 2014) and killing monsters in order to further the narrative and develop the characters; this is the core of the D&D experience, and is represented by its mechanics. Regardless of its reliance on essentialist notions of 'character class', race and gender. The roleplaying we often laud as part of the game, is often in spite of these mechanics, not because if them. This creates, as Mizer says, a particular experience, and as we focus our research on play experiences and communities, the mechanics and ideology that drive those experiences become of utmost importance as objects of critical analysis.

This is what Bergström is speaking of when discussing rules and creativity in different TTRPGs (Bergström 2012), finding, for instance, that D&D puts the rules before narrative, whereas other games in his sample privilege narrative and creative participation over rules. This should come as no surprise to anyone experienced with D&D as well as other systems.

Does it Matter?

As critical researchers we should be aware of the political, financial and cultural interests that are driving the visibility of *Dungeons & Dragons*. Of course, game studies should be aware of the huge cultural influence of D&D, but we should also be able to engage with it critically and discuss what this monopolization of the tabletop roleplaying space does to the hobby. The more attention D&D receives, from game studies or from the media, the larger the franchise gets, potentially overshadowing or even out-competing other, smaller games. Many are the game systems that have fallen to the wayside, not for the lack of quality, but for the lack of an audience. With our hyperfocus on one game and one part of gaming culture only, we are contributing to its dominance: culturally, politically and financially.

Given that there is a plethora of tabletop roleplaying games available, with vibrant communities and different approaches to mechanics and thus experiences and affordances for creative play, we are barring ourselves from understanding a sizable part of what roleplaying is and can be outside the realm of D&D. With greater scope for the essay, this is also where we could bring in the critical research done on The Forge community (Torner 2015; Trammel 2019; White 2020; White et al. 2012), and the games that sprung out of this, such as *Apocalypse World* (Baker and Baker 2010) and *My Life With Master* (Czege 2003). This work shows the potential to delve into not only commercial alternatives to D&D, but into the avant-garde of tabletop game design and para-academic activities of tabletop game designers, which parallel that of live action roleplaying game designers.

And this should matter to game studies.

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Notes

1 I have no interest in calling anyone out, as their research in and of themselves was mostly good and interesting, so I will not name the presenters abiding as close as I can to the Chatham House Rule.

2 It is much the same situation for wargaming, miniature games and Games Workshop's *Warhammer*, which should be discussed elsewhere. It bears noting, however, that parallel to DiGRA 2022, the wargaming discourse on YouTube became very much aware of how algorithms skewed contents towards *Warhammer* and as 2023 comes around many people are looking for alternatives.

3 Admittedly a guilty pleasure of the author.

4 Barker was not only a muslim convert, but on the review board of the notorious Holocaust-denying *The Journal of Historical Review*. He also published an anti-semitic novel under the pseudonym Randolph D. Calverhall.

5 And in 2023 Paramount+ picked up a live action TV-series based on D&D.

6 Now also an animated series on Amazon Prime (Ahn et al. 2022).

7 Some relevant papers have not been tagged as such, and some papers do not show up when using the tags. Because of time restraints they have not been included in the statistics, but some have been read and cited in this paper.

8 While revising this paper there was an uproar against potential changes to the Open Gaming License that would have third party publishers pay to make compatible products.