Faculty of Humanities, Social Sciences and Education

Producing & Playing Hegemonic Pasts

Historical Digital Games as Memory-Making Media

Emil Lundedal Hammar

A dissertation for the degree of Philosophiae Doctor - November 2019

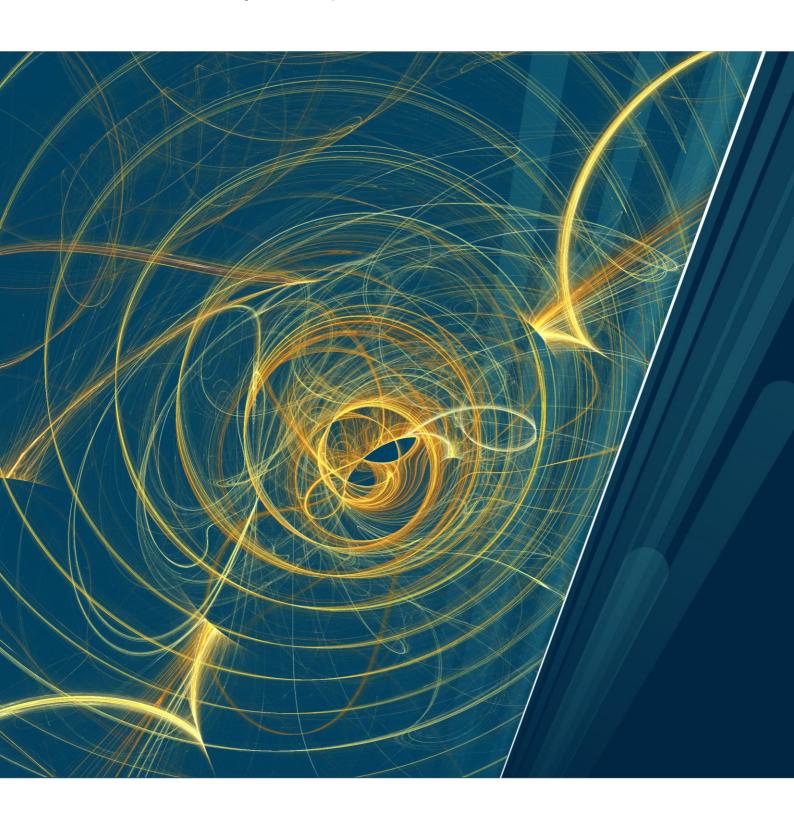




Table of Contents

i.	A	Abbr	eviations	6
ii.		List	of articles	6
iii	ı. <i>A</i>	Ackn	owledgements	7
iv	. F	Prefa	ce	9
Pa	art I	Intro	ductory chapter to this dissertation	11
1	(Over	view of the introductory chapter	11
2	F	Rese	arch hypothesis and questions	12
3	F	Findi	ngs	15
4	N	Meth	ods	16
	4.1]	Formal analysis	16
	4.2	(Quantitative analysis	16
	4.3]	Reception analysis	17
	4.4	(Qualitative interviews	19
	4.5	,	Summary of methods	20
5	7	Γheo	retical framework	22
	5.1]	Memory studies	22
	5.1.1		Collective memory	24
	5	5.1.2	Cultural memory	26
	5.2]	Encoding / decoding media	29
	5.3]	Hegemony	31
	5.3.1		Mnemonic hegemony	33
	5.3.2		Mnemonic hegemony, culture, and media	34
	5.4	,	Summary of history, cultural memory, media, and hegemony	35
	5.5	-	The encoding and decoding of digital games	36
	5	5.5.1	Encoding and political economy	36
	5.5.2		Decoding and reception	37
	5.5.3		Tensions between encoding and decoding	39
	5.6	(Game analysis	40
	5.6.1		Games as cybermedia	41
	5.6.2		The analysis of historical digital games as cultural memory	43
	5.6.3		Erll's intra-, inter-, and -pluri-medial analysis of games	45
	5.7	,	Summary of encoding, decoding, and game analysis	47
6	A	A qu	antitative content analysis of mnemonic hegemony in realist historical digital games	48
	6.1]	Research background	48

	6.2	Selection criteria	48	
	6.3	Analytical categories	49	
	6.3	.1 Conflict resolution mechanic	49	
	6.3	.2 Moral (dis)engagement factors	49	
	6.3	.3 Geographical region and historical period	50	
	6.3	.4 Conflict type	50	
	6.3	.5 Transgressivity	51	
	6.3	.6 Budget	51	
	6.4	Table	52	
	6.5	Data analysis	64	
	6.6	Discussion	67	
	6.7	The political economy of the digital games industry	68	
7	Sel	ecting games for analysis	74	
8	Pro	pject findings - the intersection of games, play, memory, hegemony	78	
9	Co	nclusion	80	
1	0. Refe	rences	82	
P	art II R	esearch Articles 1-4	101	
		e 1: Counter-Hegemonic Commemorative Play: Marginalized Pasts and the Politics of		
		ory in the Digital Game Assassin's Creed: Freedom Cry		
		stract		
		ducing the Past in the Present - Cultural Memory, Hegemony, & Digital Games		
		story as Entertainment Commodity - Freedom Cry & the Assassin's Creed Series		
	Pla	ying the Past through Representation & Procedures	105	
		sing up against Slavery in a Virtual Caribbean		
		Holistic Understanding of Representation & Mechanical System		
		nulating Race & Historical Trauma within Hegemony		
	De	coding & Situated Play	112	
	Co	unter-hegemonic commemorative play - Recognition of identity & memory	115	
	Co	nclusion	116	
		knowledgements		
	References			
		Article 2: Playing Virtual Jim Crow in Mafia III - Prosthetic Memory via Historical Digital Gar		
		ne Limits of Mass Culture		
		ort description		
	Ab	stract	121	

Introduction	121
Cultural & Prosthetic Memory	122
Digital games and memory	123
Mafia III's blend of organized crime fiction and 1960's racial memory politics	124
The mnemonic hegemony of violence	124
The mnemonic hegemony of masculinity	126
Counterhegemonic commemorative play	126
Foreclosed avenues of counter-hegemony	127
Past and contemporary memory politics	128
Virtual Jim Crow	129
The limits of empathy via mass media	130
Conclusion	131
References	133
Article 3: Producing Play under Mnemonic Hegemony: The Political Economy of Memory Production in the Games Industry	138
Abstract	138
Introduction	138
The Political Economy of Digital games	140
Player Negotiations	141
Bridging Production and Reception as "Memory-Making Potentials"	142
How Political Economy Predispose Games' Memory-Making Potentials	142
Methodology	144
Findings	145
Challenges and Limitations	149
Discussion	149
Conclusion	150
References	151
Article 4: Mapping experiential memory-making through play: How digital games frame cul	
Abstract	
Introduction	
The importance of play	
The involvement model	
Kinesthetic involvement	
Spatial involvement	164

Shared involvement	166
Narrative involvement	167
Affective involvement	169
Ludic involvement	170
Memory, play, and games - implications for memory studies	172
Conclusion	173
References	173
Part III Appendix	178
Letter of invitation	180
Interview guide	181
Introduction	
Selection process of interviewees	
General guidelines	
1. Preceding the interview	
2. Initial questions and building of rapport	
3. During the interview	
4. After the interview	
Interview Question Guide (semi-structured)	
Data privacy & security	
Consent form	
Consent form	165
List of Tables	
Table 1 Overview of the quantitative content analysis	52
List of Figures	
List of Figures Figure 1 The encoding / decoding model (Hall 1973, 130)	30
Figure 2 cybermedia model (Aarseth and Calleja 2015, 6)	
Figure 3 Conflict resolution mechanic – low – medium – high budget	
Figure 4 Conflict type – low – medium – high budget	
Figure 5 Transgressivity: low – medium – high budget	
Figure 6 Moral (dis)engagement factors – low – medium – high budget	
Figure 7 Region – low – medium – high budget	
Figure 8 Historical war – low – medium – high budget	66
Figure 9 Nationality – low – medium – high budget	66
Figure 10 Race and gender: low – medium – high budget	66
Figure 11 Division of gender-exclusive representation	67

i. Abbreviations

DLC = Downloadable Content

Freedom Cry = Assassin's Creed: Freedom Cry

WWII = World War II

ii. List of articles

- Article 1: Counter-hegemonic Commemorative Play: Marginalized Pasts and the Politics
 of Memory in the Digital Game Assassin's Creed: Freedom Cry (published in *Rethinking History*)
- Article 2: Playing Virtual Jim Crow in Mafia III Prosthetic Memory via Historical Digital Games and the Limits of Mass Culture (published in *Game Studies*)
- Article 3: Producing Play under Mnemonic Hegemony: The Political Economy of Memory Production in the Games Industry (published in *Digital Culture & Society*)
- Article 4: Mapping Experiential Memory-making Through Play: How Digital Games Frame Cultural Memory (submitted to *Memory Studies*)

iii. Acknowledgements

The journey of this doctoral candidacy is obviously indebted to a multitude of people. First, Holger Pötzsch went above and beyond in the role of supervisor and friend, whether it was drop-in meetings at the office, responding to complex e-mail queries almost immediately, invitations to take on responsibilities such as administrating research groups, editing journal issues, co-authoring book chapters, or even having dinners with his family. Holger has most certainly been an absolutely outstanding supervisor across the board. Of course, I'd also like to thank Adam Chapman for his excellent co-supervision that was always both instructive, comprehensive, and elaborate, as if the work he put into my supervision was his own book proposal or a survey of an entire field. Along the way, some assistance from my good friend Souvik Mukherjee, who not only provided key criticisms during my midterm evaluation, but who also was the first game scholar I met at a conference (and shared a bunkbed with) all the way back in 2013 when I first tried my hand at an academic conference in Bergen. Since then, Souvik has shown an immeasurable warmth and hospitality to my existence in game studies, most of which is indebted to Souvik's excellent scholarship across the board. And speaking of Bergen, I would like to thank Kristine Jørgensen for her critical and dependable input and observations throughout year one to this final year, through which her work has served as a great inspiration for (and reminder of) academic integrity.

Before even starting my PhD, I was also fortunate and privileged to have a formal education in game analysis thanks to the many talented people at the Center for Games Research at the IT University of Copenhagen. If not for Gordon Calleja's motivational advice and Emma Witkowski's absolutely engaging teaching and guidance, I would not have pursued the PhD that I have finished now. I am also indebted to the excellent supervision by Miguel Sicart, who not only showed the importance of rhetoric in his teaching, but also helped me jumpstart submitting conference abstracts. Those years were also formative in many ways, where the illustrious Mira C. Skadegård took time off her already hectic schedule to give me direction, tips, and guidance. And of course, thanks to Espen Aarseth who have always showed understandings to my research trajectory and included me in administrative, teaching, and research roles —it all came full circle when Espen approved of my draft in the final reading milestone in the project.

In my PhD travels, I was also fortunate to have a four-month stay in Frankfurt where I had the immense pleasure to meet an incredibly talented group of scholars within memory studies. Huge thanks to Roxane Dänner for her great friendship, film and literature expertise, warmth, and hospitality – her and Anna-Lena Kraft were great hosts who showed us a world beyond Frankfurt (namely Mainz ©). Same goes for Jarula Wegner who made me appreciate the artistry of the school cafeteria chef making pizza and afterwards enjoy it as a lunch (and go home to nap afterwards). More seriously, Jarula always lighted up the room with his one-two punch of a deep knowledge of literature and arts, coupled with a barrage of wit and humor on the side. And of course, many, many, many thanks to Astrid Erll whose hospitality, expertise and knowledge simply radiated to everyone during my stay at the Goethe Universität Frankfurt am Main. Re-reading Astrid's scholarship in preparation for the dissertation reminded me of the mesmerizing lectures I was lucky to attend in Frankfurt. It was a joy to be able to meet and learn from what the many talented people at the FMSP group: so many thanks to Maria Elisabeth Dorr, Hanna Teichler, Chijioke Onah, Victoria Kampfmann and Maggie De Gasperi for their friendship and hospitality.

Throughout this journey I have also become so lucky to get to know some amazing human beings who've share their work, interests, guestbeds (or couches), or simply via online interaction. Thanks to the ever-joyful Stephanie de Smale, her integral scholarship on cultural memory, and her equally joyful Elias, who swept away the rug under the feet of my partner, my daughter, and myself when we visited Utrecht. Equally dazzling has been Piotr Sterczewski, his expertise on all things Laclau-Mouffe, cultural memory, and of course the entertaining Anna who demonstrated to me that vodka doesn't have to taste bad and that Leipzig is the new Berlin. Much love also goes out to Mateusz Felczak who was one of the first PhD scholars that I ever met in Gothenburg in 2015, and whose warmth, humor, and stories of Polish black metal have made many academic conferences more enjoyable than they had any right to be. I am also indebted to Lars de Wildt for not just his scholarship, but also providing a couch to sleep on and his hopeful Wi-Fi password that helps me in the darkest of times. Thanks to Pieter van den Heede whose presentations and knowledge have proven super helpful and inspirational, I can't wait to see more of it in the future. Much appreciation also goes to Tess Sophie Skadegård Thorsen, whose work, speakership, and activism always prove inspiring and serve as a guiding light – if anything would make me feel more hopeful for the future of society, it would be if Tess got a tenured position in academia. Same applies to Robbie Fordyce, who I unfortunately still need to properly meet, but nevertheless have found a good friend to confide in and learn from. Huge appreciation also goes to the (unfortunately mostly online) comrades in game studies like Jamie Woodcock, Carolyn Jong, Joachim Despland, and Daniel Joseph. Although our interactions have been minimal, their agitation has worked wonders in formulating a clear understanding of What is to be done.

Many thanks also goes to all the people around me in Tromsø who I wish I could have spent more time with, but who nevertheless were integral to the PhD life. Guro and Gunnar Moe were not only just incredibly inviting, giving, and sweet, but they practically were our second family here in Tromsø – it would not have been as incredible as it has been without Gunnar, Guro, Astrid and Olav. I also would like to thank Chrill Sørnfried aka Christian Beyer aka Hans Würst whose theories has always been great intellectual stimulation steeped in irony. Juliane C. Bockwoldt for her always dependable and rock-solid expertise and commentary on cultural memory and monsters. Franziska Jensen for her many advices and no-nonsense approach to any challenges. Andreas and Lena Klein for their steadfast friendship, humor, and hospitality, even to the point that we meet each other outside Norway. Azadeh Isaksen for her hardcore persistence in overcoming anything life can throws at her and still succeed tremendously. Åsne Høgetveit for her laughter, Russian expertise, and anti-Danish politics (which I helped propagate), Harald Lindbach for his many entertaining stories and expertise in history, Kanako Uzawa Wikström for her hospitality and great humor, and Katrine Totland for all her help.

Finally, much love to my entire family and loved ones. Mor, jeg ved ikke hvor jeg skulle starte, så en million gange tak for alt – du er og bliver årsagen til at vores liv er så godt som det er i dag. Far, din hjælp og viden om alt mellem himmel og jord har altid gjort mig nysgerrig efter verden - tak for alt hvad du har givet mig i alle disse år sammen. Lasse og Rune – jeg kan ikke sige så meget andet end: Muster the brohirrim! I er altid fantastiske brødre jeg vil elske for evigt. And thanks to the Castles fighting the good fight across the Atlantic – Alan Sr., Gloria, Evan, Alan, and Elizabeth, and Eleanor, Ellison, Eva, I miss you all and wish we could be closer. And last, but not least, thanks to my sublime partner in life forever, Alanna – every day with you is a treasure that I am overly privileged to share with you. Nothing brings me greater calm than knowing we have a future ahead of us with our miraculous Luna.

iv. Preface

I am not a trained historian and neither do I scour historical textbooks and sources in my spare time. Yet despite an overall lack of insight and dedication to history, I am constantly exposed to it. I watch films about historical events, I play games that are meant to take place in a historical period, and much of the literature I read focuses on how past events influence the present. When I recall historical events, I do not think of historical archives detailing them, but the entertainment purporting to cover or relate to the historical period in question. When confronted with the topic of World War II, the Vietnam War, or the so-called Wild West, what springs to mind are mass entertainment films like *Saving Private Ryan* (Spielberg 1998), *Der Untergang* (Hirschbiegel 2004), *Full Metal Jacket* (Kubrick 1987), *Platoon* (Stone 1986), *Dances with Wolves* (Costner 1990) or Sergio Leone's spaghetti westerns (Leone 1964; 1965; 1966). In a Baudrillardian sense (1994), to me, the image precedes history, or more simply put, popular culture appears to hold a significant position whenever I recall certain parts of history.

In this sense, we remember through culture, and it seems that mass cultural media serve as a form of popular history (De Groot 2016) that many use to recollect. As such, media function as reflections of cultural discourses and potentially serve as influential texts when we remember the past (Rigney 2016), i.e. cultural memory. Likewise, digital games have recently cemented their position as culturally significant, and many of those games that invoke history are highly popular and considered seminal for the medium. The question then is why and how do these games function when we recall the past? What do they do to our recollection of the past that perhaps other cultural forms do similarly, less, or not at all? Among the pantheon of other mass cultural media, what position do games hold in predisposing remembrances of the past?

History and how to commemorate it in the present also appear highly contested and controversial (Hodgkin and Radstone 2003). Think of the many debates on who, what, how, and why societies should (or should not) recall certain parts of their history. Should the U.S. Southern states commemorate Confederate generals with public monuments? How should Chile remember the stolen children during the Pinochet regime? What forms of reparations and commemoration of the transatlantic slavetrade by the Dutch, Portuguese, Belgian, Danish, French, and British are sufficient and respectful? To what extent should Poland recognize their own role in facilitating the Holocaust during WWII? And so on. It simply appears that history and the past keeps asserting itself and intruding in our everyday lives and societies. Indeed, as Marx writes, "the tradition of all dead generations weighs like a nightmare on the brains of the living" (1937, 5). We are practically thrown into the world underneath the sequence of historical events that put us here and condition our lives 1 i.e. "history is what we receive upon arrival" (Ahmed 2007, 154). In these lives, we contest and argue with each other over which past should be the dominant one – or to use the terminology of this research – which memory should be the hegemonic one. This struggle over memory is important, namely because how we remember the past also predisposes how we enact our future (Erll 2011a, 173).

-

¹ "Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past." (Marx 1937, 5)

These questions motivate the sensitive and highly politicized nature of commemorative processes in the present, something of which digital games are not exempt from. They also latch onto contested debates over what history is and whose histories we should remember. For example, historical games have garnered controversies over the depiction of the Soviet Union as barbaric mass-murderers of their own people in WWII (Campbell 2013); the inclusion of women soldiers in WWII battlefields (Farokhmanesh 2018); the exclusion of people of color in 15th century Bohemia (Plunkett 2014); or when U.S. war crimes in the first Gulf War are attributed to Russia (Martin 2019), just to name a few.

Therefore, these struggles over remembering reveal the power dynamics over *which* pasts should be commemorated or forgotten and *how*. In the same way, the above examples of contestations of memory reveal the importance of games in commemorative processes and the context in which they are played and received. It is for this reason that this dissertation locates historical digital games within the social and economic hierarchies that privilege certain forms of remembering over others. Yet we also need to acknowledge the multiple ways that audiences negotiate and position themselves towards media that privileges certain understandings of the past. People watch films, read literature, or play games in ways that alters the 'movement of memory' (Erll 2011b) in unforeseen ways against the dominant understanding of the past. This latter point is evident in the case of games, where their ability for players to manipulate the historical gameworld opens up for other forms of memory movement. Therefore, this dissertation contributes to the scholarship and conversation concerning the place of historical digital games in the formation of cultural memory. It does so by showing how games are conditioned by global, historical forces, yet negotiated, and even contested, locally.

Part I Introductory chapter to this dissertation

1 Overview of the introductory chapter

The introductory chapter is divided into five sections. The purpose of the introductory chapter is to establish the surrounding theoretical framework and motivations for attached the four research articles. It does so by outlining key concepts from the fields of memory studies, game studies, cultural studies, and political economy of communication.

The current component of the chapter functions as this introduction to the research project.

The second component provides an overview of the research hypothesis, research questions, and the associated research articles.

The third component presents the methods that I have employed throughout the project via formal game analysis, qualitative interviews with game developers, quantitative content analysis, and documentary research of secondary sources of player perspectives.

The fourth component comprises the major part of the introductory chapter, where I establish the theoretical framework. This component outlines the theories of memory studies, media analysis via Stuart Hall's encoding and decoding model, hegemony and media, and finally the encoding, decoding, and formal analysis of historical digital games.

The fifth part provides an empirical component by introducing a quantitative content analysis of 208 historical digital games. This analysis identifies their dominant trends in relation to identity, history, and conflict². These results motivate a subsequent overview of the games industry's political economy across production, distribution, and consumption. This overview then qualifies the reasons for the project's limitation to only analyzing two game titles, namely *Assassin's Creed: Freedom Cry* and *Mafia III*.

Finally, the sixth component connects the introductory chapter and the four research articles, and reiterates the main results of the research project once more.

11

² This fifth article introduce new empirical findings via the quantitative content analysis of historical digital games. Due to the formal constraints of the dissertation, this has been included as part of the introductory chapter. It will be transformed into an article at a later stage.

2 Research hypothesis and questions

This dissertation is best approached by reading this introductory chapter first and then the articles thereafter. These articles represent an essential line of inquiry for developing an understanding of the relationship between games and cultural memory. Each article tests the central hypothesis of the research project: *Production, game form, and play practices through historical digital games have a role in the formation of hegemonic cultural memory*. This dense hypothesis is answered in four articles, that contain the following underlying research questions:

- 1. What is the role of digital games in the negotiation and formation of cultural memory and how do players negotiate games via practices of play?
- 2. How do historical digital games offer or limit the affective and political potentials of cultural memory via mass culture? And how do player positionality influence these potentials?
- 3. What role does the political economy of games have in the formation of cultural memory and to what extent do individuals negotiate and reproduce hegemonic structures that they operate within?
- 4. How do we analyze games and play as distinct experiential phenomena in the formation of cultural memory?

The first article serves as the initial research into the intersections between cultural memory, historical digital games, play, and hegemony. I focus on the game Assassin's Creed: Freedom Cry (Ubisoft Québec 2013) and unpack how its simulation of the 18th century transatlantic slave system in the Caribbean offers players the possibility for what I call counter-hegemonic commemorative play. Via formal game analysis, I demonstrate how the game's mechanical and sign systems work in conjunction to produce cultural memory about colonialism, liberation, the Haitian revolution, and most importantly, the nature of contemporary racial and colonial struggles. To contextualize this analysis, I introduce two perspectives from two black American critics who recount their thoughts and actions during and after playing Freedom Cry. Here they reflect on their own memory of black and Afro-Caribbean historical struggles in mass culture, as well as their own current-day situation in the U.S., a society and mass culture structured along racial categories. The perspectives of these two critics reveal the inflection point between cultural memory, identity, hegemony, and the cathartic potential of play. Namely, that counter-hegemonic commemorative play refers to "instances where a game's design features allow players to playfully negotiate, and perform against, contemporary hegemony, thereby influencing processes of cultural memory [...] and [...] to perform and actively resist the depicted past hegemony in a potentially cathartic way. "(Hammar 2017b, 387, my emphasis) The first article then sets up the overall research project by using one particular game as a case study to show how games can be formally analyzed as memory-making media that in turn are appropriated³ by marginalized players in order to generate meaning-potentials within a present-day hegemonic context.

_

³ By appropriation, I refer to the ways that players take a game's encoded meaning potentials and express themselves based on their own personal values and norms. (Sicart 2011)

The second article takes its point of departure in memory studies by critically interrogating Alison Landsberg's (2004; 2015) concept of 'prosthetic memory' via the analysis of *Mafia III* (Hangar 13 and 2K Czech 2016), a historical digital game that represents the 1960s freedom struggle for black Americans within the narrative frame of an organized crime drama. Landsberg's prosthetic memory identifies the affective and political potential in mass culture, where mass cultural media form mnemonic limbs in audiences that can then potentially shape political alliances via empathy for particular subjects' political struggles. I then adapt prosthetic memory to *Mafia III*. Similar to the first article, I conduct a game analysis and close reading of the game's memory-making potentials, which I then contrast with player perspectives to show how the game is appropriated within contemporary contexts. I analyze *Mafia III* via Landsberg's prosthetic memory potentials in order to show how the game generates affect in players via its mechanical system, sign, and materiality. I also critically investigate how the game, according to prosthetic memory, might potentially form political alliances in support of black freedom struggles.

This analysis and investigation identify the limits of Mafia III and mass culture more broadly, since its political economy often sets the boundaries of the discourse in which players form their memory of the past and establish political alliances. For example, because Mafia III is reliant on exploitative work conditions in a capitalist economy reliant on 21st century imperialism of global commodity forms in the games industry, I argue that its political economy necessarily restricts mass culture's affective and political potentials. To nuance the promise of empathy via mass culture, I also locate the identity positions in broader societal power hierarchies, using critical race theory to ask the incisive question of who is playing who? As the scholar Kishonna Grays (2017) points out in the article, a white American playing Mafia III can easily engage with its representation of 1960s white supremacy, while still ignoring and benefitting from self-said system in today's American society. I thereby conclude that while mass culture's inclusion of marginalized identities may invite empathy at the level of text, it does not necessarily mean that their inclusion result in political conscience and a drive to coordinated collective action. The second article thus stands in contrast to Landsberg's political promises of prosthetic memory by me identifying the limitations set by mass culture with reference to political economy and critical race theory. Landsberg's concept might therefore be re-evaluated in light of the frames of production and consumption, particularly within the context of the games industry.

The third article is the primary empirical investigation into the production-side of cultural memory in historical digital games. First, I provide a general overview of the political-economic aspects of the games industry, where I outline its demographic composition, the global economic system through which it operates, and its labor conditions. *These aspects*, I argue, *reinforce and reproduce an oppressive system that predisposes the articulation of hegemonic memory-making potentials of historical digital games*. I interrogate this argument by positing the divide between production and reception, where especially players are able to negotiate and activate these memory-making potentials differently, as my previous two articles also demonstrated. Subsequently, I introduce my empirical data based on nine semi-structured qualitative interviews with game developers that I conducted between 2015 and 2017. Here I inquired about their motivations for representing the past, what creative choices they made, to what extent they relied on other media, how the economy affected these choices, and how industry gatekeepers determined what is produced, among a range of other questions. The informants ranged from student and indie developers to CEOs of mid-sized studios to

one lead writer working in a so-called AAA⁴ multinational game company. I segmented the collected data into four different themes: self-reflections; mnemonic reinforcement and contestations; technoludic constraints; and economic axiom. These themes reflect some of the general trends of producing a historical digital game and each reveals the underlying structures that motivate developers to produce certain types of memory-making potentials in their products. Overall, the findings illustrate how individual workers do not necessarily intend to reproduce received systems of power and hegemony. Instead, certain cultural and material relations tacitly motivate and/or marginalize workers in the digital game industries and thus motivate the reproduction of hegemonic power relations in cultural memory. Finally, the article argues that attention to cultural production networks such as the games industry constitute important factors that need to be taken seriously in research on cultural memory and game studies.

The fourth article introduces a theoretical framework for the analysis of memory-making potentials of digital games. Not much explicit research within the field of memory studies has been conducted on the relations between memory and play, whereby this article serves to fill this epistemological gap. First, I qualify why play matters in the creation of culture by using the play theory of Johan Huizinga and the hermeneutics of Hans Georg Gadamer. This qualification of play's importance in the formations of and struggles over culture helps establish the link between play and cultural memory. I then introduce a practical component by including the game studies scholar Gordon Calleja's 'player involvement model', the purpose of which is to identify and map how players experience games and thereby become experientially involved. The model serves as a heuristic to capture six different dimensions through which players become experientially involved in the playing of games, namely the 1) kinesthetic, 2) spatial, 3) shared, 4) narrative, 5) affective, and 6) ludic modes. I then explore the memory-making potentials in each of the six dimensions by relating each type of involvement with examples of memory-making in historical digital games. As such, the article is both *an illustration of the importance of studying play in cultural memory*, but also *a methodological proposal on how to study this phenomenon via established heuristics from the discipline of game studies*.

_

⁴ AAA is the colloquial term for the large size of the budget of the game's production. These budgets are estimated to run up to hundreds of millions of dollars (Nieborg 2011), rivaling the level of large-scale and financially risky Hollywood productions.

3 Findings

Combined, these four articles investigate the phenomenon of historical digital games in relation to cultural memory with particular attention to the political economy and practices of play of historical digital games, I contend that games potentially contribute to cultural memory-making processes via their game form. Firstly, my research demonstrates that digital games can be understood as cybermedia objects that facilitate meanings about the past at the level of mechanical system, sign, and materiality. Secondly, this triadic relationship is activated by players whose practices of play, to a degree, alter the game object. My research thereby shows how players appropriate games locally in ways that align with their own personal values and norms. At this level of play, I also show how to analyze and map the experiences of involvement in historical digital games via Calleja's experiential six-dimensional model. In addition to this analysis of play, I make it clear that players' own backgrounds and social positions within power hierarchies also inform how they negotiate and appropriate game objects when generating beliefs about the past. In my analysis of play, I deployed notions of racialization and colonialism to illustrate how mnemonic practices of play are informed by the present. Thirdly, I claim that the political economy of games production structure the discursive boundaries of the appropriated game object, which are conditioned by the epistemic, economic, and technical contexts of game development. I claim that game development structure most mainstream historical digital games in such a way that they predispose the reproduction and reinforcement of existing hegemonic perspectives on history, with western white men committing violence as the central focus, while other identities, perspectives, action possibilities, and forms of memory-making are marginalized, if not made entirely invisible. My argument for the importance of political economy in analyzing mnemonic media, such as historical digital games, implies that memory-making through mainstream historical digital games is structured according to contemporary mnemonic hegemony. Yet I also argue that games themselves open up for unforeseen forms of negotiations and oppositions due to their formal configurative qualities activated by players. The advancements made by this research project provides a more comprehensive account of cultural memory in historical digital games by not only analyzing the games themselves and how people in their own local context play them, but also by analyzing their production and the hegemonic conditions that predispose the memory-making processes of these games in the first place. This comprehensive account is what my research project has attempted in this dissertation and its four included articles.

4 Methods

This section of the dissertation accounts for the methods I used to generate data that I analyzed in my four main lines of inquiry into cultural memory in games: Production, quantitative and qualitative game analysis, and reception. The methods to investigate each of these inquiries were 1) formal analysis and close readings of a limited set of historical digital games, 2) a quantitative content analysis of the genre of historical digital games, 3) semi-structured qualitative interviews with game developers, and 4) analyses of publicly available player testimonies. The following section provide brief accounts on how I completed each of the four objectives.

4.1 Formal analysis

In line with Aarseth's (2007, 3) argument that, as researchers, playing games ourselves is the best method to analyze games, because by indirect access to the experience of games make us "liable to commit severe misunderstandings." Thus. I played the games. I played both Freedom Cry and Mafia III on a PC with a game controller, the former in 2014 and the latter in 2016. At first, I simply played their predesigned narrative plots to 'completion' while casually observing some of their implicit politics. After finishing this playthrough, I then consulted Anglophonic paratexts (Wright 2018) about the games, such as what critics and players had to say about the games and their commentary on history, racialization, power struggles, and colonialism. I then replayed each game once more with a pen and a notebook in which I wrote down my observations with regard to the game's approach to history, race, colonization and white supremacy, masculinity, and the game's mechanical system and what it allowed me to do. After replaying the games, I subsequently read or listened to interviews with the games' developers and watched recordings of their industry presentations on how they approached certain design aspects of their games. This approach of my own playing complemented by other player perspectives and the reflections from the people involved in producing the games, informed my subsequent scholarly analysis of Freedom Cry and Mafia III. Their close readings were conducted with attention to the game form in how both games represented the past via their semiotic and mechanical systems (cf. this chapter's section on games analysis). The decision to focus on only two games was largely motivated by the fact that relegating an analysis to only one particular game provides more analytical depth with respect to the game itself as a game object, but also the multiple ways that it is negotiated differently by players. Overall, my approach to the game analysis illustrate my use of the production-reception approach, where I included: One, my own game analysis; two, other player testimonies; and three, developer insights that inform my close readings of the memorymaking potentials of the chosen games for the project. I return to and elaborate on this approach later in this introductory chapter.

4.2 Quantitative analysis

In this introductory chapter, I also present the results of a quantitative content analysis (Riffe et al. 2019) of historical digital games that employ a realist simulation style⁵. When first gathering data on

-

⁵ I borrow this demarcation from Chapman (2016a) as a categorization of the different "ludic aesthetics of historical description" (ibid. 59). He defines the category of realist simulation style in historical digital games to encompass those games that have an audiovisual specificity to them, where they aim and/or claim to show the past "as it appeared to agents" (ibid. 82), usually by relying on audiovisual aesthetics conventions established in other media depicting the same past. The category also emphasizes the diegetic role of the player-controlled

all historical digital games, I roughly included all historical games that I could find via Wikipedia's category page "Video games with historical settings" (Wikipedia 2017), then I used the search term 'history' in the digital storefront Steam, and then I supplemented my gathered data with entries from the database HistoriaGames (2019). After this data-collection, I excluded games that did not meet the criterion of using the realist simulation style.

The sources that I used for data-collection were curated in a way that only includes Windows PC and console games. This means that my dataset in the quantitative analysis does not include browser-oriented and mobile games, because they were not part of the databases I used. Neither do I rule out the possibility that some PC and console games were left out of the equation, especially those that have not been inserted into the databases that I consulted. This means that certain 'minoritized' historical digital games have been overlooked in the data-collection, which is noticeable in how relatively few low-budget entries are present in the dataset. Still, this potential oversight corresponds with my project's emphasis on mainstream titles – i.e. mass cultural, commodified historical digital games.

After the data-collection, the games were inserted into a spreadsheet and categorized alphabetically. I then removed the non-realist simulation style games from the sheet. I then inserted the categories of the playable character's race, gender and nationality, conflict resolution, morally (dis)engaging opposition, region, historical war, conflict type, transgressivity, and budget scope into the sheet. These categories were selected for analysis because most of them are central themes of contemporary cultural memory and can be easily explained as such. I then analyzed each single game corresponding to the category in question. Because I have not played or completed all of the 208 entries that I found, I had to consult secondary sources on these games. These sources included media reviews, Wikipedia summaries, fan-wikis, and Youtube playthroughs. These sources thereby informed the categorization of the games I had not played. After categorizing each single entry, I calculated the divisions between each entry in order to draw out the dominant trends in the dataset. These calculations highlighted the 'mnemonic hegemony' in the dataset, with most games depicting white American men who commit one-dimensional violence. This result was then divided by the estimated category of budget scope in order to reveal the correspondence between economy and memory-making potentials.

4.3 Reception analysis

In line with Stuart Hall's encoding / decoding model, which I elaborate on later, I conceive of reception as an active and situated process. This frame has consequences for my approach to game play as a constitutive element of processes of cultural memory. With regard to my inclusion player perspectives for the research project, I conceptualized them as "as a source to understand how game features work with respect to the game as a whole." (K. Jørgensen 2012, 375). In addition to Aarseth's claim on the importance of playing games as researchers, Kristine Jørgensen (2019, 103) states that such a perspective will add a research-oriented reading of the game, while potentially overlooking other perspectives and ways of playing that other players do. Consequently, I incorporated an analysis on the reception of historical digital games in this research project.

_

agent who is generally at the center of the game's depicted past setting. The realist simulation style is a category at the end of a spectrum and thus many hybrid games mixing conceptual and realist styles exist.

First, I formulated an interview guide early on in the project (cf. the appendices in this introductory chapter). The planned interview format was anonymized semi-structured qualitative interviews (Brinkmann 2014). The research questions focused on each informant's background, their identity, how they related to history in games, how much importance they ascribed to the type of history they were playing, and then on their thoughts on the power over whose histories are told in games and their opinion on marginalized histories usually not seen in games. I did not choose to focus on one single game for the interview, as I wanted to capture as much player reflection on the topic of cultural memory and games as possible. I also wrote a letter of consent that each informant had to sign if they agreed that I could use the data for my research project. I would record each interview with Skype if the interview was online, or via my phone when the interview was local. Only I would have access to the recorded interview data, which I stored locally on my encrypted work computer. I then sought approval from the NSD (Norwegian Centre for Data Research) and received an approval some weeks later. Once everything was in place, I started sending out a total of 18 requests for interviews both locally and online. These 18 people were selected via colleagues, local game groups, local games industry cultural events, and then online via people on social media who responded to my notice.

I also conducted one pilot interview in order to test my interview guide and adjust it accordingly. This pilot test indicated that my interview questions were too broad and as a result, the test informant did not provide any real, specific insights beyond vague statements and misunderstandings between them and I. I rewrote parts of the guide and planned meetings with the confirmations of interviews that I had received in the meantime. At first, three online and two local informants had given their consent to interviews. I met either online or locally with each of these five informants and went through the interview questions. After reviewing the gathered data, the results were unfortunately less useful than I had hoped. Each informant had different notions of what history was, they never really revealed their own personal preferences for playing historical games, and the conversations were mostly superficial because of my imprecise interview structure. I again blamed this on the interview guide, where I unfortunately still had too broad of a set of questions that never managed to get into the specifics of the informants' memory-making when playing historical digital games. It became clear to me that I would need much more time and experience with the topic of reception studies and interview procedure in order for me to obtain quality research data that would benefit the research project's findings. As a result, and given the large amount of time I had already used on this method, I decided to discard it and replace it with a different approach.

As a result of the problems described above, I chose to research player perspectives via publicly available testimonies of people playing *Mafia III* or *Freedom Cry*. These were selected based on search keywords across the Internet, on specific websites focused on digital games, and on social media. Data sources emerged in several formats, most notably in written form in online articles, such as reviews and specific critiques, but also Youtube videos where the host recounted their experiences with either game, and so-called 'Let's Plays'. Specific podcast episodes in which players discussed their experiences with playing the games were also included. In this way, I replaced my method of gathering player perspectives via qualitative interviews by looking at secondary sources and documents (May 2001, 175). The generated data from these sources were coded and analyzed with attention to the central research questions of this research project. These were the relations between the past and the present, how this relation was activated in the games themselves, thoughts on hegemonic perspectives on history in and outside the game, and in general, any worthwhile commentary that related to the games' memory-making processes. The data were gathered into a

specific document, which I then read through when writing the research articles. After writing the first drafts of the two articles, I revisited my compiled notes once more to ensure that I included and addressed these different ways of playing and thinking about the cultural memory found in *Mafia III* or *Freedom Cry*.

The method of using secondary sources has its limits, because the selected testimonies are often produced after the fact and consciously curated to fit within a certain frame of delivery. For example, a game review is written with intention to inform a potential consumer whether or not the game is entertaining enough to purchase. A critique might only focus on few aspects of the play experience, and a podcast discussion is meant for public audiences, so certain viewpoints may be excluded, because of privacy reasons or because they might be detrimental to economically driven attempts to maximize an audience of followers. Nevertheless, just like qualitative interviews "say little about a reality that is 'external' to the interview." (May 2001, 143), but rather "the *internal* reality constructed as both parties contrive to produce the appearances of a recognizable interview" (Silverman 1985, 165, his emphasis), using secondary sources is likewise not able to state anything comprehensive about reality. Instead, the testimonies in each source and my observations on them did reveal parts of the discursive intersection between cultural memory, hegemony, play and games. The compiled insights from these sources are partial, but nonetheless useful to answer the research questions of the project, as the research articles themselves and their use of these sources demonstrate.

4.4 Qualitative interviews

While conducting interviews with players, I also discovered the importance of media producers. I had previously published research on moral responsibilities for game producers in terms of representation of marginalized identities (Hammar 2015), so I thought it natural to proceed with consulting with game developers about their own perspectives on cultural memory and questions of hegemonic perspectives on history. Given the analytic emphasis on encoding in my application of Stuart Hall's model that I describe later, this move to include developer perspectives into the research project appeared obvious. Similar to the procedure with interviewing players, I also wrote an interview guide focusing on the reflections of game developers when they develop a game, regardless of their internal position within a company. The questions focused on inspirations, attitudes to historical sources, challenges, the rationale behind creative decisions, reasons for being interested in history and digital games, and reflections on their own position in their society as cultural creators, among other inquiries.

I submitted my guide and the guidelines for collecting data to NSD to obtain approval for conducting the research with person-identifiable information in the audio recordings. Only I would have access to the locally stored recordings of the interviews and I would anonymize them. Once the approval with NSD was cleared, I then looked up various historical games online through categorization made by game magazines and distribution platforms. I had no requirements for what type of developer or historical game it should be, only that the informant in question had worked on game projects that "in some way represent the past or relate to discourses about it" (Chapman 2016a, 16). Neither did I constrain my interviews to certain productions budgets. After finding a game, I found the contact information of their developer. I sent out thirty-five requests for interviews via e-mail, in which I outlined my project, my interests, the anonymity of the interviews, and the expected duration of the conversation. Out of these thirty-five requests, ten responded with their approval, with one of these later retracting their interview because of a non-disclosure agreement. Eight of the thirty-five replied

that they were under non-disclosure agreements, six said that they did not have the time, and the remaining twelve did not reply to both my request and subsequent reminder. The nine interviews were gathered, transcribed, and analyzed between May 2015 and June 2017. I also asked for other potential contacts via the so-called snowball method, but this was either denied or never materialized. Via the transcriptions, I divided the different statements in each interview into four different major themes that identified the dominant trends in all interviews (May 2001, 150). As stated earlier, qualitative interviews are limited in that they do not represent the complete picture of game development, because the interviews rely on my informants' own account of their actions (ibid., 142-3). Second, their accounts may be inaccurate, there might be circumstances or events which my informants were not aware of when recounting their experiences to me, and third, only by examining the day-to-day events at a game company would make it possible for me to attain a better understanding of the production processes of specific historical digital games (K. Jørgensen 2019b). However, my qualitative interviews did reveal pockets of situated knowledge that inspires further research into the directions indicated by my informants' testimonies. While the interviews are not generalizable, they still indicate particular conditions that some developers of historical digital games operate under.

Qualitative methods perceive of the process of knowledge production as situated. This, of course, also applies to my own position as researcher. My own identity, social position, and context have colored the interview questions, my game analysis, and data gathering. In the interviews, my presentation and appearance have affected the informants' own attitudes towards the project. My language focus on Danish, Norwegian, and English communication, excluded other major languages in document research and interviews. My own positioning in society by virtue of my whiteness and masculine performance also meant that I easily am able to overlook aspects of oppression and marginalization painfully apparent to minority experiences. However, I have also deployed this position in an essay on playing Freedom Cry as a white Danish man born in a former colonial nation (Hammar 2017a). Moreover, this position has meant that much of my analysis with regard to questions of oppression is second-hand, since I fall under the category of identities who can simply leisurely participate in fighting white supremacy in either Freedom Cry or Mafia III without being marginalized when I turn off the game (Gray 2018). In a sense, these games have potentially given me white catharsis for historical injustices that my identity position most likely has, at least on a structural level, benefitted from. This is also why I included other player perspectives beyond the all-encompassing default Whiteness that affects much of the dominant knowledge production in my work. In the first and second article's cases, I asked for permission by the critics to include their testimonies in my research. This request was granted each time. Overall, my position as a researcher embedded in global systems of inequality along economic, racialized, gendered, and national strata, has meant a motivation to uncover or speak of the often under-researched topics that are excluded from general academic inquiries. In that way, despite my identity position, I found it mandatory to bring these conversations into the foray of game studies and memory studies scholarship.

4.5 Summary of methods

In sum, I chose the methods in order to identify parts of the processes in the production, form, and reception of historical digital games. While each of the deployed methods has its limits, the generated data nevertheless revealed aspects of memory-making conducive for further research. This revealing may point to future research directions that other methods are more apt for investigating. In this way, the methods I have employed identify *memory-making potentials*, namely the possible meanings inherent to the games themselves, which are selectively activated and negotiated by players in their

own situated contexts, while being conditioned by the imposing factors of the political-economy of the games industry. The concept of memory-making potentials serves to bind together these the segments of production, form, and reception through which a mnemonic hegemony is reproduced and negotiated. I return to this concept of memory-making potentials later. Instead, I now proceed with the second part of this introductory chapter, namely the overarching theoretical framework for the research project.

5 Theoretical framework

This section of the introductory chapter establishes the theoretical framework that underpins the research project. I begin with defining memory studies and the associated concepts of collective memory and cultural memory. The focus on culture makes the analysis of media relevant, whereby I introduce Hall's encoding / decoding communication model as the conceptual approach to analyzing memory-making media. I then proceed to stress the importance of power hierarchies in culture by view of the concept of hegemony. Here, I outline the project's understanding of hegemony through the work of Antonio Gramsci and Ernesto Laclau and Chantal Mouffe. These insights identify the dynamics between reproduction and contestations via articulations over hegemony. Hegemony is then transposed to cultural memory via Bertrand Molden's concept of mnemonic hegemony. At this point, I summarize this first part of the theoretical framework's multi-varied inclusion of cultural memory, media analysis via Hall's model, and mnemonic hegemony.

The latter half of my theoretical framework focuses on the conceptual analysis of historical digital games. I return to Hall's distinction between encoding and decoding as applied to historical digital games, whereby I relate the contexts of encoding to the political economy of communication. I then connect contexts of decoding to the reception of digital games and player perspectives. Once this distinction is established, I then proceed to define digital games and how to formally analyze them. I conceptualize games as cybermedia through their triadic relationship between sign, mechanical system, and materiality, which in turn are perceived and enacted differently by players. I then outline how to analyze historical digital games with attention to their form in playing the past. This section also includes established approaches in cultural memory studies, where I introduce Astrid Erll's conceptual framework for analyzing memory-making media at the intra-, inter- and pluri-medial level. Finally, I summarize this latter half of the theoretical framework with attention to encoding, decoding, and formal analysis of historical digital games. I now begin the description of this theoretical framework.

5.1 Memory studies

In order to study the past, the discipline of history is usually the first to spring to mind. 'We' think of the past as something that once happened and therefore our task is to ascertain 'what actually happened back then'. We do this, for example, by investigating the archives, historical sources, and eyewitness accounts. In contrast to this, the academic field of memory studies is less concerned with the question of 'what actually happened', but rather with *what people in the present believe happened and how they arrived at those beliefs*. In a sense, an analysis anchored in the tradition of memory studies shifts the focus to contemporary forms of remembering (or forgetting), independent of concerning itself with 'what actually happened'. This scholarly shift is explained by Erll who asks the pertinent question: "Why 'memory'?" (2011a, 1) She then lists all the ways that practices of memory-making are central to our everyday lives – from commemorative calendar events, to musical performances, to contemporary literature and art, to political contestations and struggles over memory, to "a fledging heritage industry" (ibid., 5). It is clear that the past and the constructed memories thereof matter to our present. The multiple cultural activities commemorating the past are emblematic of this constant fascination with remembering (or forgetting (ibid. 8–9)). If we are to account for what

⁶ That is not to say that memory studies do not engage with historiographic questions of 'what actually happened'. I return to this point below.

the past is to individuals or collectives, then it is pertinent to analyze and understand the present-day practices of memory-making.

This interest in contemporary memory-making is also motivated by an awareness of historical contingency⁷. Hayden White (1973; 1984; 1990) and Alun Munslow (2007a; 2007b) are two of the scholars who highlighted this contingency with their assertion that all history is narrativization. When we recollect a past event and provide its historical account, we articulate an ultimately contingent past, a process which Munslow refers to as "the authored model of what, how, when, why and to whom things happened in the past." (2007a, 6). I.e. historians use the narrative form in order to structure the chaos that is the past. As a result, White (1973, 29) argues that the narrative structures exert particular pressures on the arranged historical information. Further, he claims that subjective perspectives and the situatedness of the historian and archivist color this re-telling of the past, something Munslow echoes when he writes that "all history is situated, positioned and for something or someone" (2007a, 41 his emphasis). Thus, the broader argument of both White and Munslow is that history can only be experienced through the narrative form and therefore history is the articulation of contingent pasts that are partly fictive⁸. In that sense, White, Munslow, and others similar to their epistemological position to history, made what is commonly referred to as the linguistic turn (Paul 2011, 2), where narrative and contingency unsettled the historical discipline's epistemological foundation. Put formally, contingency was highlighted as precondition for historical articulations. As Chapman (2013, 323 his emphasis) writes,

history is always a reductive exercise of capturing the evidence of the past and transcoding it into an assimilable narrative

If we follow these notions of historical contingency, it is possible to widen the scope of how cultural phenomena contribute to what we think history is. It is perhaps less interesting to ask if historical fictions of the past are correct or incorrect, but instead, if they are believed, and if they are believed, why or why not? These questions motivate an attention to how fictions are produced, presented, and ultimately received as far as history and beliefs about the past are concerned. Popular history, as mentioned in the introduction, is one domain through which people form beliefs about the past, regardless of what historians might think about the validity of such cultural representations.

Therefore, the aforementioned linguistic turn in history has a two-fold component: One, claims about the past are less absolute and much more humble in their alleged truth-value; two, seemingly historical fictions play a role in forming beliefs about the past. This view implies that scholars interested in understanding the past and how contemporary beliefs about it are shaped also need to take seriously fictions as part of broader, collective notions of what the past is. The linguistic turn is therefore an emphasis on not only considering *what* we articulate about the past, but also focusing on *how* we articulate it and what effect this turn has on *what* we articulate (Chapman 2016a, 8–9). Thus, we arrive at the academic field of memory studies.

_

⁷ I employ the notion of contingency as related to the inherent subjectivity in historical writing per White's argument. This notion of contingency is later brought up in Laclau and Mouffe's theory on hegemony, but in a much wider sense that encompasses all forms of meaning systems as being contingent.

⁸ Fictive constructions of history means "neither entirely factual nor [...] entirely fictional" (Chapman 2016a, 8)

Whereas history and historiography are concerned with investigating sources, archives, and 'what actually happened' in the past, memory studies focuses on what people presently think about the past, regardless whether or not their memory is 'factually correct'. As Erll writes, memory is not in opposition to history, but rather "it is the totality of the context within such varied cultural phenomena originate" (2011a, 8). This means that history is one mode of remembering within the broader framework of memory studies. Erll (ibid., her emphasis) clarifies,

Historical memory takes place within comprehensive memory cultures, which usually also feature many other ways of remembering. 'History' is thus one symbolic form of reference to the past. In addition to history, other symbolic forms, such as religion, myth, and literature, contribute to the production of cultural memory. Likewise, historiography is one medium of cultural memory alongside other media, such as novels, architecture or rituals.

The question for memory studies is therefore not about historical sources that verify a singular truth about history, but rather an inquiry into the modes of remembering that occur between individuals and groups in sociocultural contexts. In the view of memory cultures as an approach to analyze the past, historiography is subsumed under the larger umbrella of memory. Thus, memory serves as such a wide category that encompasses multiple sociocultural phenomena, which can be studied across several scholarly disciplines. For example, Erll notes that memory can be approached from such varied perspectives as art history, neurosciences, psychology, sociology, cultural and media studies, and history, to name but a few (ibid., 38).

As memory appears to be a wide phenomenon that can be analyzed in a myriad of ways, the concept itself warrants further precision. What is of interest to the present investigation is two popular conceptualizations of memory – namely collective memory and cultural memory. First, I briefly explain what is meant by collective memory, before moving on to defining cultural memory and its relation to media.

5.1.1 Collective memory

Collective memory refers to the social dimension of memory. While it is perfectly possible for individuals to have memories of an event or experience, it is in the interplay between individuals and groups that memory attains life and 'movement'9. Maurice Halbwachs (1992) is credited with being the first scholar to address collective memory with the term 'les cadres sociaux de la mémoire' (ibid. 43), roughly translated to 'the social frames of memory'. Halbwachs focuses on memory as a social relation and establishes a collective framework between individuals and groups (ibid. 38). He emphasizes how people apply cognitive schemata when remembering the past and share such remembering with one another. This is how collective memory serves as "the creation of shared versions of the past, which results through interaction, communication, media, and institutions within small groups as well as large cultural communities" (as summarized in Erll 2011a, 14). Halbwachs'

⁹ Ann Rigney (2016) points out that collective memory has to constantly be reiterated and, like a swimmer, keep moving, even just to stay afloat and be remembered. This movement happens through mediation, circulation, and remediation.

importance for memory studies cannot be understated due to his emphasis on the social aspects of how we form beliefs about the past. He writes:

A remembrance is in very last measure a reconstruction of the past achieved with data borrowed from the present, a reconstruction prepared, furthermore, by reconstructions of earlier periods where past images had been altered (Halbwachs 1980, 68)

This quote underscores a central aspect of memory studies, namely the focus on the present when remembering, where contemporary memories are also created via previously generated memories. Halbwachs made both the social and the present central to early memory studies as captured in the general concept of collective memory. As such, his scholarship established the significance of the social frameworks we engage in when remembering the past and how such remembering relies on present-day practices. This emphasis on the present is the motivation for my research in the sense that I am less concerned with the past, but rather on how individuals and groups in the present use the past through producing or playing historical digital games.

Collective memory can be further dissected into subcategories. Here, Jan Assmann (2011) provides a clarifying distinction between what he calls cultural and communicative memory. Both concepts denote the movement of memory through either interpersonal communication (communicative memory) or through culture, such as institutions, traditions, and media (cultural memory). According to J. Assmann, the communicative memory used to be the primary mode of remembering the past, where family members would recount historical events to the next generation. With the advent of modernity and the establishment of national institutions, memory became more of a ritualized and institutionalized process seen in monuments, museums, literature, and later mass culture. J. Assmann (ibid., 109) therefore argues that cultural memory is the prominent form of remembering today. As such, his distinction is useful to highlight the fact that our understanding of history and the past is today highly dependent on culture, which then encourages scholarly attention and analysis.

Pierre Nora is another scholar in memory studies who introduces a similar distinction. He differentiates between what he calls 'milieux de mémoire' and 'lieux de mémoire' (Nora 1989, 7). *Milieux* refers to forms of commemoration that take place in direct interaction with eyewitnesses, such as in small-scale village societies, while *lieux* refers to large-scale sites of remembering with relevance to contemporary mass culture. In contemporary modern societies, spaces of memory have become "a symbolic element of the memorial heritage of any community" (Nora 1996, xvii). They are landmarks, museums, national flags, and even practices and expressions that refer to a communal past.

Nora's distinction between *milieux* and *lieux de memoire* runs parallel to J. Assman's separation between communicative and cultural memory in the sense that both scholars link memory's transition to modernity to an increasing importance of mass culture for collective memory. The decreasing importance of the nation state in formulating memories and inversely, modernity have paved way for a globalized media culture that Chiara De Cesary, Ann Rigney, and Erll call the transnational movement of memory (De Cesari and Rigney 2014; Erll 2011b). In transnational memory studies, memory travels across multiple contexts and is reconfigured and appropriated locally. This formulation draws attention to the interrelations and flows of memory between people through the connectivity of digital media technologies (A. Assmann 2014, 547; Reading 2016) orchestrated by global actors and

networks¹⁰. This historical development from communicative memory to institutionalized memory to transnational, global memory highlight the changes in cultural sanctioning of certain memory forms. As Robert Rosenstone remarks in his argument for the importance of the present for remembering the past, we "want our deep interest in and caring for the past to be expressed in forms congenial to both a contemporary sensibility and to intellectual systems consonant with our own era." (Rosenstone 2006, 3). It is for this reason that I now turn to cultural memory studies.

5.1.2 Cultural memory

As a result of the social, collective nature of memory, I now proceed to specify how to analyze collective memory when located in the domain of culture – i.e. 'cultural memory'. Here, I adopt Erll's definition (which is different from J. Assmann's use of the same term above). She (2011a, 101) writes that

Cultural memory can thus broadly be defined as the sum total of all the processes (biological, medial, social) which are involved in the interplay of past and present within sociocultural contexts. It finds its specific manifestation in memory culture.

Cultural memory refers to a mode of collective remembering that emphasizes "the cultural dimensions and symbolic forms of memory" (ibid. 8). Remembering and forgetting materialize in form of cultural expressions, which we use to form beliefs about and commemorate certain aspects of the past. By studying these phenomena, it is possible to ascertain how people form certain beliefs about the past and how they use cultural forms such as literature, film, monuments, etc. to highlight some aspects of the past and de-emphasize others.

Because of the usage of these cultural forms, we speak of an "inherent mediality of memory" (Erll 2011a, 114) that are dependent on technologies of memory (Sturken 2008, 75). This is because, as Rigney argues (2016), memory only comes alive through mediation, circulation, and remediation. Further, Erll states that non-genetic/-hereditary "memory on the collective level [...] is only possible with the aid of media" (2011a, 113), and both Erll and Rigney goes as far as to say that memory is dead if it is not remediated (Erll and Rigney 2009). Our relation to the past must therefore be "considered in terms of its mediation and remediation in the global present." (Hoskins 2001, 334). For example, in his study on the Russian remembering of the Soviet Union's efforts in defeating the

-

¹⁰ Already here we sense the impact of modernity on the movement of cultural memory. Future research could investigate how transnational movement of memory is conditioned by global power relationships, such as cultural imperialism (Boyd-Barrett 2015; Boyd-Barrett and Mirrlees 2020). The dissemination of cultural memory is conditioned by actors and networks run by multinational companies mostly located in the U.S., whose actions and technologies frame much of the distribution of these transnational cultural memories. As such, it is important to be critical of the 'globalization' of transnational cultural memory, since it very much involves neoliberalization and free market ideology controlled by private actors that commodify cultural memory (Timcke 2017). For example, Garde-hansen writes that "the controlling power of large media conglomerates that produce a great deal of the digital media we consume everyday, and provide and manage many of the very same digital production tools and networks that are seen by some as heralding a loosening of their grip. [...] Digital memories [...] involve a range of vertically and horizontally integrated media corporations" (Garde-Hansen 2009, 10) One attempt at accounting for the globalization and power over memory is Anna Reading's (2016) concept of the 'globital'.

German army in WWII, James Wertsch argues that we should "focus on the semiotic mediation of memory" (2002, 26) in order to pinpoint how we arrive at certain beliefs about the past.

Erll (2011a, 113) summarizes such a position when she states that "we must understand media and mediation as a kind of switchboard at work between the individual and the collective dimension of remembering" and that, readjusting Hallbwach's tenet on social frames, "what we are increasingly dealing with is, in fact, *cadres médiaux de la mémoire/medial frameworks of memory*." (ibid. my emphasis).

As the many references above already affirm, media is important for cultural memory. This also explains why visual media have received much attention in memory studies (Erll 2011a, 134). The importance of film and photography in cultural memory studies is underscored by Walter Benjamin when he claims that "history decays into images, not stories" (Ross 2014, 127). Studies of graphic novels, visuals arts, television, video installations, film, museum artefacts, photographs, "all the way to tattooed bodies and the Web" (Erll 2011a, 134) have therefore proliferated in the field of cultural memory studies. Reiterating the earlier discussion on the narrativization of history à la White, the analysis of media as part of cultural memory also implies viewing historical fictional visual media as legitimate sources for memory-making.

For this, Rosenstone (2006) argues that historical films, such as popular dramas, can leave a residue of knowledge that impacts historical and political discourse. Therefore, Rosenstone argues, we need to take fictional media into account because they are "seriously attempting to make meaning of the past" (ibid. 37). He argues further that the emotional impact of drama films through their dramatization and personalization of characters are potentially more memorable and impressionable in contrast to "slavish imitation of historical facts" (ibid. 54). As Rosenstone states, these historical facts are necessary, but not sufficient, for our understanding of the past. (ibid. 35). As such, their significance of non-factual sources for cultural memory should not be understated relative to 'factual' representations of the past and how these fictive representations are consumed (De Groot 2006). This is in line with Tobias Winnerling's (2014) argument that entertainment transposes factual history into an 'affective historicity', where its emotional engagement informs people's understanding of the past. This affective experience of history is echoed by Alison Landsberg (2004; 2015), who claims that mass-cultural historical cinema affect their audiences to such an extent that they form mnemonic limbs as a connection to the film's depicted past. Landsberg call this 'prosthetic memory' and it is a term that I critically interrogate in my second article by applying it to the digital game Mafia III. Therefore, an analysis of how mass entertainment such as film or games cultivate certain affective relationships in audiences is important in order to capture the dynamics of cultural memory through film.

Erll likewise states that most contributions to the field of cultural memory studies "seem to agree that indeed we cannot overemphasize the power of mass culture and its mass media to mould our images of the past" (2011a, 137). It is clear that, for instance, Hollywood as a mass cultural industry disseminates their products across the globe, which "has functioned strategically in the articulation and codification of the cultural past" (Grainge 2003, 4). Therefore, scholars need to acknowledge the position of popular culture as an "authentic memory text" (ibid). This connects well with how Erll sees media's relation to epistemology.

media do not simply reflect reality, but instead offer constructions of the past. Media are not simply neutral carriers of information about the past. What they appear to encode -

versions of past events and persons, cultural values and norms, concepts of collective identity - they are in fact first creating (Erll 2011a, 114)

Here Erll follows the observations made by White and Munslow that I covered earlier. Despite its fictive nature, popular culture, including historical digital games, is important for processes of memory-making. This is because popular culture construct understandings of the past that audiences themselves negotiate and potentially adopt as beliefs about the past. As such, media, even in their fictional and mass cultural forms, appear to play a significant part in cultural memory-making processes. It is therefore necessary to analyze these media and their usages in order to understand their potential impacts on processes of collective memory. Indeed, ignoring popular culture in the study of history and memory, "is to condemn ourselves to ignore the way a huge segment of the population has come to understand the events and people that comprise history" (Rosenstone 2006, 4). Joanne Garde-Hansen (2011, 2–41) summarizes the claims covered in this section:

it seems we are at a stage where popular culture has such a firm grip on the past that we need to turn our attention to big issues such as authenticity, reality, evidence, ethics, propaganda, and the commercialisation of the past [...] The position of media as simultaneous producer and saboteur of power is important here because it is impossible to think about memory and media without connecting it to popular culture and interpersonal communications.

With media being such a significant switchboard between individual and collective memory, it is perhaps surprising that little scholarship within memory studies has paid attention to the phenomenon of historical digital games (de Smale 2019b, 20). Within recent years, an increasing amount of scholars researching historical digital games have applied knowledge from memory studies to highlight processes of memory-making through playing historical digital games (Hubbell 2015; Begy 2015; Pötzsch and Šisler 2019; Sterczewski 2016; de Smale 2019a; 2019b; 2019c; Kingsepp 2007; Šisler 2016; Chapman 2016b; 2019; Hammar 2017c; 2017b; Hammar and Woodcock 2019; Sterczewski 2019; Kempshall 2015). However, relatively few scholars within memory studies have dealt with digital games as having a role in the formation of cultural memory (Kansteiner 2017). At best, digital games appear peripheral to established memory studies scholarship, even being entirely excluded in anthologies on so-called 'digital memory studies' (Garde-Hansen, Hoskins, and Reading 2009; Hoskins 2017). This omission is especially surprising given the notion that "the memory of a society depends on the available technologies of communication [...] of the individual society: these influence its forms, range, and interpretation." (Erll 2011a, 61). Since digital games are a relatively new technology that has been widely adopted and propagated across the world (Huntemann and Aslinger 2012), then scholarly attention to its role would seem essential. Indeed, Erll states that "changes in media technologies [...] play a decisive role in the transitions from one form of social memory to another." (2011a, 119). Therefore, it seems appropriate to take digital games seriously in understanding their potential impacts on memory-making and their role in broader mediated discourses on the past.

This lack of scholarly attention to digital games is the central motivation for this research project, as I place them as the central object of study as media of cultural memory. For example, in his seminal study on historical digital games, Chapman (2016a, 12) proposes the thought experiment of recalling the D-Day landings in Normandy during WWII. In such a recollection, it is less likely that the general reader would recall facts, maps, primary sources, and historical textbooks about the landing. Instead,

Chapman says, the general reader likely recalls images from popular media such as the film *Saving Private Ryan* or the game *Medal of Honor: Frontline* (EA Los Angeles 2002). This means that if we are to understand cultural memory in its multiple forms, academic analysis has to be brought to bear on historical digital games as well. Akin to the position of other cultural forms in remembering the past, games are potentially significant in contemporary popular culture¹¹, where millions of people regularly consume them (Newzoo 2019a; 2019b). In line with the aforementioned importance of popular culture for understandings of the past, then digital games are also considered potentially significant for how people arrive at certain beliefs about the past. Consequently, in order to capture the communication processes undergirding cultural memory, it is necessary to establish a conceptual approach to media analysis. I do this in the proceeding section on Hall's encoding / decoding model.

5.2 Encoding / decoding media

In order to conceptualize the communication process of media, and of digital games in particular, for cultural memory, I employ Hall's encoding / decoding model (1973) as an overall framework. While this model was originally referring to television, it speaks to other media communication processes as well. This enables me to structure my analysis of how historical digital games impact on cultural memory and historical discourse between three segments: production, game, and reception.

Hall's model is instructive for conceptualizing processes of communication via media, because he departs from a linear understanding between producer and receiver of a text (Hall 1973, 128). Instead, he establishes the process as a discursive relation in which both producer and receiver are embedded in specific contexts that predispose the so-called *encoding* and *decoding* of particular meanings in textual structures.

-

¹¹ Note that I do not argue that games are *definitely* significant for remembering. Rather the overall research inquiry should focus on *which* parts of culture convince us of the past, *how* they do so and *how effective* are they. The research done by Sian Beavers and Sylvia Warnecke (2020) on reception of memory-making media is one example of answering some of these questions.

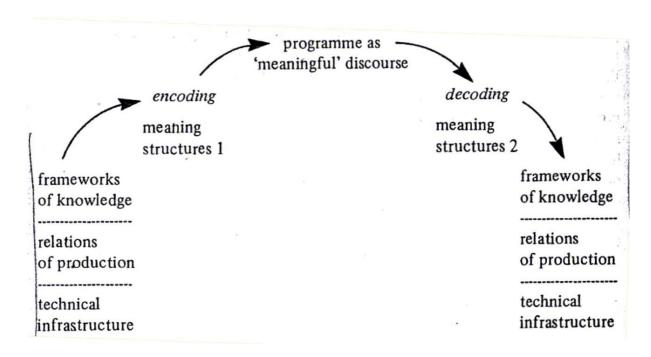


Figure 1 The encoding / decoding model (Hall 1973, 130)

Hall distinguishes between three moments in communication processes; *encoding*, *text*¹², and *decoding*. Both encoding and decoding are communication events that each rest on their own *frameworks of knowledge*, i.e. the discourses that inform the production or reception of the text. *The technical infrastructure*, meaning the available technologies that allow for the production, dissemination, and reception of the text. Finally, *the relations of production (and consumption)*, which refers to the economic relations between producer and receiver and how they inform encoding and decoding practices. I now detail encoding and decoding, respectively.

Encoding refers to the context of production where producers of media encode a meaning structure that ends up as a text, in Hall's words 'as meaningful discourse' (ibid.). Studying the moment of encoding in communication processes is important, because it reveals the way that meaning is reflected in media due to the creative decisions, norms, technology, and social relations of the agents producing media. The study of encoding is thereby helpful in order to understand cultural memory, because it identifies the reasons for why a media text represents the depicted past in the manner it does. For example, it motivates questions on which historical period to depict, whose perspectives to include, how the media technology constrains the meaning structure, and often how many will be interested and consume the media text in question – all according to the frameworks of knowledge, technical infrastructure, and relations of production and consumption.

The decoding moment in the communication process media identifies how audiences, users, and players of media interpret, negotiate, and even oppose the received text. Hall makes it clear that

_

¹² Text is referred to as programme above, but I instead refer to it as text in order to encompass my very wide definition of 'text' as any mediating meaning-bearing structure

¹³ Hall's use of discourse is meant to be understood in a narrow sense, only referring to the communication process between encoding and decoding. This narrow sense stands in contrast to this chapter's later introduction of Laclau and Mouffe who understand discourse in a wide sense. I elaborate on this in the section on hegemony.

reception is a moment where the original meaning-bearing structure as envisioned in the moment of encoding is not necessarily symmetrical. Different interpretative positions are enacted, namely the dominant, negotiated and oppositional strategy (ibid. 136-137). According to Hall, the dominant interpretation means that audiences decode the received text the way it was meant to be interpreted as envisioned by its producers. The negotiated interpretation refers to cases where audiences interpret and use the media text in ways that the text allows for, but not as the producers originally envisioned. Then, Hall sees the oppositional positon as unexpected interpretations or uses that subvert, contradict, or go beyond the originally intended meaning by producers. These three interpretative positions are advantageous if we are to account for the asymmetrical dynamics between producers and audiences, where the latter does not conform to the expected meaning-bearing structure.

In this manner, Hall's model acknowledges the indeterminacy of meaning in the relationship between media producer and audience. It is not a given that what producers encode into their texts is the same as what gets decoded by audiences. The model highlights the dynamics through which people use media in widely different ways to generate different meanings. The reason why Hall's model is specifically useful for my inquiry is that it "offers a fuller picture of what forms of power and resistance exist in users' relationships to [...] technologies." (A. Shaw 2017, 596, her emphasis). It allows for a separate categorization of the moments of communication between production, text, and reception, where each can be individually analyzed with attention to their respective contexts, while avoiding technological determinism (Dafoe 2015). Therefore, Hall's model provides a useful starting point for the research project by taking the discursive relationships into account across the divide between production and reception, while still acknowledging the influence of a text's meaning structure that users interpret and negotiate differently.

Before showing how encoding and decoding are manifested in the communication process of digital games, I now move to outline Hall's attention to power hierarchies. Central to Hall's scholarship and the communication model was the wish to understand the struggle over meaning between encoding and decoding (Hall 1997; 1999). For this, Hall employed the concept of hegemony as advanced by Gramsci and Laclua and Mouffe, among others (Hall 1985). To understand the relation between power and media's communication processes, it is therefore necessary for me to define hegemony, the purpose of which has also been central to my analysis of historical digital games and cultural memory. This is because an understanding of hegemony gives a context to the specific inquiries related to power struggles that occurs in and around cultural memory and historical digital games.

5.3 Hegemony

Rather than understanding the domination of subordinate groups through direct coercion by the ruling groups in society, hegemony refers to the social and cultural means through which those in power maintain their dominant position (Hartley 1994, 99). Therefore, with the analytical considerations of hegemony by view of Gramsci (1971), it is possible to refer to *power through consent rather than through coercion*. Gramsci understands this hegemony as a dominant constellation of certain worldviews, values, and perspectives that are "taken for granted, common-sense, naturalized ways of thinking about the world", as summarized by Vincent Mosco (2009, 188). This system can be referred to as a possible meaning system that structures an implicit consensus on how to explain the world. In more explicit political terms, the struggles between different hegemonies illustrate the struggle for explaining the world and for what is considered to be *prima facie* consensus. In such non-coercive instances, different groups and coalitions struggle over which meaning system is the hegemonic one.

This does not mean that the current hegemonic perspectives are a conspiracy established in backrooms, but rather the fundamental explanatory system that colors, coordinates, and categorizes the phenomena we experience. As such, the *concept of hegemony explicates relations through which subjects are ideologically positioned within discursive frameworks*. Through this explication, Gramsci showed that struggle over ideas as not reducible to class actors, but rather the subjectivity of historical actors (Laclau and Mouffe 2001, xii). As Hall also notes, Gramsci "is one of the first modern Marxists to recognise that interests are not given but have to be politically and ideologically constructed." (Hall 1988, 233). In this sense, Gramsci helped widen "the conception of revolutionary politics to encompass the social struggle over cultural and linguistic space." (Mosco 2009, 207) beyond the traditional Marxist view of class identity essentialism¹⁴.

Adopting Gramsci's development of hegemony as an analytical tool, Laclau and Mouffe (2001) would later develop a notion of discursive frameworks to what they called discourse theory ¹⁵ based on semiotics and post-structuralism (M. W. Jørgensen and Phillips 2002, 24). They considered discourse (in a broad sense) as a dialectic relation between multiple actors struggling to stabilize their meaning systems as the hegemonic one. As John Hartley (1994, 135) notes, the struggles between different hegemonies means that they

[...] can never be total. There are always emergent forms of consciousness and representation which may be mobilized in opposition to the hegemonic order. This means that a lot of work, called ideological labour, goes into the struggle between hegemonic and counter-hegemonic forms.

Therefore, Laclau and Mouffe do not talk about one single hegemony, but several, competing meaning systems that struggle with each other over becoming the dominant way of explaining the world. They do not become dominant simply because they provide the superior discursive frameworks, but rather because the most powerful group put it there (Laclau and Mouffe 2001, xii). In their view, hegemony is considered a set of articulation practices that construct meaning, which attempt to fixate an explanation of the world in a particular configuration. Yet this fixation is always in flux and ultimately impossible, because "every concrete fixation of the signs' meaning is *contingent*." (M. W. Jørgensen and Phillips 2002, 25, their emphasis). These articulations show that meaning is never given, but a product of social struggles through which different political positions clash and compete with each other over which will be the dominant worldview. In this sense, Laclau and Mouffe speak to the means of stabilizing temporary discursive orders and to the contingencies of what is considered to be common sense or truthful at a given time and place.

_

¹⁴ This expands on Marx and Engels who state that "The ideas of the ruling class are in every epoch the ruling ideas, i.e. the class which is the ruling material force of society, is at the same time its ruling intellectual force. The class which has the means of material production at its disposal, has control at the same time over the means of mental production, so that thereby, generally speaking, the ideas of those who lack the means of mental production are subject to it. The ruling ideas are nothing more than the ideal expression of the dominant material relationships." (Marx and Engels 1968, 6)

¹⁵ Here it is important to note that this is not a semiotic system as some may understand discourse theory to mean. Rather, their discourse theory refers to a post-Marxist formulation of the struggles over dominant meaning systems.

The state of society and explaining the world are temporary, constructed, and most important of all, not necessary. Laclau and Mouffe conclude thereby that articulations of political objectives and imaginaries are crucial to form political movements that unite different fragments of society into a mobilized coherent whole. Populist articulations are able to form chains of equivalence across apparent divisions to facilitate radical politics. Such formations are according to Laclau and Mouffe always contingent relations, because such alliances are temporary and contested. Despite this contingency, the formation produces a hegemony that is "a moral, cultural, and symbolic order" (Petitjean 2014, para. 7). Thus, we arrive at multiple, competing meaning systems that are constituted by contingent articulations of a given material reality, whose purpose is to offer and provide stability to a dominant meaning of the world and its politics.

As such, the theoretical contributions by Gramsci, Laclau, and Mouffe allow us to identify the forces that establish what is commonly established as 'common-sense'; how this consensus is temporary and contingent; and how this establishment of dominant systems of meanings produce subjects within discursive frameworks. Hegemony enables an account for the complexities through which ideas, value systems, and intellectual hierarchies are established as a dominant map through which we make sense of the world. As such, Gramsci's concept of hegemony addresses consent as a tool of domination rather than coercion, while Laclau and Mouffe pinpoint contingency of hegemony. In short, hegemony refers to

the ongoing formation of both image and information to produce a map of common sense which is sufficiently persuasive to most people that it provides the social and cultural coordinates to define the "natural" attitude of social life. (Mosco 2009, 206)

With this understanding of hegemony in mind, I now proceed to situate it within the field of memory studies by view of Bertrand Molden's concept of *mnemonic hegemony*. This is done to illustrate how hegemony informs our remembering or forgetting of the past, and in turn, how this relates to cultural memory and media.

5.3.1 Mnemonic hegemony

Given Munslow's and White's perspectives on the instability of memory and the narrated nature of history, hegemony also helps identify why some pasts and the perspectives on them are dominant, while others are marginalized or entirely forgotten (Radstone 2008). Molden's (2016) mnemonic hegemony helps answer this, because it explicates the structures and processes that create consensus around the past. According to him, mnemonic hegemony is "built by prioritizing some memories over others according to the specific power constellations of a given society." (ibid. 126)¹⁶.

Mnemonic hegemony refers to the dominant discursive forces that privilege certain ways of remembering the past, where "access to and control over the means of communication and diffusion of historical narratives are of utmost importance for the establishment and maintenance of mnemonic hegemony." (ibid. 134). This is in line with Erll's observation on media, which "tends to solidify cultural memory, creating and stabilizing certain narratives and icons of the past." (2011a, 141). Even the technologies we employ to investigate and mediate the past "embody relations of power arising

_

¹⁶ This is for example seen in the imperial amnesia (Gopal 2016) or the silencing of the past (Trouillot 1995) that nation states engage in in order to exclude, marginalize and forget their uncomfortable pasts.

from particular historical, political and economic circumstances" (Reading 2016, 22). Therefore, mnemonic hegemony puts questions of power over the past to the forefront of analysis. For example, Joanne Garde-Hansen (2011, 50) states that:

powerful media and cultural institutions whose business it is to record, archive and make accessible the everyday life, major events and social and cultural heritage of nations and communities, invariably write those narratives in ways that glorify not only themselves but the cultural hegemony of the societies they serve.

It is for this reason that White's and Munslow's insights are important for how to approach history. Their arguments destabilized master narratives sanctioned by state or other institutions by alerting us to the inherent contingency and artificiality of all articulations about history. As such, Molden's application of hegemony to memory-making processes allows us to more easily pay attention to the power hierarchies that predispose the creation of certain memories over others. This is especially apt for the analysis of cultural memory and the media, which I now turn to juxtapose with each another.

5.3.2 Mnemonic hegemony, culture, and media

Given that media occupy a central role in the movement of cultural memory, it is important to question the relation between media and mnemonic hegemony. As illustrated in numerous scholarship, media is a key part in establishing and reinforcing the hegemony in the societies where they proliferate (Molina-Guzmán 2016; Artz 2015; Dyer 2002; D'Acci 2004; Herman and Chomsky 2002; Alford 2015; Omi 1989; Omi and Winant 1994; Hall 1999). The reinforcement of hegemony through media does not mean there is a direct correlation between media and power, but rather that they *shore up* and *institute* hierarchies. Media 'effects' is a highly contested topic and beyond the scope of this dissertation, but we can at least acknowledge media's significance in reinforcing or even destabilizing already existing dominant ways of seeing the world (Dyer 2002). Therefore, the role of media in shoring up the existing hegemonic perspectives applies to cultural memory as well. This has for instance also showed to be true in the case digital games (Cassar 2013). Below, I show how hegemony in media can be made evident through an analytical emphasis via intersectional theory.

Struggles over hegemony in media are made evident, among other things, along axes of identity markers, such as gender, race, sexuality, age, class, ethnicity, language and bodily ability. Kimberly Crenshaw (1989; 1990) is credited with coining the term *intersectionality* in terms of combining these traits as interlocking systems of oppression in society¹⁷. Such intersectional lenses on oppression have been widely used in the analysis of media to ascertain the interlocking layers of mediated oppression (Lykke 2010). Therefore, intersectional analysis of media is also able to pinpoint the contestations over the politics of representations and identity. For mass media, especially, this is an important approach. As Patricia Hill Collins points out, "as mass media grows in importance, it creates, circulates, and reflects ideologies of gender, sexuality, and race that mask contemporary forms of race and class segregation." (2000, 35). To conceptualize an intersectional analysis, Collins suggests the matrix of domination to "describe social structures of domination" (ibid.), which places power at the

¹⁷ Similar work in a US-American context have previously been done with examples such as Sojourner Truth (Brah and Phoenix 2013), Angela Davis (1983), the Combahee River Collective (K.-Y. Taylor 2017), and Audre Lorde (2007), where multidimensional analysis reveal their interdependent features of signifiers such as class, race, gender, and sexuality.

center of a circle, while those while those in the periphery of the circle hold relatively less power. The dimensions in this matrix are race, age, class, sexuality, language, ability, and gender. In a typical Western society, the matrix of domination would emphasize whiteness, masculinity, heterosexuality, upper-class, English-speaking, adulthood as being the traits closest to power and less prone to discrimination (ibid). These observations on identity is similarly located in discussions over cultural memory and media, because cultural memories "have important implications in terms of identity and belonging, as well as for justice, conflict and social change." (Reading 2011, 382).

As I also show in my quantitative content analysis, this matrix of domination in relation to memory is relevant for locating mnemonic hegemony in historical digital games. It reveals the interlocking regimes of representation in the dataset that I collected. Moreover, the intersectional approach is important with reference to my close readings of Freedom Cry and Mafia III. I analyze mnemonic hegemony at the level of text by, for instance, focusing on the games' formal devices. This is because "textual structures that systematically cue particular forms of engagement in that they establish diegetic subject-positions the viewer is invited to identify with" (Pötzsch 2013, 128). Pötzsch is here referring to formal devices such as character engagement that positions audiences to identify with certain characters. Camera framing and narrative focalization will usually emphasize the protagonist more so than other characters and thereby invite a dominant reading of the media that makes audiences empathize with the protagonist more than others. In this vein, by emphasizing intersecting categories of race, gender, and nationality in my analysis of Freedom Cry and Mafia III, I show that by placing players into a marginalized subject using any means to fight oppressive power structures, these games intervene in mnemonic hegemony. Therefore, qualitative and quantitative analysis of media with respect to intersecting levels of oppression help uncover the dynamics of mnemonic hegemony in media.

5.4 Summary of history, cultural memory, media, and hegemony

To sum up the above section, I have established the role of memory studies, cultural memory and their attention to how understandings of the past are constructed through media. I then provided an overview on how to analyze media via Hall's encoding and decoding model. Via the concept of hegemony, I highlighted the power struggles and contestations framing media communication processes and therefore cultural memory. This hegemonic struggle can be identified in media, among other things, via black feminist theory on intersectionality that explicates the politics of identity and representation through Collins' matrix of domination. The three objectives for this multilayered theoretical overview is to: One, show how memory-making are dependent for media; two, that media communication processes involve producers who encode meaning into a text, which audiences then activate, negotiate, or oppose, i.e. decoding; three, these media processes are structured by prevailing power hierarchies in the form of hegemony that can be analyzed, among other things, via intersectionality. This makes evident how politics of identity manifest in media. As such, the preceding sections have illustrated how hegemony, media, and cultural memory are highly interrelated and inform one another.

I now narrow my focus to historical digital games. I proceed so by categorizing my analysis of them via encoding, decoding, and their in-between tensions, respectively. These approaches guided my analysis to locate the discursive effects and hegemonic relationship in historical digital games between

the divide of encoding and decoding. Overall, these moments structure my research project's approach to the analysis of cultural memory and digital games.

5.5 The encoding and decoding of digital games

As mentioned, Stuart Hall's model enables a categorized overview of the communication process, while also acknowledging the discursive dynamics of hegemony. The encoding and decoding distinction structures my analysis of historical digital games. When analyzing their encoding, I took advantage from the insights found in the political economy of communication. To analyze their decoding, I relied on game studies research on players. Finally, I explore the tensions in between encoding and decoding.

5.5.1 Encoding and political economy

With attention to how digital games are encoded, Shaw (2015, 6–7) states in her critical analysis of *Assassin's Creed 3* (Ubisoft 2012) that

[...] we can look at texts, like historical games, as products of cultural industries whose products are shaped to appeal to an imagined primary audience. [...] only by piecing together several studies can we begin to the see the entire assemblage that informs how history is constructed in these games.

By investigating how historical digital games are developed with an emphasis on the discourses of knowledge, technologies available, and the relations between production and consumption, we gain a fuller understanding of how games come about and end up articulating the past in the ways they do. To analyze these moments of encoding historical digital games with attention to hegemony, my research project has employed the political economy of communication as conceptual lens.

Mosco defines the political economy of communication as "the study of the social relations, particularly the power relations, that mutually constitute the production, distribution, and consumption of resources, including communication resources." (2009, 2) Including such an approach to the encoding of games helps to identify the power hierarchies, tacit pressures, and material structures in their production, which in part predispose the meaning structure of the game as media text. As mentioned, producers of media decide on what features of the past they want their text to represent – which historical period, what characters, whose perspectives, what ideologies, which visual art direction, sound motifs, affordances, and so on. This is what Chapman refers to as the developerhistorians who "make meaning about the past through the form of digital games" (2016a, 15). This means that in order to ascertain the encoding of a given historical medium, investigating developerhistorians, economy, norms, available technologies, and so forth helps understand the why and the how of a game's encoded meaning structure. This is especially important if we are to answer Hall's contention that "the problem about the mass media is that old movies keep being made" (1992, 10), insofar as our analysis of media seeks to explain the reproduction of the same old types of media. This is precisely the point that Shaw makes when she wants to move beyond the limiting frames of marketlogics and media effects in the conversation on media representation:

The total replication of the same ideas over and over again—that's where representation matters. (Aronczyk 2016)

Political economy of communication also helps to identify how consolidation of power over communication functions as a resource that "rewards market position with privileged status within social hierarchies." (Mosco 2009, 220). This market position is maintained through the consolidation of communication resources, which in turn can be used against any potential challengers. This is for example seen in the digital games industry, where most of the same major companies have dominated the top ten positions in the market (Kerr 2017). Moreover, as EEDAR's research revealed, these market positions allows their holders to gobble up the majority of the revenue, where 12 percent of the game released in between 2012 and 2017 accounted for 75 percent of total revenue in the games industry (Zatkin 2017, 38:50). In that sense, political economy of communication draws attention to the discrepancies between different actors and the horizontal and vertical integration of companies that maintain their dominant market position. As Mosco (2009, 224) summarizes,

Media power, which gives those with control over markets the ability to fill screens with material embodying their interests, tends to structure the substance and form of polysemy, thereby limiting the diversity of interpretations to certain repeated central tendencies that stand out among the range of possibilities, including those marginalized few that diverge substantially from the norm.

Here Mosco's main claim is that the power over media productions *structures* the multiplicity of meanings attached to media texts and their meaning potentials. This point is especially evident in the quantitative analysis that I introduce later in this chapter. While some might argue that the mechanics of the market would cater to multiple unique offerings based on a diverse set of consumer-demands, Mosco and also Lee Artz (2015, 167) argue that the power of media production entails an overall homogeneous picture. I.e. the consolidated power of media companies means that their centralized, corporate structure results in a limitation of possible meaning-bearing structures that align with hegemonic frameworks of knowledge, technical infrastructure, and relations of production and consumption. Mosco's argument, therefore, is an attempt to bridge the divide between encoding and decoding, where the former limits the latter along dominant, central tendencies. I return to this line of argumentation following my present outline on decoding in digital games below.

5.5.2 Decoding and reception

By placing the analytic emphasis on player perspectives, performances, negotiations, and oppositions to games, it is possible to ascertain the decoding in digital games. Such research can reveal the tensions between production and reception in digital games and play (A. Cote and Raz 2015), as well as how they are adopted, appropriated, and reconfigured in local cultures (Shaw 2010). As Penix Tadsen argues, much knowledge can be gained

[...] by understanding games as complex technological and cultural products whose creation, circulation, consumption and meaning are shaped by concerns and practices that are fundamentally local and situated in nature. (Penix-Tadsen 2019, 6)

For example, the anthology *Gaming in the Global South* (Penix-Tadsen and Frasca 2019) collects articles that provides "a glimpse of video games and game cultures in the Caribbean, Indian subcontinent, Middle East, Asia-Pacific region and Africa" (Penix-Tadsen 2019, 6) on the often-overlooked player cultures that negotiate and appropriate games differently in areas usually considered ""peripheral" to the global centers of technological production and consumption." (ibid.) These articles gives insight into how globally produced games are adopted and reconfigured in the local by

players who re-interpret, negotiate, or oppose the meaning potentials in an otherwise hegemonic game. This decoding is also seen when players take on 'external sources' such as games and transform them into something subjective and meaningful *for themselves*. The appropriation of remembering the past through digital games is also evidenced in my research on *Freedom Cry* and *Mafia III*, where players activated and adopted the games' memory-making potentials to their own context. With regard to historical digital games, Souvik Mukherjee has also highlighted how the decoding position interprets and understands these games differently. For example, players originating from the erstwhile colonies are aware of the hegemonic portrayal of their countries, languages, and cultures. As he (2018, 508) writes.

These games' portrayal of the colonies is often simplistic and contains inaccuracies that are immediately obvious to players from these regions.

As such, the position of the player may provide a different perspective on the same game. The practices and multiplicity of player positions thereby reveal the dominant, negotiated, or oppositional strategies of playing historical digital games.

The discursive relationship between the encoded game and its decoding is also explored via Tom Apperley's research with what he calls 'counterplay' (2010). Counterplay accounts for the resonance of the 'digital game ecology' (Chapman 2013), where resonance refers to the rhythmic tension between the globally produced game and the local negotiation and appropriation of it. Via this local context, counterplay is made possible and "offers, and affords, players the opportunity to: deliberately 'resist' or ignore coded messages, create aberrant outcomes, and even to change the message." (Apperley 2010, 107). As such, Apperley captures some of the complexities in which situated play arises in the encounter between the globally produced digital game, and the local, everyday social and material practices that inform the multiplicity of player negotiations of the global game. Again, this dynamic is what Apperley classifies as the 'resonance'.

Chapman adapts this understanding of resonance to the playing of historical digital games with his term 'historical resonance'. This can be understood as "the establishment of a link between a game's historical representation and the larger historical discourse, as the player understands it" (2016a, 36). This enactment of historical resonance can be activated via what Chapman calls configurative resonance or dissonance. Configurative resonance refers to player performances that align with broader historical discourses in the 'global'. Meanwhile, historical configurative dissonance refers to instances where players disrupt a game's attempt at establishing resonance by playing against the grain or performing counter-factual play that contradicts or subverts the game's tacit depiction of the past (Peterson, Miller, and Fedorko 2013; Andersen 2015; Chapman 2016a, chap. 2).

An example of this dissonance is Mukherjee's (2015) demonstration of how some Indian players of *Empire: Total War* (Creative Assembly 2009) played the game counterfactually. The game purports to simulate the colonization of the world in the 18th century, where players can take on the role of the various empires at the time. Here, Mukherjee showed how Indian players took on the role of the Indian empire and used their forces to colonize the United Kingdom, thereby creating historical dissonance. This example affirms how both historical resonance and dissonance are contingent on the local context in which players position themselves toward the global. As such, historical resonance or dissonance are activated in the relation between the game and players' own understandings of history. Other examples of how players appropriate historical digital games demonstrate how players generate

historical dissonance (Apperley 2018; Fisher 2011), while others reveal their use in creating historical knowledge (O'Neill and Feenstra 2016) and masculine identities (Healey 2016; N. Taylor and Voorhees 2018a). Stephanie de Smale (2019a, 143) analyzed young Bosnian players' negotiation and circulation of the Yugoslav War through *This War of Mine* (11bit Studios 2014), as well as the circulation and translation of memory through online platforms like Youtube that discussed and recontextualized the game's memory politics (de Smale 2019c).

As such, in the decoding in historical digital games, we find multiple approaches and findings on how players play them. What is important is the fact that their practices of play reveal the dynamics of games as complex systems. Researchers can also prudentially employ players as co-researchers to give better insight into how games function as negotiated media objects (K. Jørgensen 2012; 2019a) as I explained in the section on the methods of this research project.

If players therefore are able to appropriate games and even play counterfactually, the question is to what extent are they able to change the meaning-bearing structure of the game? Do the 'global' game really matter if all players are able to activate counterplay? This would stand in opposition to Mosco's earlier claim that the diversity of possible interpretations follow "certain repeated central tendencies that stand out among the range of possibilities" (2009, 224). Therefore, it is beneficial to resolve the tension between encoding and decoding. This question is what motivates the subsequent section.

5.5.3 Tensions between encoding and decoding

While player perspectives are crucial to understanding the function of historical digital games, the question still remains on how often players actually can subvert or change the game's meaning structure in the moment of decoding. While it is possible for players to counterplay the global game or play oppositionally, I argue that this does not negate the importance of the meaning-bearing text in the first place. Shaw states to this predicament that

Designs and environments like media representations do not tell us what to think or do, but they do shape what we think with. (2017, 595)

This point fits nicely with the way that digital games structure or shape the ways that players play. Players are still able to use the game differently, but the game still structure their practices of play. As Shaw writes, media "exist within systems of meaning that guide, yet still do not determine, how they are interpreted." (ibid.) Given this observation, and Mosco's argument on the diversity of interpretation following central, repeated tendencies, it is therefore still possible to stress the importance of encoding and the game itself. For example, Soraya Murray states that even though players actively filter the meaning from the games they play, it does not mean we should "downplay games' persuasiveness and profound rootedness in the project of imperialist expansion, and reification of patriarchal values." (S. Murray 2017a, 86). Chapman (2016a, 37-38) reiterates this limitation in relation to how historical digital games:

[...] have limits and thus representation always emerges from the tension between what the player is allowed to do and what they choose to do (or at least attempt)" (Chapman

Therefore, in this section, I claim that the interpretative capacity of players does not diminish the hierarchical status of the meaning potentials inscribed by game developers and publishers at the level of encoding. While Graham Murdock and Peter Golding did not refer to digital games in the following

quote, their argument on the relationship between media producers and audiences is valuable for this discussion:

To describe and explicate these interests is not to suggest a deterministic relationship, but to map the limits within which the production of mediated culture can operate. (1979, 226–27)

In this sense, games as meaning-bearing structures can be regarded as spaces that limit how locally enacted interpretations via practices of play can operate. The affordances encoded into historical digital games predispose the possible ways players can play, while the discourse itself is structured by hegemony. In this sense, Murdock and Golding's argument on mass media also applies to my discussion on cultural memory and historical digital games.

I propose that attention to the encoding and decoding provide a more holistic analysis of the dynamics of cultural memory, especially with regards to *mapping the limits within which cultural memory can operate* and *how* and *why* these limits are imposed. The goal of a comprehensive account of the significance of historical digital games for how people remember the past is, on the one hand, to analyze the structure of the moment of encoding as the reason for the ways historical digital games appear to players as meaningful discourse. On the other, to account for the ways that players activate, negotiate, and even oppose the meaning potentials of the hegemonic game. As Artz (2015, 12) summarizes,

[...] the cultural meaning and consequence of any text have as much to do with the social and political context of reception as they do with the sender-receiver dynamic

To address this sender-receiver dynamic and the social and political contexts, I have employed the concept of memory-making potentials. I elaborate on this concept within cultural memory studies via Erll later in the subsequent section, but it nevertheless necessitates a brief explanation here. Memory-making potentials refers to certain meaning potentials of a given text without claiming that these meaning potentials are activated in all possible cases of play. The memory-making potentials can then be activated differently along dominant, negotiated, or oppositional paths, while still acknowledging the merits of a formal game analysis. Thereby, memory-making potentials bridges the tensions between encoding, text, and decoding, where first, game developers endow the meaning structure of the game with *meaning*, which, secondly, game analysis then *identifies*, that then thirdly are activated, negotiated, or contested in *potentially* different ways by players. Given this concept and ways to identify these potentials, I now move away from decoding and proceed to establish the analysis of digital games, and more specifically, historical digital games and their *memory-making potentials*.

5.6 Game analysis

Before outlining ways to conceptualize the analysis of games, I first need to adapt Hall's model to digital games. This is because Hall primarily talks about television in his article. Shaw suggests that 'new media', i.e. digital technologies such as the Internet and digital games, require both interpretative and *configurable* forms of decoding (Shaw 2017). Decoding historical digital games is both an activity of interpretation, but also of use, because they require input by their users to change their state.

In adapting Hall's model, Shaw uses the concept of affordances (Gibson 1977; 2015) to state that new media have certain inherent possibilities that users then negotiate and configure themselves to produce

specific outcomes. Affordances can thereby be understood as the *action possibilities* that environments offer agents to act with or within. Designed machines, objects, and therefore games, constrain and afford certain actions for players (Norman 1988). The term has then been adapted to media studies in order to bridge the gap between the designed action possibilities of a specific medium and how its users can configure these (Nagy and Neff 2015). Affordance theory is useful when analyzing media because it identifies how certain uses and behaviors corresponded with the way new media are designed, while still acknowledging that users negotiate and activate these affordances differently. This rings especially true in the case of digital games, due to the fact that they are designed objects that constrain or enable certain uses that players activate and configure differently (Flanagan 2009; Sicart 2008). I expand upon this configuration of games by defining them as 'cybermedia' in the subsequent section.

5.6.1 Games as cybermedia

Digital games appear as a composite form of multiple media (Jayemanne 2017, 5). They can represent text-based narratives, film sequences in the form of so-called 'cutscenes' and intro films, graphic novels, online chat rooms, management sheets, and as rule-based systems that players interpret and configure, among many other media forms (Linderoth 2015; Calleja 2010). In order to analyze such a complex object that is able to take multiple forms, scholars have suggested different conceptual models in order to provide an approximation to their ontology (Fernández-Vara 2014; Aarseth 2003; Consalvo and Dutton 2006; Apperley 2006; Patri Lankoski and Björk 2015; Carr 2017). I will not dedicate too much time on these different models, but instead offer one general approach on how to account for their distinct *game form* that is vital for the overall argument forwarded in this dissertation. For this, the cybermedia model developed by Espen Aarseth and Gordon Calleja (2015) suggests a viable framework.

Aarseth and Calleja (ibid. 6) classify their game ontology as a triadic relationship forming the game object – the *sign*, the *mechanical system*, and the *materiality* – that is then experienced by *players as a perspective* on this game object. Its triadic approach is therefore instructive if we are to capture the distinct nature of games as not just a semiotic form, but also as mechanical and material properties, wich are perceived by players. I now go through each of these aspects in the cybermedia model.

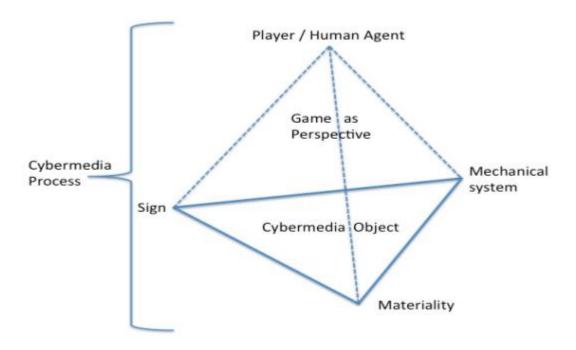


Figure 2 cybermedia model (Aarseth and Calleja 2015, 6)

Broadly speaking, digital games are characterized by a visible 'surface layer' that players interpret and experience the game through – think of the screen and speakers conveying audio, text, and imagery to players. This is what Aarseth and Calleja call the sign. It is through this aspect that the audiovisuals of the 'gameworld' are visible to players and through this that they perceive the game. Thus, the level of sign of a digital game "refers to the interpretable, "surface" representational elements that players read/observe in order to be able to use/play the game." (ibid. 7)

'Underneath' this surface layer, games also have a mechanical or rule-based layer that change the state of what is being displayed on the screen and what is heard through the speakers in line with the input by players. Aarseth and Calleja write that the mechanical system refers to "the machinic operations which structure the process, e.g., to switch from one state to another, or simply to change some informational condition, great or small." (ibid.) Digital games are procedural due to the computer's "defining ability to execute a series of rules" (J. Murray 1997, 71) that partly structure and predispose player actions. Game states change according to players' configuration of them, but these states remain bound by the rules through the algorithmic nature of the software. At the most basic level, players interpret and configure games via the interplay between the sign and mechanical system. This means that games are, at the very least, dual in how they present meaning for players to engage with the signifier that can be changed at the behest of player action (i.e. configuration and manipulation). In this sense, games are defined by the tensions between control and agency (Sicart 2009, 118). This means that in order to analyze games, and especially digital games, it is not sufficient to only focus on the sign at the level of representation – we must also look into the mechanical system and how it structures the representation and its possible states.

The third part on how to analyze digital games is by focusing on their material properties. On a concrete level¹⁸, the materiality of the game object refers to the physical, material instantiation of the game in question, such as the hardware that powers the software, the tactile interface between player and game like the touchscreen, controller, or a mouse and keyboard. A game's material property will, according to Aarseth and Calleja, "influence its form and experience to varying degrees." (Aarseth and Calleja 2015, 7), as for example with the material difference between the boardgame *Catan* (Teuber 1995) versus its digital conversion (Castle Hill Studios 2004). Thus, the cybermedia model's attention to the materialities of games provide an 'adequate analytical tool' that helps account for the differences between different physical versions of a given game object.

Finally, in analyzing games and looking at the triadic model of a game as sign, mechanical system, and materiality, it is also crucial we take into account the agents (human or non-human) configuring and interpreting games, or even just spectating them. Indeed, Aarseth and Calleja state that, ultimately, "games are thus an individual or a group's perspective on the perception of a cybermedia object." (2015, 7). Including perspectives on the game object via player performances allows formal analysis to be flexible and richer in capturing the complexities through which people play games, as I also showed in the section on decoding of digital games and the first and second research article.

Shortly stated, Aarseth and Calleja's cybermedia model manages to capture the game object as material, semiotic, and mechanical that in turn is interpreted and configured by players. I now move from the cybermedia model to the specific genre of historical digital games.

5.6.2 The analysis of historical digital games as cultural memory

Following Chapman, I define historical digital games as "those games that in some way represent the past or relate to discourses about it" (2016a, 16). This genre has also lead to the establishment of the multidisciplinary field of 'historical game studies' (Chapman, Foka, and Westin 2017)¹⁹.

In adapting the cybermedia model to historical digital games, the triadic relationship between semiotic layer, mechanical system, and materiality comprise the game object that "produce meaning and allow the player to playfully explore/configure discourses about the past" (Chapman 2012, 42). Moreover, if we are to determine how digital games represent history for players to play with, "the game theorist must talk about actions" (Galloway 2004), which the mechanical system allows players to enact and perform through. I.e. historical games give players the opportunity to perform and enact their agency within 'historical problem spaces' (McCall 2012). It is thereby fruitful to investigate what type of affordances are given to these players, and which ones are the dominant ones. I followed this

¹⁸ While Aarseth and Calleja do not mention this, material aspects of games can also be analyzed on a broader level. This can be through the conceptual frames of embodiment of players, the design of the technologies, the ecological impact of gaming hardware, and finally the overall political economy that frames the production of hardware and software (Packer and Wiley 2012; Pötzsch 2017a). This is qualified by the observation that "all signification has an immediate material dimension" (Packer and Wiley 2012) and the playing of digital games always are "within a set of materialist frames" (Jayemanne & Apperley, 15), and therefore it is necessary to account for the "machine, body, and social situations of play." (ibid., 7).

¹⁹ The broad definition of the field is "the study of games that in some way represent the past or relate to discourses about it, the potential applications of such games to different domains of activity and knowledge, and the practices, motivations and interpretations of players of these games and other stakeholders involved in their production or consumption." (Chapman, Foka, and Westin 2017, 362)

observation in my analysis of both *Freedom Cry* and *Mafia III*, as well as my quantitative content analysis. In each study, I analyzed how the selected games allow players to resolve conflict, usually through violence, which comprises the majority of the time playing these games.

Therefore, to adequately capture how digital games convey the past, Chapman (2012) suggests that analyzing the 'form' of historical digital games, and not just their 'content', underscores the specific ways that they as games generate beliefs about history²⁰. A consideration to form is important because such an approach tells us not just *what* is articulated by specific historical digital games, but also *how* it is articulated (Chapman 2016a, 18), where the latter influences the former²¹.

This formal analysis is for example also evidenced in my article on *Freedom Cry*, where I demonstrate how the game endlessly reproduces slave ships to frame "the historical event through a procedural rhetoric that demonstrates how unassailable the structural and systemic nature of the slave trade was if one chose to resist as an individual." (Hammar 2017c, 380). Thereby, a formal analysis of historical digital games addresses the procedural ways through which games generate meaning about the past. This is where the triadic approach of the cybermedia model helps navigate my formal game analysis in the first and second article, where signs, mechanical system, and materiality structure the argument, with players as perspectives on the game object.

With regard to cultural memory and digital games, Holger Pötzsch and Vit Šisler (2019) propose to view games as a 'history as simulation'²². This approach emphasizes the selection processes behind the creation of historical representations and highligts the performative and configurative aspects of games' relations to the past. Games as virtual spaces, they write, "enable more or less significant choices in the context of (necessarily simplified) past settings" (Ibid. 6). These choices in historical games enable players to "bring forth series of conditioned representations that are then read and negotiated by audiences." (ibid.). Pötzsch and Šisler's analysis is particularly useful for this project, because they employ methods established in cultural memory studies via Erll, which "directs attention to the intertextual connections between a given historical representation, available documents, and a wider historical discourse." (ibid. 10).

Based on the above section, I have established how to understand digital games as cybermedia, where it is possible to analyze their game form at the level of sign, mechanical system, and materiality, that is enacted and perceived differently by players. In order to properly ascertain the meaning-making of historical digital games, a proper analysis pays attention to this game form and how it particularly

²⁰ Chapman suggests a comprehensive analytical metalanguage that attempts to capture "the core structures and properties of historical games, their language of representation, their ludic aesthetics of historical description, their implications for history and the opportunities that these create" (2016, 18), where the categories are simulation style and epistemology, time, space, narrative, affordances. However, going into the detail with this model is beyond the scope of this introductory chapter.

²¹ For instance, Uricchio (2005, 333) states that an analysis of historical digital games could pay attention to their formal relationship to history, where a game's mechanical system and its affordances relate to historiography. In other cases, Kapell and Elliott (2013, 14) point out that digital games have become "the ideal medium for teaching the lesson of [historical] contingency", due to the mechanical system enabling players to create multiple "historical representations emerging through practices of play" (Pötzsch and Šisler 2019, 7)

²² Their concept is inspired by Rosenstone's (2006, 134) view of the drama film as 'history as drama'

generate meaning about the past. Here I showed how, among others, Chapman's approach to the form, and Pötzsch and Šisler's attention to cultural memory-making are conducive for analyzing and understanding historical digital games. With this in mind, I now proceed to outline Erll's multi-level analysis of media's role in cultural memory while illustrating its usefulness when applied to historical digital games.

5.6.3 Erll's intra-, inter-, and -pluri-medial analysis of games

Erll (2008, 390) proposes a conceptual approach that draws attention to the *intramedial*, *intermedial*, and *pluri-medial* levels of a media text. The intramedial level focuses on the rhetorical strategies and formal devices that media use to establish historical fictional universes and motivate certain types of memory-making²³. By analyzing a media text at this level, special attention is paid to the form through which the past is presented. In the case of digital games, such an analysis could potentially emphasize the procedural rhetoric that a historical digital game facilitate.

The intermedial level similarly looks at these formal properties of a media text, but relates and contextualizes them to previous representations depicting the same historical period or event. This is particularly useful in mass cultural historical digital games, because they rely on the intermedial relations to other established media. Because games have to appear 'historically authentic' to players, the aforementioned historical resonance relies on already established understandings of history in the local contexts of targeted players. This means that at the intermedial level, mainstream productions use highly circulated, hegemonic historical understandings and imageries (Gish 2010), in order to attempt to activate historical resonance for imagined consumers. This is seen when games mimic Hollywood aesthetic conventions, for example with the prominence of WWII games in the late 90's and early 2000's following the popularity of Saving Private Ryan and Band of Brothers (Frankel et al. 2001). These intermedial relations establish what Andrew Salvati and Jonathan Bullinger (2013) call 'BrandWIII'. They argue that historical games employ 'selective authenticity' that "blends historical representation with generic conventions and audience expectations" (ibid., 154). This selective strategy in WWII games establishes intermedial relations to BrandWWII by the selective deployment of cinematic conventions, technology fetishism, and documentary authority, thereby appearing as 'authentic' to players. Thus, the intermedial level is particularly noticeable in mass cultural historical digital games, because they often have to rely on established understandings in between media to appear historically authentic and recognizable to potential consumers. This point also came up in my interviews with game developers in my third research article, where several informants stated that they needed to rely on already established imagery from especially Hollywood films in order to entice customers with their game.

These two levels of intra- and intermedial analysis facilitate a formal reading of the media text and its *memory-making potentials*. According to Erll, there are certain "formal and aesthetic strategies which contribute to memory-effects" (2011a, 137), but these strategies only endow media with "a *potential* for mnemonic effects. The potential has to be *realized* within situative, social and institutional frameworks" (ibid. 137-138 her emphasis.). A formal analysis of a given media text at the intra- and intermedial levels identifies certain meaning potentials of said text without claiming that these

_

²³ Erll lists some of these rhetorical strategies that applies to novels on the First World War. These are the experiential, reflexive, antagonistic, mythical rhetorical strategies (Erll 2008, 390). However, these may not apply to other media, so I chose not to include them in my theoretical framework.

meaning potentials are activated in all possible cases of reception. Moreover, this advantageous term allows us to account for the multiple forms of interpretation of a given media text while still retaining the validity of the formal analysis of the text itself as identifying certain intended hegemonic meaning potentials (Pötzsch 2012). To reiterate my earlier formulation of memory-making potentials, I employ this concept throughout my research project, as it binds the tensions between encoding, text, and decoding, where on one hand, game developers endow the meaning structure of the game with *meaning*, which are then activated, negotiated, or contested in *potentially* different ways by players.

This latter part of how memory-making potentials are received is addressed by Erll's pluri-medial level of analysis. This accounts for the reception and circulation of the text in question. As she (2011a, 138) writes,

A tight network of different media representations prepares the ground for memory films, leads reception along certain paths, opens up and channels public discussion, and thus endows movies with their mnemonic meaning [...] all of these advertisements, comments, discussions, and controversies constitute the 'pluri-medial networks', or constellations, of memory

The level of pluri-medial analysis acknowledges the importance of the social contexts in which memory-relevant media are received and adopted. It is not necessarily the media themselves that make them historically relevant, but rather "what has been established around them." (ibid. 138). The plurimedial analysis therefore looks at the social practices of media reception that gives life to the circulation and remediation of cultural memory, whether it is reviews in news magazines, television coverage, marketing material, merchandise, awards and accolades, educational packages, academic analysis, and so on. This also means that different contexts of reception potentially reconfigure the same memory-relevant media differently. For example, a Somali audience cheered when US helicopters were shot down in the film Black Hawk Down (Scott 2001) despite the film's formal devices motivating a different reading of the scenes in question (Pötzsch 2013, 134). I.e. the film might intra- and intermedially frame these scenes as tragic events, yet they are reconfigured in different received contexts. This speaks to the different forms of decoding that Hall refers to, namely the dominant, negotiated, and oppositional. However, this flexibility of interpretation does not entail that active, oppositional reception is true for all cases. Rather, a passive audience would likely adopt "a proposed hegemonic discursive frame and reproduce the dominant tendency of meaning vested in the formal properties of the audio-visual text" (ibid.)

The intra-, inter-, and pluri-medial levels of analysis help categorize the reading of historical games along a variety of textual and contextual categories. One aspect that Erll's model fails to include, however, is the discourses, pressures, and practices that tacitly guide and frame processes of production and reception. While enabling attention to circulation and reception, Erll's pluri-medial level does not consider the role of hegemony and, more broadly, the power hierarchies that predispose practices of encoding and decoding the meaning and memory-making potentials in media.

In that sense, Erll's model assumes pluri-medial constellations are 'a level playing field' without attention to hegemony and political economy. The model appears to misbalance the ascribed importance in encoding and decoding, where power hierarchies are downplayed. Therefore, because Erll's conceptual approach assumes that pluri-medial networks are neutral, its function as an analytical tool can be politically debilitating. As I also show in section on the political economy of historical

digital games, the pluri-medial constellations of digital games are always invested in power hierarchies and the reproduction of hegemonic perspectives, something which Erll does not mention. Adding Hall's communication model to the approach to cultural memory helps to avert this oversight. In this sense, my research project accounts for ways to improve already existing and popular conceptual approaches to the analysis of cultural memory and its movement through various media, such as historical digital games.

5.7 Summary of encoding, decoding, and game analysis

The above sections have applied encoding and decoding to the case of historical digital games via political economy and reception studies. Moreover, an analysis of digital games benefits from paying attention to their affordances that players activate and use in their configuration of the game. Historical digital games can be understood as a composite cybermedia object that, via its material, semiotic, and mechanical aspects, generate memory-making potentials that players activate, negotiate, or contest within discourses about the past. Within these discourses, the game form generates memory-making potentials via the mechanical system in tandem with sign and materiality. Further, Erll's model allows us to locate a game's intra- and intermedial formal devices and their relations to other media, while a pluri-medial analysis directs attention to how historical digital games circulate and are appropriated in social contexts. However, the pluri-medial level does not account for power discrepancies in the contexts of reception and production. It is for this reason that I returned to Hall's concept of encoding/decoding, because it helps explain the hegemonic dynamics surrounding the cultural memory of, in this research project's case, historical digital games. I now proceed to the subsequent part of the introductory chapter to introduce and outline the empirical overview of historical digital games and mnemonic hegemony.

6 A quantitative content analysis of mnemonic hegemony in realist historical digital games

With the theoretical framework in place, I now provide an overview of historical digital games within the category of realist simulation style. This overview is produced via the methods I applied for the data collection and analysis as detailed in the section on methods. As I show below, the table reveals a noticeable correlation between the size of a game's budget and its tendency to reinforce mnemonic hegemony. Overall, this quantitative content analysis of realist simulation styled games is conducted with the intention to provide a map of dominant mnemonic trends that manifest across categories related to identity, conflict affordances, history, and economic considerations.

6.1 Research background

Historical game studies has only recently started to look into the broader macro-trends in the relatively nascent history of historical digital games. Yannick Rochat (2019) conducted a quantitative analysis consisting of 1452 games and 238 game 'extensions'²⁴. He analyzes his dataset across historical periods, genres, and platforms. Relevant for my research project, Rochat observes that almost thirty percent of his dataset were set in WWII with the 'action' genre being most representative in this particular period. This echoes the findings by Johannes Breuer, Ruth Festl, and Thorsten Quandt (2012), whose dataset of 189 historical digital games showed that 64 percent featured a WWII scenario. Elsewhere, Pieter Van den Heede, Kees Ribbens, and Jeroen Jansz (2017) conducted an analysis of fifteen popular war-themed games in post-1989 settings. Their results illustrated, among other observations, that conflict areas "[...] only vaguely correspond to contemporary geopolitics, primarily in order to play into a sense of recognition among American/European gamers" (ibid. 249).

Combined, these three surveys indicate that it is possible to identify dominant trends in a larger dataset of historical digital games. In this tradition, I adopt a similar approach to provide an overview of historical digital games using the realist simulation style that I defined earlier. The analysis helps get a sense of the mnemonic hegemony in the dataset of 208 entries. For example, the analysis helps to answer the questions such as: Which racialized and gendered identities are most often represented in these historical digital games? Which historical periods and their perspectives are most commonly depicted? What type of actions are players able to activate within these historical playgrounds? How do games depict antagonists in conflict scenarios in order to motive ethical reflection on player actions? These inquiries are important to investigate, because historical digital games take up a cultural position in which players engage the past and potentially form beliefs about how to remember it via the semiotic, mechanical, and material aspect of the game object. This means that a holistic approach that accounts for dominant trends is necessary to pinpoint how historical digital games contribute to already existing mnemonic hegemony.

6.2 Selection criteria

qualitative engagement with the depicted past. Here, players experience the past through the focalized viewpoint of one historical agent often in a relatively high fidelity of audiovisual presentation. As Chapman notes, this style draws "from a long cultural history of representation" (2016a, 68), so that

My decision to only focus on this style was due to the notion that such games offer a more immediate,

²⁴ Extensions refer to products that add content to the existing main game (Rochat 2019, 32)

such games more easily latch onto broader collective memory discourses. This also means that these games more readily follow intermedial relations, especially with a persistent reliance on already established Hollywood conventions. Therefore, this style motivates an immediate emphasis on historical events through specific agents in historical periods. Critical observations on race and gender are also more evident in this style, due to its visual specificity, and their focalization on single historical agents as the player-character (Black 2017). Some scholars have argued that having single historical agents entails a "superior comprehension of history" (Matei 2015), due to sympathetic identification with the player-character (Rejack 2007; K. Jørgensen 2010; Petri Lankoski 2011). This assumption is echoed by Emily Roxworthy's experiences with her students playing a game set in Japanese-American internment camps, where they felt more empathy by viewing the player-character in third-person mode, because, according to Roxworthy, they "could read a lot more emotion from constantly being aware of Jane [the player-character] in the frame." (Wieder 2011). These claims inform the decision to focus on realist simulation style games in my quantitative analysis.

Therefore, the decision to limit the research project to only the historical digital games using the realist simulation style is motivated not only by practical reasons in terms of scope, but also the applied concepts emphasize engagement with characters and plots that highlight the politics of cultural memory. That is not to say that games outside the category of realist simulation style historical digital games do not invoke similar forms of character engagement and visual fidelity, but, as a general tendency, such styles are more system-oriented and abstract (Chapman 2016a, 82).

6.3 Analytical categories

The analytic categories that I applied to the data collection were centered on the player-character's nationality, race and gender, conflict resolution mechanic, moral (dis)engagement factors of enemy opposition, region, historical war (if applicable), conflict type, transgressivity, and budget scope. I now detail each category below.

6.3.1 Conflict resolution mechanic

In the category 'conflict resolution mechanic', I observe how the selected sample of games constrains and enables players to resolve the posited conflicts within a represented historical context. I particularly wanted to identify any dominant tendencies in the ways that historical digital games allow players to perform in their problem spaces. For example, in the highly popular *Call of Duty* series (Infinity Ward 2004) and many other first-person shooters within that genre, players are tasked with progressing a linear space. Through this linear space, players are most often tasked with resolving violent conflict by pointing and clicking on a mouse/press a controller button to shoot nearby enemies akin to a virtual shooting gallery. A contrasting example would be *Attentat 1942* (Charles Games 2017) that allows players to resolve conflicts with other characters via multiple dialogue options. As such, the category of conflict resolution mechanic draws attention to the affordances of historical digital games with broad descriptors such as violence, stealth, dialogue, or puzzle-solving.

6.3.2 Moral (dis)engagement factors

With regards to the category of moral (dis)engagement factors, many games ask players to enact, often extreme, violence upon enemy non-playable characters. Therefore, these games employ a series of what Tilo Hartmann and Peter Vorderer (2010) call 'moral disengagement factors'. These factors function to justify the violence that players indulge in. Potential negative emotions associated with the enactment of such simulated violence are negated or softened by, for example, highlighting the enemy as irrational, inherently evil, fanatical or monstrous, and thus beyond effective strategies of opposition

other than violence. This is also in contrast to which protagonist players are offered to play from, and thereby asked to identify with morally and personally. Usually in these games, players play from the side of a benevolent force. Pötzsch (2017b) defines this particular form of alignment as a 'character filter' in action digital games, where oppositional "characters are made to appear caricatured and their evil plans and actions (including torture of player characters or allies) [...] serve as the implicit legitmatory [sic] frame for the in-game violence committed by players" (2017b, 5). The result of this filter, Pötzsch argues, motivates a sense of moral disengagement in players, who do not reflect morally on the virtual actions they are committing. Hartmann et al.'s (2014) study of first-person shooter games suggests that distortion of consequences, dehumanization, and moral justification are some of the most widely used moral disengagement factors in the narratives and gameplay of the analyzed games. Later, he (2017) argues that

these factors characterize how violent videogames typically communicate (or display) violence: namely, as a justified and clean action with negligible consequences against a largely anonymous enemy (whose atrocities seem ill-motivated).

The concept of moral engagement versus disengagement factors has been applied to the selected dataset in my overview in order to illustrate dominant trends that may or may not reinforce mnemonic hegemony.

6.3.3 Geographical region and historical period

The categories of region and historical war refer to what geographical region the game is set in and what historical war, if applicable, the game refers to. These two categories also help reveal which geopolitical and historical settings are the dominant trends in realist historical digital games, similar to what Breuer, Festl, and Quandt's (2012) study²⁵. Sometimes game developers decide to use non-specific settings or historical periods that echo intermediality, such as a fictional country set in the Middle East, but still using and relying on the audiovisual stereotype of Middle Eastern countries (Höglund 2008). There is a similar rhetorical strategy with historical periods, where for instance, WWII is transposed to a different, fictional and fantastical setting (Koski 2017) or using zombies and robots (Chapman 2019). This rhetorical strategy helps game producers avoid sensitive political topics (the Iraq war) or historical trauma (the Holocaust) that games otherwise are perceived to be unfit for (Chapman and Linderoth 2015).

6.3.4 Conflict type

With regards to the category of conflict type, I adopt Smith's (1995, 197) distinction between graduated and Manichean types of conflict, which he states are two moral structures in war films. The Manichean "refers to a relation of mutual exclusivity where the success or survival of one group normally necessitates the failure or death of the other." (Pötzsch 2013, 131). The Manichean is seen in examples of digital games, where the only way to progress through the game is by defeating and

²⁵ Their findings show the dominance of American perspectives on wars and conflict, and the regions in which they take place. These findings also echo what the game developer Radwan Kasmiya stated about games generally reducing Middle Eastern countries to "the Crusades, oil and terrorism." (Halter 2006). Mukherjee (2018, 515) explains why this is the case: "The images of the orient are always being manufactured and only represent things that colonial imperialism wishes to show and see. This is what influences how maps are charted and identities fixed."

ultimately eliminating an unambiguously evil and dangerous opposition, usually through sheer violence. The graduated "indicates a multidimensional approach that opens for mutual dependencies among the opponents and takes heed of the complex grievances underlying the behaviour, conceptualizations, and the attitudes of the opposing parties" (ibid.). This conflict type opens up for a commentary on the committed violence or via multiple ways to engage the opposition by not necessarily defeating them, or depicting antagonists in a more ambivalent and/or nuanced manner.

6.3.5 Transgressivity

On this category, I adopt one of Pötzsch's (2019) analytical categories, 'critical and hegemonic transgressivity'. Critical transgressivity refers to instances where a game questions or subverts dominant norms and conventions, such as the war game Spec Ops the Line (Yager Development 2012) that "highlights the unintended consequences of violent player performances during the course of the game." (Pötzsch 2019, 54), such as showing players the consequences of their action of bombarding civilians with white phosphorous. In contrast, hegemonic transgressivity "employs transgressions in a speculative or cushioned manner with the objective to, often implicitly, stabilize, reinforce, or capitalize upon dominant arrangements and structures." (ibid. 54). This refers to cases were a historical digital game conform to already dominant understandings of history and memory via particular forms of transgression – such as the case of *Playing History 2: Slave Trade* (Serious Game Interactive 2013) that involved a segment later termed 'Slave Tetris' following a public controversy (Thomas 2015). This particular game's presentation failed to convince players of the brutality of the transatlantic slave trade, and instead conformed to dominant understandings of reifying Africans as commodities that need to be piled together as efficiently as possible to maximize the slave transportation across the Atlantic. In this sense, critical or hegemonic transgressivity refer to articulations in historical digital games that either destabilize or reinforce hegemonic conventions.

6.3.6 Budget

Finally, the category of budget refers to the estimated project costs of the game in question. It is important to stress that this is not an empirically precise category, as it is highly difficult to get access to information on the precise costs of a game production. Often game companies do not reveal the cost estimates for their projects and instead keep them secret. As such, I instead triangulated the estimated costs by the number of employees involved in the game's production via the database Mobygames. I complemented these findings with the complexity of the game's audiovisual fidelity, and the level of widespread marketing that the game received upon release. For example, the game Thralled (Oliveira 2014) is developed by nine people, it has relatively simplistic audiovisual design, and it has little to no marketing. This would classify *Thralled* as a low-budget entry in the analysis. A medium-budget entry would be Red Orchestra 2: Heroes of Stalingrad (Tripwire Interactive 2011), because its production involved 102 people excluding outsourcing studios, it featured a less intensive marketing campaign at its release, and the game was not as graphically complex in comparison to higher-budget competitors in the same genre, such as Call of Duty: Black Ops (Treyarch 2010) released around the same time. In contrast, a game like Assassin's Creed IV: Black Flag (Ubisoft Montréal 2013) has reportedly up to a thousand workers on it, features relatively complex audiovisual fidelity, and enjoyed a widespread marketing in most major markets when it released. Therefore, *Thralled* is classified as low-budget, Red Orchestra 2 as medium-budget, and Assassin's Creed IV: Black Flag as a high-budget title. This triangulation allowed me to distinguish between three broad categories applied to the dataset – high (N=117), medium (N=65), low (N=25).

I now proceed to list the table with the collected data and categorization.

6.4 Table

Table 1 Overview of the quantitative content analysis

Game title	Conflict resolution mechanic	Playable characte Nationality	Playable character Race & Gender	Moral disengagem ent factors	Region	Historical war	Conflict type	Transgressi on	Budget
80 Days	Dialogue	British	White man	Engaged	Internation al	N/A	Graduated	Critical	Low
A Plague Tale: Innocence	Violence and stealth	French	White woman	Disengaged	France	Hundred Years' War	Manichean	Hegemonic	Medium
Amnesia: The Dark Descent	Stealth	British	White man	Disengaged	Britain	N/A	Graduated	Critical	Low
Army of Two	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High
Army of Two: The 40th Day	Violence	American	White man	Disengaged	Shanghai	War on terror	Manichean	Hegemonic	High
Assassin's Creed	Violence and stealth	Arab	Brown man	Disengaged	Middle East	Crusades	Manichean	Hegemonic	High
Assassin's Creed 2	Violence and stealth	Italian	White man	Disengaged	Italy	Renaissance	Manichean	Hegemonic	High
Assassin's Creed 2: Brotherhood	Violence and stealth	Italian	White man	Disengaged	Italy	Renaissance	Manichean	Hegemonic	High
Assassin's Creed 3	Violence and stealth	Indigenuo us	Native American Man	Disengaged	North America	US Independen ce War	Manichean	Hegemonic	High
Assassin's Creed 4: Black Flag	Violence and stealth	British	White man	Disengaged	Caribbean	War of the Spanish Succession	Manichean	Hegemonic	High
Assassin's Creed: Freedom Cry	Violence and stealth	Caribbean	Black man	Disengaged	Caribbean	Haitian Revolution	Manichean	Hegemonic	Medium
Assassin's Creed: Liberation	Violence and stealth	American	Black woman	Disengaged	North America	US Independen ce War	Manichean	Hegemonic	Medium
Assassin's Creed: Odyssey	Violence and stealth	Greek	white man & white woman	Disengaged	Greece	Greek war	Manichean	Hegemonic	High

Assassin's Creed: Origins	Violence and stealth	Egyptian	Brown man	Disengaged	Egypt	Egyptian war	Manichean	Hegemonic	High
Assassin's Creed: Revelations	Violence and stealth	Italian	White man	Disengaged	Ottoman Empire	Renaissance	Manichean	Hegemonic	High
Assassin's Creed: Rogue	Violence and stealth	American	White man	Disengaged	North America	Seven Year War	Manichean	Hegemonic	Medium
Assassin's Creed: Syndicate	Violence and stealth	British	white man & white woman	Disengaged	Britain	Victorian Empire	Manichean	Hegemonic	High
Assassin's Creed: Unity	Violence and stealth	French	White man	Disengaged	France	French Revolution	Manichean	Hegemonic	High
Attentat 1942.	Dialogue	Czech	white man & white woman	Engaged	Czech Republic	wwii	Graduated	Critical	Low
Banner Saga	Violence & Dialogue	Nordic	white man & white woman	Disengaged	Scandinavi a	N/A	Graduated	Critical	Low
Banner Saga 2	Violence & Dialogue	Nordic	white man & white woman	Disengaged	Scandinavi a	N/A	Graduated	Critical	Low
Banner Saga 3	Violence & Dialogue	Nordic	white man & white woman	Disengaged	Scandinavi a	N/A	Graduated	Critical	Low
Battlefield 1	Violence	Multinatio nal	Multiple	Disengaged	Multiple	wwi	Manichean	Critical	High
Battlefield 1942	Violence	European	White man	Disengaged	Western Europe	wwii	Manichean	Hegemonic	High
Battlefield 2	Violence	American / Middle Eastern	White man & brown man	Disengaged	Middle East	War on terror	Manichean	Hegemonic	High
Battlefield 3	Violence	American / Russian	White man	Disengaged	Middle East	War on terror	Manichean	Hegemonic	High
Battlefield 4	Violence	American / Chinese	White man	Disengaged	Middle East & Asia	War on terror	Manichean	Hegemonic	High
Battlefield Hardline	Violence	American	Latino man	Disengaged	North America	War on drugs	Manichean	Hegemonic	High
Battlefield V	Violence	Multinatio nal	Multiple	Disengaged	Western Europe	wwii	Manichean	Hegemonic	High
Battlefield: Bad Company	Violence	American	White man	Disengaged	Russiastan	War on terror	Manichean	Hegemonic	High
Battlefield: Bad Company 2	Violence	American	White man	Disengaged	Russiastan	War on terror	Manichean	Hegemonic	High

Battlefield: Vietnam	Violence	American / Vietnames e	White man & Asian man	Disengaged	Vietnam	Vietnam war	Manichean	Hegemonic	High
Brothers in Arms: Earned in Blood	Violence	American	White man	Disengaged	Western Europe	WWII	Manichean	Hegemonic	Medium
Brothers in Arms: Hell's Highway	Violence	American	White man	Disengaged	Western Europe	WWII	Manichean	Hegemonic	High
Brothers in Arms: Road to Hill 30	Violence	American	White man	Disengaged	Western Europe	wwii	Manichean	Hegemonic	High
Call of Duty	Violence	American / Soviet	White man	Disengaged	Western Europe & Eastern Europe & Soviet Union	WWII	Manichean	Hegemonic	High
Call of Duty 2	Violence	Multinatio nal	White man	Disengaged	Western Europe & Soviet Union & North Africa	wwii	Manichean	Hegemonic	High
Call of Duty 3	Violence	Multinatio nal	White man	Disengaged	Western Europe & Eastern Europe	wwii	Manichean	Hegemonic	High
Call of Duty 4: Modern Warfare	Violence	American / British	White man	Disengaged	Arabistan & Russia	War on terror	Manichean	Hegemonic	High
Call of Duty WWII	Violence	American	White man	Disengaged	Western Europe	wwii	Manichean	Hegemonic	High
Call of Duty: Black Ops	Violence	American	White man	Disengaged	Cuba & East Asia & Soviet Union	Cold War	Manichean	Hegemonic	High
Call of Duty: Black Ops II	Violence	American	White man	Disengaged	Cuba & China	Cold War & war on terror	Manichean	Hegemonic	High
Call of Duty: Modern Warfare 2	Violence	American	White man	Disengaged	Middle East & Russia & North America	War on terror	Manichean	Hegemonic	High
Call of Duty: Modern Warfare 3	Violence	Multinatio nal	White man	Disengaged	South Asia & Europe & Russia	War on terror	Manichean	Hegemonic	High

Call of Duty: World at War	Violence	American / Soviet	White man	Disengaged	Pacific islands & Soviet Union	wwii	Manichean	Hegemonic	High
Call of Juarez	Violence	American / Native American	Multiple	Disengaged	North America	Western	Manichean	Hegemonic	High
Call of Juarez: Bound in Blood	Violence	American	White man	Disengaged	North America	Western	Manichean	Hegemonic	High
Call of Juarez: Gunslinger	Violence	American	White man	Disengaged	North America	Western	Manichean	Critical	High
Chivalry: Medieval Warfare	Violence	European	White man	Disengaged	Europe	Medieval	Manichean	Hegemonic	High
Commandos	Violence and stealth	Multinatio nal	Multiple	Disengaged	Europe	wwii	Manichean	Hegemonic	Medium
Commandos 2	Violence and stealth	Multinatio nal	Multiple	Disengaged	Europe	wwii	Manichean	Hegemonic	Medium
Conflict Desert Storm	Violence	British / American	White man	Disengaged	Middle East		Manichean	Hegemonic	Medium
Conflict: Vietnam	Violence	American	White man	Disengaged	East Asia	Vietnam war	Manichean	Hegemonic	Medium
Contrast	N/A	French	White woman	N/A	France	N/A	N/A	N/A	Medium
Cryostasis: Sleep of Reason	Violence	Russian	White man	Disengaged	Antarctica	N/A	Graduated	Critical	Medium
Curse of the Monkey Island	Dialogue	British	White man	N/A	Caribbean	N/A	N/A	Critical	High
Custer's Revenge		American	White man	Disengaged	North America	Western	Manichean	Hegemonic	Medium
Delta Force	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	Medium
Delta Force 2	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	Medium
Delta Force Angel Falls	Violence	American	White man	Disengaged	South America	War on terror	Manichean	Hegemonic	Medium
Delta Force Land Warrior	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	Medium

Delta Force Xtreme 2	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	Medium
Delta Force: Black Hawk Down	Violence	American	White man	Disengaged	Somalia	Battle of Mogadishu	Manichean	Hegemonic	Medium
Delta Force: Task Dagger	Violence	American	White man	Disengaged	South America & Russia	War on terror	Manichean	Hegemonic	Medium
Delta Force: Urban Warfarce	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	Medium
Desperados	Violence	American	Multiple	Disengaged	North America	Western	Manichean	Hegemonic	Medium
Desperados 2: Cooper's Revenge	Violence	American	Multiple	Disengaged	North America	Western	Manichean	Hegemonic	Medium
Draugen	Dialogue	Nordic	White man	N/A	Norway	N/A	N/A	Hegemonic	Medium
EndWar	Violence	American	N/A	Disengaged	Europe & Russia & North America	Future war	Manichean	Hegemonic	High
Escape from Monkey Island	Dialogue	British	White man	N/A	Caribbean	N/A	N/A	N/A	Medium
Far Cry	Violence	American	White man	Disengaged	South Pacific	N/A	Manichean	Hegemonic	High
Far Cry 2	Violence	Multinatio nal	Multiple	Disengaged	Central Africa	N/A	Graduated	Critical	High
Far Cry 3	Violence	American	White man	Disengaged	South Pacific	N/A	Manichean	Hegemonic	High
Far Cry 4	Violence	Asian	Asian man	Disengaged	South Asia	N/A	Manichean	Hegemonic	High
Far Cry 5	Violence	American	Multiple	Disengaged	North America	N/A	Manichean	Hegemonic	High
Far Cry Primal	Violence	Indigenuo us	Brown man	Disengaged	N/A	N/A	Manichean	Hegemonic	High
For Honor	Violence	Nordic / Asian / European	Multiple	Disengaged	N/A	N/A	Manichean	Hegemonic	High
Freedom!	Puzzle	African	Black man	N/A	Matinique	N/A	Graduated	Critical	Low
Ghost Recon 2	Violence	American	White man	Disengaged	North Korea	War on terror	Manichean	Hegemonic	High
Ghost Recon 2001	Violence	American	White man	Disengaged	Eurasia	War on terror	Manichean	Hegemonic	High

Ghost Recon Advanced Warfighter	Violence	American	White man	Disengaged	Central America	Condor	Manichean	Hegemonic	High
Ghost Recon Advanced Warfighter 2	Violence	American	White man	Disengaged	Central America	Condor	Manichean	Hegemonic	High
Ghost Recon Desert Siege	Violence	American	White man	Disengaged	East Africa	AFRICOM	Manichean	Hegemonic	High
Ghost Recon Future Soldier	Violence	American	White man	Disengaged	South America	Condor	Manichean	Hegemonic	High
Ghost Recon Island Thunder	Violence	American	White man	Disengaged	Cuba	Bay of Pigs	Manichean	Hegemonic	High
Ghost Recon Jungle Storm	Violence	American	White man	Disengaged	South America	Condor	Manichean	Hegemonic	High
Ghost Recon Predator	Violence	American	White man	Disengaged	East Africa	AFRICOM	Manichean	Hegemonic	High
Ghost Recon Wildlands	Violence	American	White man	Disengaged	South Asia	Condor	Manichean	Hegemonic	High
Gun	Violence	American	Mixed race	Disengaged	North America	Western	Manichean	Hegemonic	High
Hard West	Violence	American	Multiple	Disengaged	North America	Western	Manichean	Hegemonic	Medium
HAWX	Violence	American	White man	Disengaged	South America	Condor	Manichean	Hegemonic	High
HAWX 2	Violence	American	White man	Disengaged	Eurasia	War on terror	Manichean	Hegemonic	High
Herald	Dialogue	Indian	Brown man	N/A	India	N/A	Graduated	Critical	Low
Hidden & Dangerous	Violence	British	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	Medium
Hidden & Dangerous 2	Violence	British	White man	Disengaged	Multiple	wwii	Manichean	Hegemonic	Medium
JFK Reloaded	Violence	American	White man	Disengaged	North America	N/A	Graduated	Critical	Low
Ken Follett's The Pillars of the Earth	Dialogue	French	Multiple	N/A	European	N/A	Graduated	Hegemonic	Medium
Kingdom Come Deliverance	Violence	Czech	White man	Disengaged	Bohemia	N/A	Manichean	Hegemonic	Medium
Last Express	Dialogue	French	White man	N/A	Ottoman Empire	First World War	Graduated	Hegemonic	High

Mafia	Violence	American	White man	Disengaged	North America	N/A	Manichean	Hegemonic	High
Mafia 2	Violence	American	White man	Disengaged	North America	N/A	Manichean	Hegemonic	High
Mafia 3	Violence	American	Black man	Disengaged	North America	N/A	Manichean	Hegemonic	High
Medal of Honor	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	High
Medal of Honor 2010	Violence	American	White man	Disengaged	Afghanista n	War on terror	Manichean	Hegemonic	High
Medal of Honor: Airborne	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	High
Medal of Honor: Allied Assault	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	High
Medal of Honor: European Assault	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	High
Medal of Honor: Frontline	Violence	American	White man	Disengaged	Europe	WWII	Manichean	Hegemonic	High
Medal of Honor: Heroes	Violence	American	White man	Disengaged	Europe	WWII	Manichean	Hegemonic	High
Medal of Honor: Heroes 2	Violence	American	White man	Disengaged	Europe	WWII	Manichean	Hegemonic	High
Medal of Honor: Infilitrator	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	High
Medal of Honor: Pacific Assault	Violence	American	White man	Disengaged	Pacific islands	wwii	Manichean	Hegemonic	High
Medal of Honor: Rising Sun	Violence	American	White man	Disengaged	Pacific islands	WWII	Manichean	Hegemonic	High
Medal of Honor: Undergroun d	Violence	American	White man	Disengaged	Europe	WWII	Manichean	Hegemonic	High
Metal Gear Solid 3: Snake Eater	Violence and stealth	American	White man	Engaged	Eurasia	Cold War	Graduated	Critical	High

Metal Gear Solid V: Phantom Pain	Violence	American	White man	Engaged	Afghanista n & Central Africa	Cold War	Graduated	Critical	High
Monkey Island 1	Dialogue	British	White man	N/A	Caribbean	N/A	N/A	N/A	Medium
Monkey Island 2	Dialogue	British	White man	N/A	Caribbean	N/A	N/A	N/A	Medium
Mordhau	Violence	European	White man	Disengaged	Europe	Holy Crusades	Manichean	Hegemonic	Medium
Omerta - City of Gangsters	Violence	American	White man	Disengaged	North America	N/A	Manichean	Hegemonic	Medium
Operation Flashpoint: Cold War Crisis	Violence	American	White man	Disengaged	Russiastan	Cold war	Manichean	Hegemonic	Medium
Operation Flashpoint: Red Hammer	Violence	Russian	White man	Disengaged	Russiastan	Cold war	Manichean	Hegemonic	Medium
Operation Flashpoint: Resistance	Violence	Eastern European	White man	Disengaged	Russiastan	Cold war	Manichean	Hegemonic	Medium
Outlaws	Violence	American	White man	Disengaged	North America	Western	Manichean	Hegemonic	High
Playing History - The Plague	Dialogue & puzzle	European	White man	N/A	Europe	Medieval	N/A	Hegemonic	Low
Playing History 2 - Slave Trade	Dialogue & puzzle	African	Black man	N/A	West Africa & Atlantic Ocean & Caribbean	Transatlanti c slave trade	N/A	Critical	Low
Playing History 3 - Vikings	Dialogue & puzzle	European	White man	N/A	Scandinavi a	Viking	N/A	Hegemonic	Low
Rainbow Six	Violence	American	Multiple	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High
Rainbow Six Raven Shield	Violence	American	Multiple	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High
Rainbow Six Rogue Spear	Violence	American	Multiple	Disengaged	Eurasia	War on terror	Manichean	Hegemonic	High
Rainbow Six Siege	Violence	American	Multiple	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High

Rainbow Six Vegas	Violence	American	White man	Disengaged	North America	War on terror	Manichean	Hegemonic	High
Rainbow Six Vegas 2	Violence	American	White man	Disengaged	North America	War on terror	Manichean	Hegemonic	High
Red Dead Redemption	Violence	American	White man	Disengaged	North America	Western	Manichean	Hegemonic	High
Red Dead Redemption 2	Violence	American	White man	Disengaged	North America	Western	Manichean	Hegemonic	High
Red Dead Revolver	Violence	American	White man	Disengaged	North America	Western	Manichean	Hegemonic	High
Red Orchestra 2: Heroes of Stalingrad	Violence	Russian	White man	Disengaged	Soviet Union	wwii	Manichean	Critical	Medium
Red Orchestra: Ostfront 41- 45	Violence	Russian	White man	Disengaged	Soviet Union	wwii	Manichean	Critical	Medium
Return of the Obra Dinn	Puzzle	British	N/A	N/A	Atlantic Ocean	N/A	Graduated	Hegemonic	Low
Return to Castle Wolfenstein	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	High
Rise of the Argonauts	Violence	Greek	White man	Disengaged	Europe	Antique	Manichean	Hegemonic	Medium
Ryse: Son of Rome	Violence	Roman	White man	Disengaged	Europe	Roman	Manichean	Hegemonic	High
Shellshock: Vietnam	Violence	American	White man	Disengaged	Vietnam	Vietnam war	Manichean	Hegemonic	Medium
Sid Meier's Pirates	Dialogue & puzzle & violence	British	White man	N/A	Caribbean	N/A	Manichean	Hegemonic	Medium
Sniper Elite	Violence	American	White man	Disengaged	Europe	WWII	Manichean	Hegemonic	Medium
Sniper Elite 3	Violence	American	White man	Disengaged	North Africa	wwii	Manichean	Hegemonic	Medium
Sniper Elite 4	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	Medium
Sniper Elite V2	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	Medium
Sniper Ghost Warrior	Violence	American	White man	Disengaged	South America	Condor	Manichean	Hegemonic	High

Sniper Ghost Warrior 2	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High
Sniper Ghost Warrior 3	Violence	American	White man	Disengaged	Eurasia	War on terror	Manichean	Hegemonic	High
Spartan: Total Warrior	Violence	Greek	White man	Disengaged	Europe	Antique	Manichean	Hegemonic	Medium
Splinter Cell	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High
Splinter Cell Blacklist	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High
Splinter Cell Chaos Theory	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High
Splinter Cell Conviction	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High
Splinter Cell Double Agent	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High
Splinter Cell Pandora Tomorrow	Violence	American	White man	Disengaged	Multiple	War on terror	Manichean	Hegemonic	High
The Division	Violence	American	Multiple	Disengaged	North America	War on terror	Manichean	Hegemonic	High
The Division 2	Violence	American	Multiple	Disengaged	North America	War on terror	Manichean	Hegemonic	High
The Order 1886	Violence	British	White man	Disengaged	England	Victorian Empire	Manichean	Hegemonic	High
The Oregon Trail	Dialogue	American	Multiple	Disengaged	North America	Western	Manichean	Hegemonic	Medium
The Saboteur	Violence	French	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	High
The Sum of All Fears	Violence	American	White man	Disengaged	North America	War on terror	Manichean	Hegemonic	Medium
This War of Mine	Violence and stealth	Multinatio nal	Multiple	Engaged	Europe	Bosnian Civil War	Graduated	Critical	Medium
Thralled	Puzzle	African	Black woman	Engaged	Brazil	Spanish conquest	Manichean	Critical	Low
Vampyr	Violence and stealth	British	White man	Disengaged	England	Victorian Empire	Manichean	Hegemonic	High
Velvet Assassin	Violence and stealth	British	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	Medium

Vietcong	Violence	American	White man	Disengaged	Vietnam	Vietnam war	Manichean	Hegemonic	Medium
Vietcong 2	Violence	American	White man	Disengaged	Vietnam	Vietnam war	Manichean	Hegemonic	Medium
Viking: Battle for Asgard	Violence	Nordic	White man	Disengaged	Scandinavi a	Viking	Manichean	Hegemonic	Medium
Volgarr the Viking	Violence	Nordic	White man	Disengaged	Scandinavi a	Viking	Manichean	Hegemonic	Medium
Wolfenstein 2: The New Colossus	Violence	American	White man	Disengaged	North America	wwii	Manichean	Hegemonic	High
Wolfenstein 2009	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	High
Wolfenstein 3D	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	Medium
Wolfenstein: The New Order	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	High
Wolfenstein: The Old Blood	Violence	American	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	High
Wolfenstein: Youngblood	Violence	American	white woman	Disengaged	Europe	wwii	Manichean	Hegemonic	High
1979 Revolution	Dialogue & puzzle	Persian	Brown man	Engaged	Iran	Iranian Revolution	Graduated	Critical	Low
11-11 Memories Retold	Puzzle	Multinatio nal	White man	N/A	Europe	wwi	N/A	N/A	Medium
Ankh	Puzzle	Egyptian	Brown man	N/A	Egypt	BC	N/A	N/A	Low
Ankh 2	Puzzle	Egyptian	Brown man	N/A	Egypt	BC	N/A	N/A	Low
Ankh 3	Puzzle	Egyptian	Brown man	N/A	Egypt	ВС	N/A	N/A	Low
Crimes and Punishment: Sherlock Holmes	Puzzle	British	White man	N/A	United Kingdom	Victorian Empire	N/A	N/A	Medium
Call of Cthulu: The Official Videogame	Puzzle	British	White man	N/A	United Kingdom	Victorian Empire	N/A	N/A	Medium
Death to Spies	Violence and stealth	Russian	White man	Disengaged	Europe	wwii	Manichean	Hegemonic	Low
Enemy Front	Violence	American	White man	Disengaged	Europe	WWII	Manichean	Hegemonic	Low

Expeditions					G 1	a			
Conquistado r	Violence	Spanish	Multiple	Disengaged	South America	Spanish conquest	Manichean	Hegemonic	Low
Expeditions Vikings	Violence	Nordic	Multiple	Disengaged	Scandinavi a	Viking	Manichean	Hegemonic	Low
Jade Empire	Violence & Dialogue	Chinese	Multiple	Disengaged	East Asia	N/A	Manichean	Hegemonic	High
Kim	Violence	Indian	Brown man	Disengaged	South Asia	1880s	Manichean	Critical	Low
LA Noire	Violence & Dialogue	American	White man	Disengaged	North America	wwii	Manichean	Hegemonic	High
The Godfather: The Game	Violence	American	White man	Disengaged	North America	N/A	Manichean	Hegemonic	Medium
The Godfather 2: The Game	Violence	American	White man	Disengaged	North America	N/A	Manichean	Hegemonic	Medium
Men of Valor	Violence	American	Black man	Disengaged	Vietnam	Vietnam war	Manichean	Hegemonic	Low
Nioh	Violence	British	White man	Disengaged	East Asia	Sengoku period	Manichean	Hegemonic	HIgh
Prince of Persia	Violence & puzzle	Persian	Brown man	Disengaged	Middle East	1001 Nights	Manichean	Hegemonic	Medium
Prince of Persia: Sands of Time	Violence & puzzle	Persian	Brown man	Disengaged	Middle East	1001 Nights	Manichean	Hegemonic	HIgh
Prince of Persia: Warrior Within	Violence & puzzle	Persian	Brown man	Disengaged	Middle East	1001 Nights	Manichean	Hegemonic	HIgh
Prince of Persia: The Two Thrones	Violence & puzzle	Persian	Brown man	Disengaged	Middle East	1001 Nights	Manichean	Hegemonic	HIgh
Prince of Persia 2008	Violence & puzzle	Persian	Brown man	Disengaged	Middle East	1001 Nights	Manichean	Hegemonic	HIgh
Prince of Persia: Forgotten Sands	Violence & puzzle	Persian	Brown man	Disengaged	Middle East	1001 Nights	Manichean	Hegemonic	HIgh
Rune	Violence	Nordic	White man	Disengaged	Scandinavi a	Viking	Manichean	Hegemonic	Medium
Rune 2018	Violence	Nordic	White man	Disengaged	Scandinavi a	Viking	Manichean	Hegemonic	Medium

The Council	Dialogue & puzzle	British	White man	Disengaged	United Kingdom	Victorian Empire	Graduated	N/A	Medium
War of Rights	Violence	American	White man	Disengaged	North America	US Civil War	Manichean	Hegemonic	Low
Warsaw	Violence	Polish	Multiple	Disengaged	Europe	WWII	Manichean	Hegemonic	Medium
We The Revolution	Dialogue & Puzzle	French	White man	Disengaged	Europe	French Revolution	Manichean	Hegemonic	Medium

6.5 Data analysis

I now summarize the data analysis and complement the findings with a visual diagram categorized by budget. In each figure, the left circle represents the low-budget dataset, the middle circle represents the medium-budget dataset, and finally the right circle represents the high-budget dataset.

The dominant trends highlight that the majority of the dataset features Manichean forms of conflict (84 percent, N=174), violence as predominant conflict resolution mechanism (70 percent, N=146), and hegemonic transgressivity (84 percent, N=174). Splitting the results across low, medium, and high budget framing, a noticeable picture emerges in the following diagrams. In figure 3, we notice that the low budget diagram of conflict resolution mechanics is more diverse, while the medium and high budget diagrams both predominantly feature violence as the conflict resolution mechanic. This trend is repeated on the categories of conflict type (figure 4) and transgressivity (figure 5), as seen below.

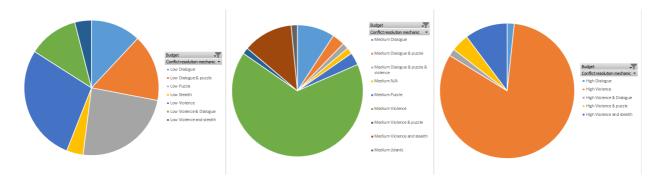


Figure 3 Conflict resolution mechanic - low - medium - high budget

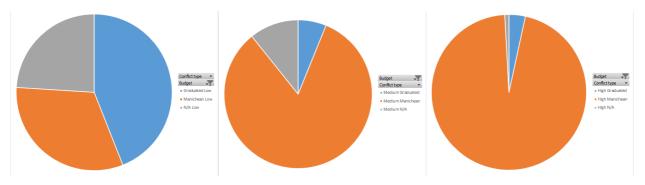


Figure 4 Conflict type - low - medium - high budget

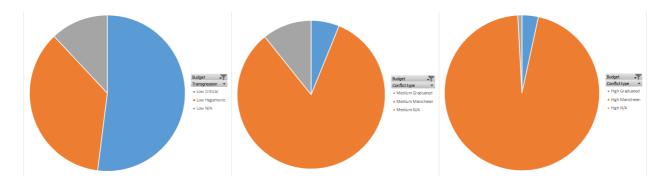


Figure 5 Transgressivity: low - medium - high budget

Across the dataset, moral disengagement factors were present (87 percent, N=180) in their depiction of antagonists. If we again divide this across budget, we see in figure 6 that medium and high budget titles are more likely to employ moral disengagement factors.

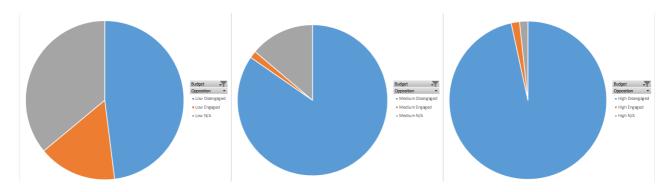


Figure 6 Moral (dis)engagement factors - low - medium - high budget

With regard to historical period in figure 8, the most often presented historical war is WWII (22 percent, N=45) and the so-called War on Terror (18 percent, N=38). In figure 7, the difference in regions seems a bit more varied, although North America (16 percent, N=33) and Europe (17 percent, N=35) once again feature more prominently, while continents such as Africa and South Asia are almost entirely absent. In contrast to the previous diagrams, the budget-framing across low, medium and high in figure 7 and 8 does not appear to be particularly determinate of the composition.

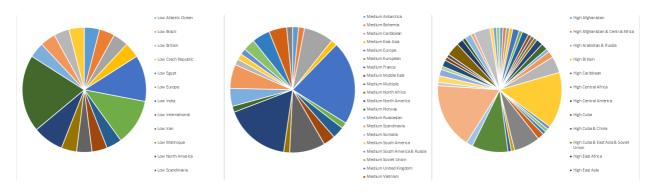


Figure 7 Region - low - medium - high budget

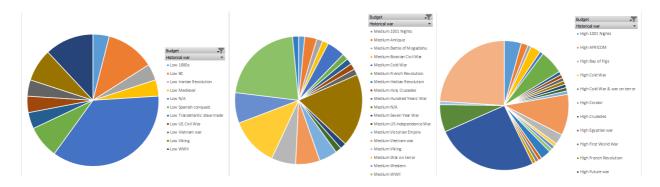


Figure 8 Historical war – low – medium – high budget

Identity representations of the player-character along the categories of nationality, race, and gender exhibit a dominance of white American men (43 percent (N=90)) across the entire dataset. These numbers exclude games where Americans play alongside other nationalities as seen below. Framing nationality across the budget frame in figure 9, low budget game titles appear much more varied in comparison to medium and high budget titles. In those two categories, as seen below, British and especially American nationalities of the player-character.

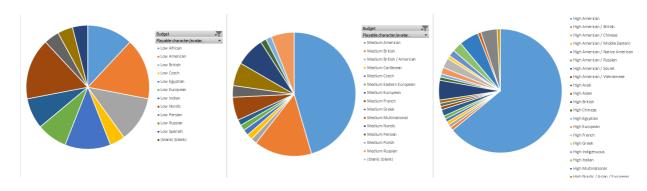


Figure 9 Nationality - low - medium - high budget

Removing the American nationality descriptor increases the White Man dominance to 145 out of 208 (70 percent). If we divide the entries by the budget as seen in figure 10, we again notice that white men comprise 73 percent (N=85) in high-budget games and 77 percent (N=51) medium-budget games. In contrast, the low-budget sample 'only' has 32 percent (N=9) white men.

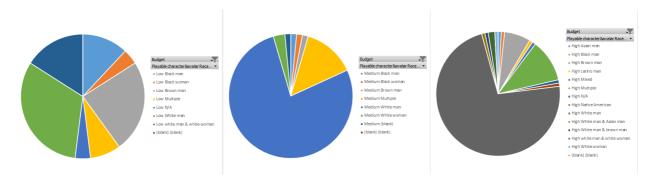


Figure 10 Race and gender: low – medium – high budget

If we combine the large concentration of white men with the violence as the conflict resolution mechanic means that 57 percent (N=118) centers white men whose way of resolving conflict is primarily through violence.

It should be noted that there is also a presence of 'Multiple player-character representations of race, gender, and nationality' in high and medium budget category with approximately 11 (N=13) and 14 percent (N=9), respectively. There were only 2 instances (8%) of multiple protagonists in the low budget category, presumably because the budget does not allow for the labor required to animate, sculpt, voice, etc. multiple protagonists in the realist simulation style genre.

Of particular interest with regard to gender division in the dataset, in figure 11 below we see that exclusively women-player characters amount to 5 entries (2 percent) in the dataset in the left-most circle in contrast to exclusively men-player characters at 167 entries. There were only 2 instances of exclusively black women being represented in the dataset, all the while *zero* brown women were present. This also means that the exclusive female player-character is more marginalized than when the player-character is exclusively a man of color (10,5 percent, N=22), as seen in the middle circle. This means that even white women (1,5 percent, N=3), but especially women of color, are severely underrepresented in comparison to their racialized male counterparts. Of course, with the total game titles with set gender player-character among exclusively men of color and women overall (14 percent, N=29), we are still talking about representational scraps in comparison to the dominance of exclusively white men in this category (70 percent, N=145), demonstrated in the right-most circle.

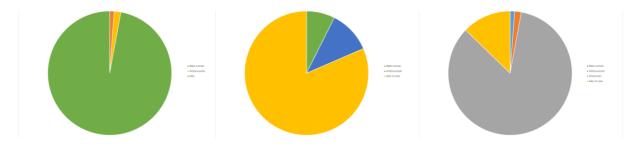


Figure 11 Division of gender-exclusive representation

6.6 Discussion

Based on the above application of the low-medium-high budget framing we notice the increasing amount of homogeneity the higher the budget is. In almost all of the above visualizations, one or two tendencies turn increasingly dominant. These tendencies are white men, American, violence, morally disengaging oppositions, Manichean conflict types, and hegemonic transgressivity. As such, there appears to be at least a correspondence between the size of a game production's budget and the encoded memory-making potentials.

Therefore, applying these categories to the collected dataset helped parse out the dominant trends in historical digital games that primarily employ the realist simulation style. We notice that the mnemonic hegemony articulates violence as predominant conflict resolution mechanic, Manichean type of conflict, and moral disengaging oppositions. White men dominate across the board with North America and Europe being the main geographical regions the games take place in. Only few men of color are present in the dataset. White women and especially women of color are marginalized, if not entirely absent from the dataset. Thus, the financial costs of a project seem at least to correlate with the extent to which mnemonic hegemony is reinforced through a particular historical digital game.

I return to the reasons for these dominant trends in the subsequent section. The resulting consequence from this analysis reveals the neglected representations of history that the sampled historical digital games exclude. Digital games are in principle, only impeded by developer's imagination and the technical and realist conditions they derive from (computational processes). Yet in these virtual worlds, the primary and most prominent creative landscape revolves around US-American white men going around the world killing others without moral reflection. How can the counter-hegemonic articulations and strategies in and around historical digital games ever be reconciled with a global mass culture that produces and reinforces hegemonic notions of history? I now turn to an overview of the political economy of the games industry because it provides a possible explanation for the mnemonic hegemony that quantitative content analysis highlights.

6.7 The political economy of the digital games industry

As I showed in the section on encoding, a political-economical approach to the games industry reveals its power hierarchies and economic structure (Dyer-Witheford and De Peuter 2009). The games industry is structured by major multinational companies predominantly located in North America, Japan, and Europe (Consalvo 2006), where the top companies have consolidated their position in terms of capturing large swaths of the market (Kerr 2017; Zatkin 2017, 38:50). Embedded into the global economic system of capitalism, the hardware companies exploit workers in the Global South to produce the hardware technology (mobile, PC, or console components) required to execute digital games. The minerals required for the hardware is mined in countries such as the Democratic Republic of Congo (Sinclair 2015; 2016; 2017; Valentine 2018), while the manufacturing and assembly of them take place in China, Vietnam, India, or Mexico (Lugo, Sampson, and Lossada 2002; Fuchs and Qiu 2018; Kerr 2017). Both the miners and the assembly-workers work under avert conditions (Qiu 2017). From here, the games hardware is shipped to consumers where the largest markets are North America, Europe, Japan, and most recently, China. When these hardware products are rendered 'obsolete' via the marketing of 'new' products, the 'old' hardware turns to so-called e-waste that is often dumped in poorer countries willing to take it (Nguyen 2017; Maxwell, Raundalen, and Vestberg 2014). The distribution of games sold to consumers increasingly follow the trend of a platformization of culture (Nieborg and Poell 2018; Joseph 2017) that aligns with the domination of platform capitalism (Srnicek 2016) and imperialism (Jin 2015). Other markets such as regions in the Middle East and Africa are seen as less profitable, due to less consumerism, relatively high piracy-rates of games, and no laws or treaties to protect intellectual property in these markets according to Clement²⁶ (2019).

The software development of the digital games is primarily located within the countries in the Global North, such as the US, Canada, Western Europe, and Japan. However, the games industry also take major advantage of outsourcing to countries in Eastern Europe (Ozimek 2019), China (Thomsen 2018), Malaysia (Low 2017), Vietnam (Gallaugher and Stoller 2004), and India (Shafeeq and Sharma 2016), among other countries with relatively low wages. Inversely, this also means that the decision-making of commercial products is located in the center of the Global North, while those working in the peripheries lack autonomy and simply produce the outsourced requests according to the specification set by game companies in the North. Since the focus in this research project is primarily on the software side of the games industry, the workers involved in software development are also the

²⁶Africa and the Middle East are seen as "the second-to-last out of six regions in terms of commercial value lost to piracy, at approximately US\$3.7 billion in 2015" (Clement 2019)

ones important for the analysis of encoding practices. Here, the labor conditions are characterized by low wages, difficult workhours with uncompensated overtime, precarity across the board, and discriminatory work environments (Woodcock 2016; Bulut 2015; O'Donnell 2014; Kerr 2017). In general, the social structuration of the industry is highly homogenous in North America and Western Europe (Edwards et al. 2014; Weststar and Legault 2015; Weststar, O'Meara, and Legault 2018). For example, industry surveys on demographic composition show that the majority of game developers are white North American heterosexual men between 25 to 34 years of age (ibid.), while for example women are underpaid in comparison to men (H. Taylor 2018; Baribeau 2014; Game Developer Magazine 2013; Shirinian 2012). As such, there is a clear gender hierarchy in game companies (Johnson 2013; 2014; Harvey and Fisher 2015; Prescott 2014; Prescott and Bogg 2011; Johnson 2018) that structurally marginalizes women (Consalvo 2008) and non-binary workers, while also conferring immaterial labor via diversity initiatives on those already marginalized (Harvey and Fisher 2013; Ruberg 2019).

The vast majority of workers in the games industry are exploited by the multinational companies who enjoy tax reliefs for digital game production by governments interested in cultivating industry and 'creating jobs' (H. Taylor 2019b). As Nieborg, Young & Joseph (2019) demonstrate, Canadian tax reliefs often end up circulating to US companies who stow away the untaxed profits in tax havens. As such, the political economy in the games industry follows 21st century imperialism (J. Smith 2016; Cope 2015), where companies in the imperial core super-exploits workers in the imperial periphery, while also exploiting workers in the imperial core. These super-profits are then circulated outside of governmental oversight and recirculated into financial investments.

Therefore, I posit that this global economic exploitation works in tandem with the homogeneity of software developers to predispose the encoding practices at game companies and thereby the memory-making potentials. This relationship between 21st century imperialism and game production result in digital games that reflect similar experiences as the decoding contexts' homogeneous frameworks of knowledge (Hammar 2017b; Hammar and Woodcock 2019), as my quantitative content analysis indicate, and as I now proceed to argue.

Echoing Mosco's observation that political economy structures the polysemy of media, games likewise reflect the conditions outlined above. As Tanner Higgins states, "representations must be analyzed in regards to how they are constructed as well as the structural and political circumstances that generate and support them. Only when these regimes and practices are exposed can they be systematically demolished." (Higgin 2009, 20). Therefore, by moving beyond an analysis and also focus on the production of the text, we better address the entangled web that reproduces the same type of mass cultural pasts again and again (thereby answering Hall's problem with old films keep getting made). This is why political economy of communication is useful in exposing the 'regimes and practices' that reproduce mnemonic hegemony. For example, Sam Srauy's (2019a, 480) research on game developers shows that racism exists in digital games narratives because

[...] developers' profession constitutes a normative space where market uncertainty and historical practices/beliefs create an internal pressure to adopt game narratives that are problematic. Adopting racially problematic narratives [...] is a rational response to economic uncertainty in the contemporary North American video game landscape.

This pressure is evident in the games themselves. On a macro-level²⁷, many studies confirm that when it comes to race and gender, the representational regime favors white men (Dill et al. 2005; Dietrich 2013; Everett and Watkins 2008; Mou and Peng 2008; Malkowski and Russworm 2017; Williams et al. 2009; Downs and Smith 2010). The racialized representation of Arabs (Šisler 2008; Höglund 2008; Šisler 2009; Reichmuth and Werning 2006), Africans (Bayeck, Asino, and Young 2018), Indians (Chakraborti 2015; Mukherjee 2018), and blackness (Gray 2014; Brock 2011; Leonard 2006; 2004; 2016; Russworm 2017; 2019; Higgin 2009) are either marginalized, othered (Young 2016), or made invisible. Most recently with regard to the dominance of men, Bailey et al. (2019) showed that between 2001 and 2017, *all* the top-selling games in each year never featured a woman as the central player-character. Instead, 69 percent of their data set were games with exclusively male protagonists, while the remaining 31 percent were optional or non-specific genders. This means that out of 180 most-selling games across 18 years, *none* had an exclusive woman protagonist as the focalized viewpoint in the game²⁸.

Historical digital games likewise reinforce hegemonic perspectives²⁹. As Mukherjee and I state, many historical games are "marked by a Western and, specifically, late 19th-century imperialist bias." (Mukherjee and Hammar 2018). Some of them conform to hegemonic imaginations of the past (Shaw 2015) or relying on conservative historical research methods (Schut 2007). Some restrict the way of engaging with the past through the logics of colonialism (Mukherjee 2015; 2017; 2018; Lammes 2010; Magnet 2006; Ford 2016; Pobłocki 2002), "domination and mass killing" (Greenfield 2004), settler colonialism (Mir and Owens 2013; Euteneuer 2018), and imperialist narratives (Patel 2016; S. Murray 2017b; Hammar 2019a). In relation to the popular depiction of the past, Adam Chapman, Anna Foka and Jonathan Westin (2018, 283) state that:

As have been shown on numerous occasions [...], the representations we are creating of the past often follows [sic] well established conventions that are outdated, homogenous, and highly problematic, and may feed into contemporary political conflict.

Based on the above and my own quantitative content analysis, historical digital games also rearticulate mnemonic hegemony. The hegemonic memory-making potentials in historical games is likewise reflected by the game industry's political economy (Hammar 2019a; 2019b). For instance, Tara Copplestone's interviews with game developers revealed that their "games were produced with the intent of being commercially viable entertainment goods – and that as such the key responsibility was to create entertainment in a way which would sell." (2017, 432), meaning that so-called historical accuracy was a secondary concern to this prime directive of "profit-maximization" (Bulut 2018). The

²⁷ And on a micro-level. For example, recent comments about the *Gears of War* (Epic Games 2006) series put this pressure out in the open. The series' producer Rod Fergusson stated in an interview that the creative decision about the gender and race of the game project's player-character was driven by marketers, who would "have some sort of master spreadsheet where they could type in a bunch of parameters and forecast what they'd think your game would do" (Judge 2019)

²⁸ Their results were contrasted with the gender composition of the game companies producing these high-selling games, which showed the disparity. As such, Bailey et al.'s (2019) study affirms the noticeable reflection of encoding in the games.

²⁹ Research on the non-digital, i.e. conventional analogue games have also been conducted (Robinson 2014; Trammell 2016; Qureshi 2018; Sterczewski 2016; 2019).

duality between facts and profitable entertainment was echoed by the developers of *This War of Mine* who saw their game as an art form telling a message against war, that also had to reflect "the demands of the market" and "ultimately generate a profit." (de Smale, Kors, and Sandovar 2019, 404). As such, the developer-historian's creative decisions are often structured by the surrounding economy, technologies, and frameworks of knowledge, which predispose the decision-making and agency of the people working within these productions (Tschang 2007; O'Donnell 2014; Bulut 2018). My third article of this research project echoes these dominant tendencies of mainstream historical digital games are motivated by several pressures – economic, formal, and technical. This echoes Artz's claim that

any music, movie, art, political discourse, or social commentary that passes through corporate media filters must meet the prerequisites of mass entertainment and profit, thereby weakening and undermining any political edge, class independence, or democratic potential (2015, 13).

These notions forwarded by the political economy of historical digital games and interviews with game developers partially explain why white men committing simplified violence according to US/Eurocentric, imperialist logics dominate the general picture. As such, it should be evident that there appears to be a correlation between relations of production and the form and content of the games produced, as I have now demonstrated in my quantitative content analysis and critical overview of historical digital games' memory-making potentials.

In the above, I went through the production and distribution of both digital games in general and historical digital games. I now briefly touch on their consumption. Here, it is clear that players of digital games are varied and diverse with many different identity groups across the world partaking in the consumption of digital games (Huntemann and Aslinger 2012; Kafai, Tynes, and Richard 2016). Although there is a stereotype of digital games being a male-only activity (Shaw 2010), it is evident that multiple genders and races enjoy digital games across multiple genres and multiple platforms (Yee 2017a; 2018; Conditt 2014; Llamas 2016; H. Taylor 2019a; Chess 2017). However, there is a dominant structuration of game consumption that cultivates the ideal 'gamer' subjectivity (Shaw 2012). Through marketing efforts and the products themselves, the games industry constructs a consumer subjectivity that favors the Anglophonic, white, heterosexual 16 to 35 years of age man with disposable income (Kocurek 2015; Condis 2018; Kirkpatrick 2017; N. Taylor 2006). This constructed subjectivity is predicated on consumption of the 'latest and greatest' products, while forming an identification with multibillion companies as their friends (Fron et al. 2007; Möring and Leino 2016). Meanwhile, a sizeable contingent of surveyed male players did not find it important at all to play a digital game as a female player-character (Code 2017, 176; Yee 2017b), thereby illustrating, at least, the indifference towards the current hegemonic regime of representation.

Given the hegemonic regimes of representations of certain groups outlined previously, one consequence of the repetition and reproduction of the same meanings and perspectives, this can result in already existing audiences emotionally attaching themselves "to the way things are." (Schiller 1976, 30). Herbert Schillert was here referring to the relation between mass media and cultivated audiences, and I argue that this is the case with mnemonic hegemony and certain consumers of games as well. With games predominantly featuring white men performing simplified violence, while other groups are relegated to the background or existing to serve the imagined player audience, the constructed gamer subjectivity forms an emotional attachment to this prevailing hegemony. As a result, this

subjectivity will sometimes oppose and neutralize any advancements to change or destabilize it. This has often resulted in so-called toxic elements in gaming culture (Consalvo 2012) that harass and terrorize (A. Salter and Blodgett 2012; M. Salter 2017; Mortensen 2018) those who do not conform to the ideal gamer subject (Shaw 2013). Given the racialized, sexual, and gendered structuration of this subjectivity and the hegemonic regimes of representation, those who are opposed and excluded are often people of color (Gray 2012; 2016; 2013), LGBTQ+, religious minorities, and women (A. C. Cote 2015; Jesse Fox 2016; Nieborg and Foxman 2018). In a sense, these reactionary 'gamer subjects' feel that the peace in their 'garden of the bourgeoisie' are disturbed by outside forces (Joseph 2013). Much scholarship has especially been dedicated to the issue of masculinity (N. Taylor and Voorhees 2018b) that characterizes their reactionary and hostile dynamics against perceived outsiders (A. Salter and Blodgett 2017; Massanari 2017; Shaw and Chess 2015).

This constructed gamer subjectivity is also activated in struggles over cultural memory in historical digital games. As already mentioned in the preface of this dissertation, gamer subjectivity lashes out when women are present in the WWII setting (Farokhmanesh 2018), or people of color are excluded in a medieval setting (Plunkett 2014; Moosa 2015). Another example is when some consumers took offense to the *Wolfenstein II: The New Colossus*' (MachineGames 2017) anti-Nazi marketing (Moosa 2017). As such, the actions from this subjectivity strive to maintain the mnemonic hegemony in historical digital games, usually seen as reactions to attempts to destabilize the status quo. However, it should be noted that these particular reactionary contestations of cultural memory are not exclusive to digital games culture. As we have seen across the world, these trends largely reflect broader tendencies in the world with the rise of fascism (Traverso 2019; Rasmussen 2018).

Game companies also take advantage of this contingent of gamer subjects by using them as tools for maintaining the status quo that these major game companies enjoy profits within. Lana Polansky (2018), for instance, identifies how reactionary gamer subjects are used to oppress and terrorize game developers who fight for better pay, improved work conditions, more equality in the workplaces, and in general more autonomy. In that sense, there is a cooperating tandem between the game companies above, who exploit the workers for capital accumulation, and the invested consumers, who 'violently' maintain the status quo by keeping workers in line (Keogh 2018).

Given the industry's political economy, the representation of racialized and gendered identities in digital games, and the structuration of their consumption, Fron et al. (2007, 1) summarizes the landscape best when they state that the power center of the games industry is predominately white, male-dominated corporate and creative elite "that represents a select group of large, global publishing companies in conjunction with a handful of massive chain retail distributors.". This elite has strong influence on which software and hardware technologies will be produced and distributed, "which games will be made, and by which designers; which players are important to design for, and which play styles will be supported. The hegemony operates on both monetary and cultural levels." (ibid.) Its consolidated power is further compounded by a publication and advertising infrastructure that reproduces the norms and expectations surrounding digital games. Alison Harvey (2019) has also later demonstrated that this hegemony of play is reproduced through institutionalized higher education of game development professionals. In sum, Fron et al. calls this structure the 'hegemony of play'.

I see this dissertation as expansion on hegemony of play as applied to historical digital games. Overall, this section in the introductory chapter demonstrated how insights on the political economy of the games industry across production, distribution, and consumption account for historical digital games

as they appear in my qualitative content analysis. These insights motivates the reasons for choosing to focus on *Freedom Cry* and *Mafia III* in two of the four research articles, which I account for in the following section.

7 Selecting games for analysis

Given the above literature review on the political economy of the games industry and the quantitative overview of historical digital games, I now qualify the research project's focus on the two titles, *Freedom Cry* and *Mafia III*. These were selected because they, paraphrasing Keeling's (2007) research on the black butch femme characters in 20th century US cinema, can subvert the hegemonic structures of historical digital games, by making the player visibly aware of the possibility of alternative mnemonic configurations. In contrast to most of the games listed in the quantitative content analysis above, both *Mafia III* and *Freedom Cry* feature non-hegemonic player characters (black male characters), are situated in unconventional historical settings (18th century Caribbean and 1960s New Orleans), and finally exhibit financially risky and politically sensitive themes (transatlantic slavery and struggle for Black Freedom in the US).

The entries of both games into the quantitative analysis also highlight how both games still follow conventions with regard to male player-characters, morally disengaging opposition, a Manichean conflict type, and violence as main conflict resolution mechanism. In this sense, both titles increase their range of address, but attempting to both have and eat their cake too. However, they nevertheless facilitate a subversion of the dynamics of mnemonic hegemony by virtue of their uncharacteristic player-characters, historical setting, and themes in contrast to the sea of American white men in either WWII or the modern 'War on Terror' as my quantitative analysis attests to. Moreover, both games are critically transgressive with regard to the use of violence by a racialized minority against the dominant majority group, such as French white slavers or American white police officers³⁰. As I conclude in my first and second research articles, the games reconfigure the hegemonic conventions of violence in digital games into the possibility for counter-hegemonic commemorative play. This reconfiguration has been also used in the marketing of *Mafia III*, where a snapshot of the player-character shoots into a crowd of Ku Klux Klan members (Pötzsch and Hammar 2019).

Their explicit forms of unconventional memory-making merit closer scrutiny. They openly depict that which is normally hidden or unsaid, and therefore deviate from the dominant forms of memory-making in the games industry. In turn, it would still have been fruitful to analyze games with more implicit politics, where their ideologies are more or less hidden or implied within the game's sign and mechanical systems. Such games often reveal the hegemonic notions of what is to be taken as normal and commonsensical, thereby indicating that future analyses of such games could prove important for determining the mnemonic landscape of historical digital games. As I demonstrated in my section on mnemonic hegemony in games, this work has already been done, and therefore my dissertation serves

-

³⁰ However, some might object that their depiction of slavery and racism as negative and harmful are in line with dominant hegemonic conventions. While such an observation rings true, the fact that they even approach such sensitive topics still illustrate a counter-hegemonic move at the level of encoding. Moreover, their other counterhegemonic 'radical' move is in their suggestion that violent resistance by black men against white supremacy is justified in these contexts. Such armed opposition unsettles contemporary cultural hegemony, where violent struggle for freedom is demonized. This cultural hegemony is best exemplified in the demonization of Malcolm X and the Black Panthers in contrast to the white-washed memory of Martin Luther King Jr. as non-violent protest. (Russworm 2016) In that sense, both *Freedom Cry* and *Mafia III* articulate an intervention into this hegemony.

as a contribution to existing scholarship on counter-hegemonic examples, thereby uncovering the dynamics of cultural memory in historical digital games.

For example, my analysis of how *Freedom Cry* combines an anti-colonialist theme within a power fantasy shows that the game challenges "a master narrative with a defiant version of the past." (Molden, 2016, 139). As my overview of mnemonic hegemony in historical digital games highlights, they also reveal how mnemonic hegemony works through digital games, especially with what is usually taken for granted and as representing established conventions. Indeed, as Molden (ibid. 137) writes:

The central means of destabilization is the return to the origin, that is changing the discursive practice (the power of hegemonic historical narratives) by critically studying its foundational texts and its omissions, silences, and constructions of socio-political unity by means of subjugation of some.

It is here that *Freedom Cry* and *Mafia III* serve as destabilizing examples of mnemonic hegemony, because they partly highlight these 'omissions, silences, and constructions' and they articulate a position of counter-hegemony through which hegemony can be comprehended. Both games treat politically sensitive and financially risky themes of race, slavery, and white supremacy through a mass-cultural entertainment form. At the same time, however, they also reveal how hegemonic conventions are still transposed and reinforced even with what seems to be counter-hegemonic entertainment products. I chose *Freedom Cry* and *Mafia III* for closer analysis because they reveal the intrinsic dynamics of hegemony in digital games and the potentials and limits of any form of mainstream counter-hegemony. As I have argued in both articles, the games enable players to critically perform within their virtual spaces and use the games' affordance for counter-hegemonic commemorative play – at the same time they have limitations and residues of the mnemonic hegemony seen in other mainstream titles.

One particular omission in my collected articles has been *Assassin's Creed: Liberation* (Ubisoft Sofia 2014), a game that centers on Aveline de Grandpré, a racialized black woman as the player-character in 18th century New Orleans. Here Aveline is able to navigate different social strata by adorning different costumes as either a slave, an aristocrat, or an assassin via the game's Persona system (S. Murray 2017a). This particular game complements *Freedom Cry* well, since it involves similar themes on racialization and slavery, but it also lifts the mnemonic simulation of the past by addressing the intersections of class, race, and gender as an aristocratic black woman liberating slaves and fighting slave owners and traders, not only through physical violence, but also through economic rivalry and competition against European colonial traders. This particular game was initially planned as being part of the first article on *Freedom Cry*, but it was cut due to scope and size of the article. Fortunately, S. Murray's research has generated fruitful insight into the game's politics of representation and mechanics (2017b; 2017a).

Liberation and Freedom Cry are illustrative of my assertion that the political economy affect memory-making that aligns with mnemonic hegemony. For one, Freedom Cry is a minor expansion or so-called downloadable content (DLC) that utilizes the already created assets from the 'big (white) brother' main product of Assassin's Creed IV: Black Flag (which features a British white man as the protagonist). This means that Ubisoft as a publisher incurs smaller financial risks when greenlighting Freedom Cry, since it has cost-reductions via asset re-use and project scope. Similarly, Liberation was

developed by a smaller low-cost studio in Sofia aimed for a smaller platform (Playstation Vita). It is therefore noticeable that *Freedom Cry* and *Liberation* both feature black player-characters and address sensitive historical themes such as slavery and racialization, but both games are smaller in production scope and therefore lower costs. As Shaw (2015, 11) also argues,

The shunting of Aveline and Adéwalé to DLC suggests that these characters are meant for people who are willing to pay for extra content and unlike the main audience for the AC [Assassin's Creed] series are perfectly happy to play history as Aveline and Adéwalé.

This also echoes other non-historical game productions that similarly are frequently hegemonic in their main, big-budget flagship titles, while less hegemonic in their identity representation in DLC content. While the following are not necessarily historical games, consider The Last of Us (Naughty Dog 2013) and its DLC expansion product Left Behind (Naughty Dog 2014). Whilst the main game primarily features a white man as the player-character, the DLC features a queer white teenage girl and her black teenage girlfriend. Other examples of this dynamic include: Infamous: The Second Son (Sucker Punch Productions 2014b) with a Native American man and its expansion First Light (Sucker Punch Productions 2014a) with a white woman; Assassin's Creed: Syndicate (Ubisoft Québec 2015) with a white man and woman and its expansion Jack the Ripper (Ubisoft Montpellier 2015) with a white woman; Middle Earth: Shadow of War (Monolith Productions 2017) with a white man and its expansions The Blade of Galadriel (Monolith Productions 2018b) featuring a white woman and Desolation of Mordor (Monolith Productions 2018a) featuring a black man; Uncharted 4 (Naughty Dog 2016a) featuring a white man and its larger expansion Lost Legacy (Naughty Dog 2016b) featuring a brown woman; Kingdom Come: Deliverance (Warhorse Studios 2018) featuring a white man and its expansion A Woman's Lot (Warhorse Studios 2019) featuring a white woman; Dishonored 2 (Arkane Studios 2016) featuring a white man or woman and Dishonored 2: Death of the Outsider (Arkane Studios 2017) featuring a black woman; and Wolfenstein 2: The New Colossus featuring a white man and its expansion The Freedom Chronicles (Machine Games 2018) featuring a black man and white woman. Here we see a clear trend of main flagship titles using hegemonic identities, while the less costly, and therefore less risky, optional DLC and/or expansions, are more likely to include non-dominant identity representations.

Mafia III is one exception to this trend, since the game is high budget and actively centers racialization, Blackness and Whiteness, and historical trauma, such as the struggle for Freedom in 1960s Southern USA, in its marketing, narrative and mechanical system. However, as I also address in my third article, Mafia III still allows certain players to avoid the emancipatory narrative of fighting 1960s white supremacy by insisting on the organized crime section of the game, which some of the developers also tried to emphasize in the run-up to its release in order to not cause controversy or push potential customers away.

Therefore, both *Freedom Cry* and *Mafia III* were selected on the grounds of subverting common trends in hegemonic historical games, but also at the same time illustrating how game companies attempt to circumvent the realities of the political economy they find themselves embedded in by e.g. lowering costs through asset re-use in *Freedom Cry* or trying to make counter-hegemonic commentary an optional experience, as seen in *Mafia III's* reliance on organized crime fiction and the developers' marketing spiel that the game was not about racism. As a result, these games were ripe for analysis because they attempt to subvert or stray away from the dominant hegemonic perspectives on the past

by problematizing norms and conventions in digital games, while also revealing the constraining dynamics of their political economy and mnemonic hegemony. In some fashion, the games destabilize the generic conventions of mainstream historical digital games, and at the same time, they reveal plenty of the inner workings of digital game production and the imagined cultures in which they are received (Srauy 2019b, 807). As Keeling's aforementioned work on the black butch femme in 20th century US cinema shows, non-hegemonic identities serve as an incision to the established consensus, especially for those unaware players, critics, and scholars (like myself) who are dyed-in-the-wool, unfamiliar with the lives of those in the margins of contemporary hegemony. *Mafia III* and *Freedom Cry* therefore help illustrate this in the research project's analysis of contemporary mnemonic hegemony in historical digital games.

8 Project findings - the intersection of games, play, memory, hegemony

As demonstrated, the research project adopted a multi-varied analytic approach to historical digital games by focusing on their encoding, game form, and decoding practices in the dynamics of cultural memory. It has advanced understandings of cultural memory with relation to practices of play (article 1), prosthetic memory (article 2), political economy (article 3), and finally, the experiential involvement through historical digital games (article 4). More critically, the dissertation demonstrates how networks of production and power hierarchies largely predispose practices to reproduce mnemonic hegemony that in turn are negotiated and sometimes contested by the players themselves. These negotiations and contestations are enabled by the very nature of the game form as a configurable and interpretable object, thereby highlighting my research project's distinct advantages in studying the under-researched topic of digital games in memory studies. As my research on players reveal, the contestations and appropriations are significant for understanding the movement of cultural memory on a pluri-medial level. At the same time, my research on the political economy of cultural memory and quantitative content analysis are likewise significant for understanding the limits of this pluri-medial level, where the discourse is structured by the politico-economic conditions of memory-making media.

Because of these observations on production and reception, this dissertation produces new knowledge on the relations between play, memory, and hegemony as applied to the game industry and the people who play these games. By looking into how memory-making processes take place in between play and game, I establish the concept of counter-hegemonic commemorative play that identifies specific contestations of memory in contemporary memory culture. I then critically interrogated the concept of prosthetic memory to show the limits set by mass culture and the surrounding network of mnemonic hegemony in which memory-making takes place. This led me to analyze the political economy of the games industry that reproduces and reinforces contemporary mnemonic hegemony. Then, I offered one way of studying the experiential involvement of historical digital games via established theory from game studies. Finally, I conducted a quantitative content analysis of 208 historical digital games that revealed the dominant trends of those that employ the realist-simulation style. Overall, this leads to identifying the relation between encoding of historical digital games and the economically-driven tendencies to reinforce mnemonic hegemony.

Methodologically, I have examined cultural memory of historical digital games from various approaches by bringing memory studies into dialogue with game studies, enhanced further by approaches from cultural studies and political economy of communication, thereby looking into the production, game, and reception at multiple levels. These results could only have been achieved through a methodological flexibility and variability, thereby serving as a purposeful mix of ethnographic interview studies, discourse analysis, game analysis, and quantitative analysis.

Combining game analysis, player perspectives, and political-economic analysis, the project accounts for the complexities in the production of historical digital games as memory-making artefacts and how players themselves appropriate and negotiate them in accordance with or as a resistance to the mnemonic hegemony. In sum, the findings of this dissertation identify *the tensions between play*, *memory, and power on the consumption-side of historical digital games* that is then *framed by the context of production that largely predisposes the limits of the structure in which practices of play and*

their memory-making operate on, which is then contested and appropriated by the players themselves. Finally, I then also propose a framework on how to analyze involvement via play and memory-making through historical digital games.

9 Conclusion

As argued throughout this research project, historical digital games are potentially significant for memory-making discourses. Their popularity and their form as configurable and interpretable media are ripe for analyzing the movement of cultural memory. As such, despite the relatively low attention paid to digital games, memory studies would benefit from paying attention to them and their position in cultural memory. As I have shown, players appropriate, negotiate, or contest the memory-making potentials of historical digital games through their practices of play. Meanwhile, games' status as mass cultural entertainment also makes them victims to the encoding structures' reinforcement of mnemonic hegemony, where especially white supremacy, patriarchy, and capitalism predispose the type of memories being mediated and circulated. As my empirical work demonstrates, there appears to be a correspondence between the level of budget and the reinforcement of mnemonic hegemony.

The main take-away from this dissertation should not be to ask oneself what is hegemonic and what is counter-hegemonic, but instead: Under what conditions is something hegemonic or counter-hegemonic? When and how are hegemonic or counterhegemonic potentials of a given cultural expression shaped, activated, and realized? Questions of *when* and *how* and *by whom* are important factors to consider in ascertaining the role of historical digital games in struggles over cultural memory. I hope that the dissertation facilitates and potentially answers some of these questions with regard to the intersection between cultural memory, hegemony, games, and play.

Whether or not budgets are the actual cause of mnemonic hegemony, however, is a different question and something of which requires more research. For example, the question is to what extent marketing departments of the games industry have power over the creative decisions in game companies. Another possible research direction is towards analyzing the epistemology of the marketing departments, the developers themselves, and the publishers when they purport to understand the (constructed) desires of their target demographics in order to maximize sales. This is unfortunately a difficult research problem, because these tools and knowledges emanating from this epistemology are often business secrets and/or rely on personal biases that developers and publishers are less likely to be aware of, or even share or admit. However, if we are to understand the reproduction of mnemonic hegemony, we nonetheless need to investigate and identify the underlying structure that motivates people, groups, and institutions to encode dominant ways of understanding history.

Overall, the project brought into dialogue multiple disciplines in order to establish knowledge on the relation between play, cultural memory, hegemony, and games. The findings of the project show that historical digital games contribute to the formation of cultural memory via the ontological properties of digital games as cybermedia objects (mechanical system, sign, and materiality). At the level of text, historical digital games convey what I call memory-making potentials. These memory-making potentials refer to the possible meanings that are activated and negotiated by players in their own situated context. Via game analysis, it is possible to identify these memory-making potentials with specific attention to games as cybermedia. My project then advances the understanding of games as cultural memory by showing that memory-making potentials are conditioned by political economy of the games industry that design and disseminate media of remembering. Here, 21st century imperialism, white supremacy, and patriarchy, among other power hierarchies, structure the encoding of memory-making potentials, so that the latter reflects the former. Generally, historical digital games reproduce and reflect oppression and marginalization of racialized, gendered groups at the margins. This insight entails that reception is not a level playing field, because the encoded hegemonic tendencies are made

dominant for the majority of players. As such, my findings advance the established tenets of cultural memory studies, notably Landsberg's prosthetic memory and Erll's concept of pluri-medial network, by my argument that political economy and power relationships as illustrated by e.g. critical race theory, feminism, postcolonialism, political economy and cultural studies, are significant for an understanding of the hegemonic reproduction of cultural memory.

Historical digital games articulate contemporary hegemonic perspectives on history by virtue of the political-economic conditions in which they are produced. Yet the research project also finds that contexts of reception open up for interpretative practices of players who are able to negotiate, contest, and sometimes even oppose the hegemonic memory-making potentials embedded into the game. Finally, the research project identified the mnemonic hegemony in a set of historical digital games through a quantitative analysis, which prompted an analysis of the political economy of digital games as a possible explanation for this mnemonic hegemony. To reiterate, the findings of this dissertation identify the tensions between play, memory, and hegemony on the consumption-side of historical digital games. At the same time, I analyze the contexts of production which predisposes dominant textual meaning-potentials, which are then contested and appropriated by players in situated contexts of reception.

10. References

- 11bit Studios. 2014. This War of Mine. PC.
- Aarseth, Espen. 2003. "Playing Research: Methodological Approaches to Game Analysis." In Game Approaches / Spil-Veje. Papers from Spilforskning.Dk.
- ——. 2007. "I Fought the Law: Transgressive Play and the Implied Player." In *Situated Play*. Tokyo. http://lmc.gatech.edu/~cpearce3/DiGRA07/Proceedings/017.pdf.
- Aarseth, Espen, and Gordon Calleja. 2015. "The Word Game: The Ontology of An Undefinable Object." In *Proceedings of the 10th International Conference on the Foundations of Digital Games*, 1–8. Pacific Grove, CA, USA. http://www.fdg2015.org/papers/fdg2015_paper_51.pdf.
- Ahmed, Sara. 2007. "A Phenomenology of Whiteness." *Feminist Theory* 8 (2): 149–68. https://doi.org/10.1177/1464700107078139.
- Alford, Matthew. 2015. "How Useful Is a Propaganda Model for Screen Entertainment?" In *Noam Chomsky*, 141–64. Critical Explorations in Contemporary Political Thought. Palgrave Macmillan, London. https://doi.org/10.1007/978-1-137-32021-6_8.
- Andersen, Carrie. 2015. "There Has To Be More To It': Diegetic Violence and the Uncertainty of President Kennedy's Death." *Game Studies* 15 (2). http://gamestudies.org/1502/articles/andersen.
- Apperley, Tom. 2006. "Genre and Game Studies: Toward a Critical Approach to Video Game Genres." *Simulation & Gaming* 37 (1): 6–23.
- ———. 2010. *Gaming Rhythms: Play and Counterplay from the Situated to the Global*. Theory on Demand 6. Amsterdam: Institute of Network Cultures.
- ———. 2018. "Counterfactual Communities: Strategy Games, Paratexts and the Player's Experience of History." *Open Library of Humanities* 4 (1): 15. https://doi.org/10.16995/olh.286.
- Arkane Studios. 2016. Dishonored 2. PC. Bethesda Softworks.
- Aronczyk, Melissa. 2016. "The Replication of Ideology: An Interview with Adrienne Shaw and Marcus Boon by M. Aronczyk." Journal of Games Criticism. July 2016. http://gamescriticism.org/interviews/aronczyk-3-a.
- Artz, Lee. 2015. *Global Entertainment Media: A Critical Introduction*. Malden/Oxford: John Wiley & Sons.
- Assmann, Aleida. 2014. "Transnational Memories." European Review 22 (4): 546–556.
- Assmann, Jan. 2011. "Communicative and Cultural Memory." In *Cultural Memories*, 15–27. Springer.
- Bailey, Eric N., Kazunori Miyata, and Tetsuhiko Yoshida. 2019. "Gender Composition of Teams and Studios in Video Game Development." *Games and Culture*, August, 1555412019868381. https://doi.org/10.1177/1555412019868381.
- Baribeau, Tari. 2014. "The 2013 Game Developer Gender Wage Gap |." Border House Blog. April 4, 2014.
 - https://web.archive.org/web/20140404164048/http://borderhouseblog.com/?p=10567.
- Baudrillard, Jean. 1994. *Simulacra and Simulation*. Michigan: University of Michigan Press. Bayeck, Rebecca Y., Tutaleni I. Asino, and Patricia A. Young. 2018. "Representations of
- Africans in Popular Video Games in the U.S." *Journal For Virtual Worlds Research* 11 (2). https://doi.org/10.4101/jvwr.v11i2.7285.
- Beavers, Sian, and Elizabeth FitzGerald. 2016. "Perceptions, Perspectives and Practices: A Study of the Players of Historical Games." presented at the Digra International Conference, Abertay University, Dundee, August 1. http://oro.open.ac.uk/47298/.
- Beavers, Sian, and Sylvia Warnecke. 2020. "Audience Perceptions of Historical Authenticity in Visual Media." In *The Middle Ages in Modern Culture: History and Authenticity in*

- *Contemporary Medievalism*, edited by K. Alvestad and R. Houghton. London and New York: I. B. Taurus.
- Begy, Jason. 2015. "Board Games and the Construction of Cultural Memory." *Games and Culture*, August, 1555412015600066. https://doi.org/10.1177/1555412015600066.
- Black, Daniel. 2017. "Why Can I See My Avatar? Embodied Visual Engagement in the Third-Person Video Game." *Games and Culture* 12 (2): 179–99. https://doi.org/10.1177/1555412015589175.
- Boyd-Barrett, Oliver. 2015. Media Imperialism. London: Sage.
- Boyd-Barrett, Oliver, and Tanner Mirrlees, eds. 2020. *Media Imperialism: Continuity and Change*. Lanham, Boulder, New York, London: Rowman & Littlefield. https://rowman.com/ISBN/9781538121566/Media-Imperialism-Continuity-and-Change.
- Brah, Avtar, and Ann Phoenix. 2013. "Ain't I A Woman? Revisiting Intersectionality." *Journal of International Women's Studies* 5 (3): 75–86.
- Breuer, Johannes, Ruth Festl, and Thorsten Quandt. 2012. "Digital War: An Empirical Analysis of Narrative Elements in Military First-Person Shooters." *Journal of Gaming & Virtual Worlds* 4 (3): 215–237.
- Brinkmann, Svend. 2014. "Unstructured and Semi-Structured Interviewing." *The Oxford Handbook of Qualitative Research*, July. https://doi.org/10.1093/oxfordhb/9780199811755.013.030.
- Brock, André. 2011. ""When Keeping It Real Goes Wrong": Resident Evil 5, Racial Representation, and Gamers." *Games and Culture* 6 (5): 429–52. https://doi.org/10.1177/1555412011402676.
- Bulut, Ergin. 2015. "Glamor above, Precarity below: Immaterial Labor in the Video Game Industry." *Critical Studies in Media Communication* 32 (3): 193–207.
- ———. 2018. "One-Dimensional Creativity: A Marcusean Critique of Work and Play in the Video Game Industry." *TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society* 16 (2): 757–71. https://doi.org/10.31269/triplec.v16i2.930.
- Calleja, Gordon. 2010. "Digital Games and Escapism." Games and Culture 5 (4): 335–353.
- Campbell, Colin. 2013. "Why Gaming's Latest Take on War Is so Offensive to Russians." Polygon. July 25, 2013. https://www.polygon.com/2013/7/25/4553536/is-company-of-heroes-2-anti-russian.
- Carr, Diane. 2017. "Methodology, Representation, and Games." *Games and Culture*, September, 1555412017728641. https://doi.org/10.1177/1555412017728641.
- Cassar, Robert. 2013. "Gramsci and Games." *Games and Culture* 8 (5): 330–53. https://doi.org/10.1177/1555412013493499.
- Castle Hill Studios. 2004. Catan: The Computer Game. PC. Big Fish Games.
- Chakraborti, Siddhartha. 2015. "From Destination to Nation and Back: The Hyperreal Journey of Incredible India." *Journal of Gaming & Virtual Worlds* 7 (2): 183–202. https://doi.org/10.1386/jgvw.7.2.183_1.
- Chapman, Adam. 2012. "Privileging Form Over Content: Analysing Historical Videogames." Edited by Daniel Cohen, Joan Fragaszy Troyano, Sasha Hoffman, and Jeri Wieringa. *Journal of Digital Humanities* 1 (2): 42–46.
- ———. 2013. "'Affording History': Applying the Ecological Approach to Historical Videogames." In *Playing with the Past: Digital Games and the Simulation of History*, edited by Matthew Kapell and Andrew BR Elliott, 61–73. New York / London: Bloomsbury Publishing USA.
- ——. 2016a. Digital Games as History: How Videogames Represent the Past and Offer Access to Historical Practice. New York, NY: Routledge.

- ——. 2016b. "It's Hard to Play in the Trenches: World War I, Collective Memory and Videogames." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/chapman.
- ———. 2019. "Playing the Historical Fantastic: Zombies, Mecha-Nazis and Making Meaning about the Past Through Metaphor." In *War Games Memory, Militarism and the Subject of Play*, edited by Holger Pötzsch and Phil Hammond, 122–49. Bloomsbury Academic.
- Chapman, Adam, Anna Foka, and Jonathan Westin. 2017. "Introduction: What Is Historical Game Studies?" *Rethinking History* 21 (3): 358–71. https://doi.org/10.1080/13642529.2016.1256638.
- ———. 2018. "Humanising Places: Exposing Histories of the Disenfranchised through Augmented Reality." *International Journal of Heritage Studies* 24 (3): 283–86. https://doi.org/10.1080/13527258.2017.1378912.
- Chapman, Adam, and Jonas Linderoth. 2015. "Exploring the Limits of Play." In *The Dark Side of Game Play: Controversial Issues in Playful Environments*, edited by Torill Mortensen, Jonas Linderoth, and Ashley ML Brown, 137–53. London: Routledge.
- Charles Games. 2017. Attentat 1942. PC. Charles University.
- Chess, Shira. 2017. *Ready Player Two: Women Gamers and Designed Identity*. Minneapolis: University of Minnesota Press.
- Code, Brie. 2017. "Is Game Design for Everybody? Women and Innovation in Video Games." *Kinephanos | Médias et Culture Populaire | Media and Popular Culture*, Gender Issues in Video Games / Problématiques de genre dans les jeux vidéo, , July, 169–84.
- Collins, Patricia Hill. 2000. Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment. New York; London: Routledge.
- Condis, Megan. 2018. *Gaming Masculinity: Trolls, Fake Geeks, and the Gendered Battle for Online Culture*. 1 edition. Iowa City: University Of Iowa Press.
- Conditt, Jessica. 2014. "Report: Men Play More MMOs, FPSes; Women Rule Mobile, RPG." Joystiq. October 27, 2014. https://web.archive.org/web/20160203063951/http://www.engadget.com/2014/10/27/report-men-play-more-mmos-fpses-women-rule-mobile-rpg/.
- Consalvo, Mia. 2006. "Console Video Games and Global Corporations: Creating a Hybrid Culture." *New Media & Society* 8 (1): 117–137.
- 2008. "Crunched by Passion: Women Game Developers and Workplace Challenges."
 In Beyond Barbie and Mortal Kombat: New Perspectives on Gender and Gaming,
 177–191. Cambridge, MA: MIT Press.
- ———. 2012. "Confronting Toxic Gamer Culture: A Challenge for Feminist Game Studies Scholars." *Ada: A Journal of Gender, New Media, and Technology* (blog). November 11, 2012. http://adanewmedia.org/2012/11/issue1-consalvo/.
- Consalvo, Mia, and Nathan Dutton. 2006. "Game Analysis: Developing a Methodological Toolkit for the Qualitative Study of Games." *Game Studies* 6 (1): 1–17.
- Cope, Zak. 2015. *Divided World, Divided Class*. Second edition. Montreal, Quebec: Kersplebedeb.
- Copplestone, Tara Jane. 2017. "But That's Not Accurate: The Differing Perceptions of Accuracy in Cultural-Heritage Videogames between Creators, Consumers and Critics." *Rethinking History* 21 (3): 415–38. https://doi.org/10.1080/13642529.2017.1256615.
- Costner, Kevin. 1990. Dances with Wolves.
- Cote, Amanda C. 2015. "I Can Defend Myself' Women's Strategies for Coping With Harassment While Gaming Online." *Games and Culture*, 1555412015587603.

- Cote, Amanda, and Julia G. Raz. 2015. "In-Depth Interviews for Games Research." In *Game Research Methods*, 93–116. ETC Press. http://dl.acm.org/citation.cfm?id=2812784.
- Creative Assembly. 2009. Empire: Total War. PC. SEGA.
- Crenshaw, Kimberle. 1989. "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics." *University of Chicago Legal Forum*, 139–68.
- ——. 1990. "Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color." *Stanford Law Review*, no. 6 (1991): 1241–1300.
- D'Acci, Julie. 2004. "Television, Representation and Gender." In *The Television Studies Reader*, edited by Robert Clyde Allen and Annette Hill, 373–388. London/New York: Routledge.
- Dafoe, Allan. 2015. "On Technological Determinism: A Typology, Scope Conditions, and a Mechanism." *Science, Technology, & Human Values* 40 (6): 1047–1076.
- Davis, Angela Y. 1983. Women, Race, & Class. New York: Random House.
- De Cesari, Chiara, and Ann Rigney. 2014. *Transnational Memory: Circulation, Articulation, Scales*. Berlin/boston: Walter de Gruyter.
- De Groot, Jerome. 2006. "Empathy and Enfranchisement: Popular Histories." *Rethinking History* 10 (3): 391–413.
- ——. 2016. Consuming History: Historians and Heritage in Contemporary Popular Culture. 2nd edition. London; New York: Routledge.
- Dietrich, David R. 2013. "Avatars of Whiteness: Racial Expression in Video Game Characters." *Sociological Inquiry* 83 (1): 82–105.
- Dill, K. E., D. A. Gentile, W. A. Richter, and J. C. Dill. 2005. "Violence, Sex, Race, and Age in Popular Video Games: A Content Analysis." In *Psychology of Women Book Series*. *Featuring Females: Feminist Analyses of Media*, edited by E. Cole and H. Daniel, 115–30. Washington, DC: American Psychological Association. http://dx.doi.org/10.1037/11213-008.
- Downs, E., and S. L. Smith. 2010. "Keeping Abreast of Hypersexuality: A Video Game Character Content Analysis." *Sex Roles* 62 (11): 721–733.
- Dyer, Richard. 2002. *The Matter of Images: Essays on Representation*. Reprint edition. London; New York: Routledge.
- Dyer-Witheford, Nick, and Greig De Peuter. 2009. *Games of Empire: Global Capitalism and Video Games*. Minnesota / London: Minnesota Press.
- EA Los Angeles. 2002. Medal of Honor: Frontline. PC. Electronic Arts.
- Edwards, Kate, Johanna Weststar, Wanda Meloni, Celia Pearce, and Marie Josée Legault. 2014. "IGDA Developer Satisfaction Survey 2014 Summary Report." igda.org: IGDA. http://c.ymcdn.com/sites/www.igda.org/resource/collection/9215B88F-2AA3-4471-B44D-B5D58FF25DC7/IGDA_DSS_2014-Summary_Report.pdf.
- Epic Games. 2006. Gears of War. Xbox. Microsoft.
- Erll, Astrid. 2008. "Literature, Film, and the Mediality of Cultural Memory." In *A Companion to Cultural Memory Studies: An International and Interdisciplinary Handbook*, edited by Astrid Erll, Ansgar Nünning, and Sara B. Young, 389–98. Berlin / New York: Walter de Gruyter.
- ———. 2011a. *Memory in Culture*. Hampshire: Palgrave Macmillan UK.
- ———. 2011b. "Travelling Memory." *Parallax* 17 (4): 4–18. https://doi.org/10.1080/13534645.2011.605570.
- Erll, Astrid, and Ann Rigney. 2009. "Introduction: Cultural Memory and Its Dynamics." In *Mediation, Remediation, and the Dynamics of Cultural Memory*, edited by Astrid Erll and Ann Rigney, 1–14. Berlin / New York: Walter de Gruyter.

- Euteneuer, Jacob. 2018. "Settler Colonialism in the Digital Age: *Clash of Clans*, Territoriality, and the Erasure of the Native." *Open Library of Humanities* 4 (1): 14. https://doi.org/10.16995/olh.212.
- Everett, Anna, and S. Craig Watkins. 2008. "The Power of Play: The Portrayal and Performance of Race in Video Games." *The Ecology of Games: Connecting Youth, Games, and Learning*, 141–64.
- Farokhmanesh, Megan. 2018. "Battlefield V Fans Who Failed History Are Mad That the Game Has Women in It." The Verge. May 24, 2018. https://www.theverge.com/2018/5/24/17388414/battlefield-v-fans-game-womenworld-war-2-history.
- Fernández-Vara, Clara. 2014. Introduction to Game Analysis. New York: Routledge.
- Fisher, Stephanie. 2011. "Playing with World War II: A Small-Scale Study of Learning in Video Games." *Loading...* 5 (8). http://journals.sfu.ca/loading/index.php/loading/article/view/96.
- Flanagan, Mary. 2009. *Critical Play: Radical Game Design*. Cambridge, MA; London, England: The MIT Press.
- Ford, Dom. 2016. "EXplore, EXpand, EXploit, EXterminate': Affective Writing of Postcolonial History and Education in Civilization V." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/ford.
- Frankel, David, Mikael Salomon, Tom Hanks, David Leland, Richard Loncraine, David Nutter, Phil Alden Robinson, and Tony To. 2001. *Band of Brothers*.
- Fron, Janine, Tracy Fullerton, Jacquelyn Ford Morie, and Celia Pearce. 2007. "The Hegemony of Play." In *Situated Play*. Tokyo. http://ict.usc.edu/pubs/The%20Hegemony%20of%20Play.pdf.
- Fuchs, Christian, and Jack Linchuan Qiu. 2018. "Ferments in the Field: Introductory Reflections on the Past, Present and Future of Communication Studies." *Journal of Communication* 68 (2): 219–32. https://doi.org/10.1093/joc/jqy008.
- Gallaugher, John, and Greg Stoller. 2004. "Software Outsourcing in Vietnam: A Case Study of a Locally Operating Pioneer." *The Electronic Journal of Information Systems in Developing Countries* 17 (1): 1–18.
- Galloway, Alexander R. 2004. "Social Realism in Gaming." Game Studies 4 (1): 2004.
- Game Developer Magazine. 2013. "Industry in Flux Game Developer Magazine Salary Survey 2013." *Game Developer Magazine*, April 2013.
- Garde-Hansen, Joanne. 2009. "Introduction." In *Save As... Digital Memories*, edited by Joanne Garde-Hansen, Andrew Hoskins, and Anna Reading, 1–26. London: Palgrave Macmillan UK.
- Garde-Hansen, Joanne, A. Hoskins, and A. Reading, eds. 2009. *Save As... Digital Memories*. Basingstoke: Palgrave Macmillan.
- Gibson, James J. 1977. "The Theory of Affordances." In *Perceiving, Acting and Knowing: Toward an Ecological Psychology*, edited by R. Shaw and J. Bransford, 1:67–82. Hillsdale, NJ: Erlbaum.
- ——. 2015. The Ecological Approach to Visual Perception. New York: Psychology Press.
- Gish, Harrison. 2010. "Playing the Second World War: Call of Duty and the Telling of History." *Eludamos. Journal for Computer Game Culture* 4 (2): 167–180.
- Golding, Peter, and Graham Murdock. 1979. "Ideology and the Mass Media: The Question of Determination." In *Ideology and Cultural Production*, edited by Michèle Barrett, Annette Kuhn, and Janet Wolff, 198. New York: St. Martin's Press.
- Gopal, Priyamvada. 2016. "Redressing Anti-Imperial Amnesia." *Race & Class* 57 (3): 18–30. https://doi.org/10.1177/0306396815608127.

- Grainge, Paul. 2003. "Introduction." In *Memory and Popular Film*, edited by Paul Grainge. Manchester: Manchester University Press.
- Gramsci, Antonio. 2005. *Selections from the Prison Notebooks*. Translated by Quitin Hoare and Geoffrey Noell-Smith. Vol. 294. London: Lawrence and Wishart.
- Gray, Kishonna Leah. 2012. "Deviant Bodies, Stigmatized Identities, and Racist Acts: Examining the Experiences of African-American Gamers in Xbox Live." *New Review of Hypermedia and Multimedia* 18 (4): 261–276.
- ———. 2013. "Collective Organizing, Individual Resistance, or Asshole Griefers? An Ethnographic Analysis of Women of Color in Xbox Live." *Ada: A Journal of Gender, New Media, and Technology*, no. 2. http://adanewmedia.org/2013/6/issue2-gray/.
- ——. 2014. Race, Gender, and Deviance in Xbox Live: Theoretical Perspectives from the Virtual Margins. Waltham / Oxford: Elsevier.
- ——. 2016. "'They're Just Too Urban': Black Gamers Streaming on Twitch." In *Digital Sociologies*, edited by J. Daniels, K. Gregory, and T.M. Cottom, 355–68. University of Bristol: Policy Press.
- ——. 2017. "The Digital Story That Games Tell Buffoons, Goons, and Pixelated Minstrels." Maryland Institute for Technology in the Humanities, February 7. https://umd.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=4184a8f9-58fd-42a2-ae51-0be352dfae32.
- ——. 2018. "Power in the Visual: Examnining Narratives of Controlling Black Bodies in Contemporary Gaming." *Velvet Light Trap* 81 (Spring): 62–65.
- Greenfield, Gerard. 2004. "Killing Games." Z Magazine 6 (17).
- Halbwachs, Maurice. 1980. *The Collective Memory*. Translated by Francis J. Ditter Jr. and Vida Yazdi Ditter. New York: Harper & Row.
- ——. 1992. *On Collective Memory*. Translated by Lewis A. Coser. Chicago and London: University of Chicago Press.
- Hall, Stuart. 1973. "Encoding, Decoding." In *The Cultural Studies Reader*, edited by Simon During, 128–37. London: Routledge.
- ——. 1985. "Signification, Representation, Ideology: Althusser and the Post-structuralist Debates." *Critical Studies in Mass Communication* 2 (2): 91–114. https://doi.org/10.1080/15295038509360070.
- ——. 1988. The Hard Road to Renewal: Thatcherism and the Crisis of the Left. London: Verso.
- ——. 1992. "Race, Culture, and Communications: Looking Backward and Forward at Cultural Studies." *Rethinking Marxism* 5 (1): 10–18. https://doi.org/10.1080/08935699208657998.
- ——. 1997. "The Spectacle of the 'Other." In *Representation: Cultural Representations and Signifying Practices*, edited by Stuart Hall, 223–90. London/ Thousand Oaks, Calif. / New Dehli: Sage Publications.
- ———. 1999. "The Whites of Their Eyes Racist Ideologies and the Media." In *Gender,* Race and Class in Media A Text Reader, edited by Gail Dines and Jean M. Humez, 18–22. London/ Thousand Oaks, Calif. / New Dehli: SAGE Publications.
- Halter, Ed. 2006. "Islamogaming: Looking for Video Games in the Muslim World." *Computer Gaming World* 266: 38–41.
- Hammar, Emil Lundedal. 2015. "Ethical Recognition of Marginalized Groups in Digital Games Culture." In *Diversity of Play: Games Cultures Identities*. Vol. 12. Lüneburg, Germany. http://www.digra.org/digital-library/publications/ethical-recognition-of-marginalized-groups-in-digital-games-culture/.
- ——. 2017a. "Digitale Slavar Av Historiske Traume." In *Spillmagi Fortellinger Om Dataspill*, edited by Tonje Olsrud and Joakim Lie, 15–22. Oslo: Frekk Forlag.

- ——. 2017b. "The Political Economy of Historical Digital Games." Edited by Philip Lee. *Media Development* LXIV (4): 25–29.
- ——. 2017c. "Counter-Hegemonic Commemorative Play: Marginalized Pasts and the Politics of Memory in the Digital Game Assassin's Creed: Freedom Cry." *Rethinking History* 21 (3): 372–95. https://doi.org/10.1080/13642529.2016.1256622.
- ——. 2019a. "Manufacturing Consent in Video Games The Hegemonic Memory Politics of Metal Gear Solid V: The Phantom Pain." *Nordlit*, no. 42: 279–300. https://doi.org/10.7557/13.5016.
- ——. 2019b. "Producing Play under Mnemonic Hegemony: The Political Economy of Memory Production in the Videogames Industry." Edited by Pablo Abend and Annika Richterich. *Digital Culture & Society* 5 (1): 61–83.
- Hammar, Emil Lundedal, and Jamie Woodcock. 2019. "The Political Economy of Wargames: The Production of History and Memory in Military Video Games." In *War Games Memory, Militarism and the Subject of Play*, edited by Holger Pötzsch and Phil Hammond, 72–99. Bloomsbury Academic.
- Hangar 13, and 2K Czech. 2016. Mafia III. PC. 2K Games.
- Hartley, John. 1994. "Hegemony." In *Key Concepts in Communication and Cultural Studies*, edited by Tim O'sullivan, Danny Saunders, Martin Montgomery, and John Fiske, 135. London and New York: Routledge London.
- Hartmann, Tilo. 2017. "The 'Moral Disengagement in Violent Videogames' Model." *Game Studies* 17 (2). http://gamestudies.org/1702/articles/hartmann.
- Hartmann, Tilo, K. Maja Krakowiak, and Mina Tsay-Vogel. 2014. "How Violent Video Games Communicate Violence: A Literature Review and Content Analysis of Moral Disengagement Factors." *Communication Monographs* 81 (3): 310–332.
- Hartmann, Tilo, and Peter Vorderer. 2010. "It's Okay to Shoot a Character: Moral Disengagement in Violent Video Games." *Journal of Communication* 60 (1): 94–119. https://doi.org/10.1111/j.1460-2466.2009.01459.x.
- Harvey, Alison. 2019. "Becoming Gamesworkers: Diversity, Higher Education, and the Future of the Game Industry." *Television & New Media* 20 (8): 756–66. https://doi.org/10.1177/1527476419851080.
- Harvey, Alison, and Stephanie Fisher. 2013. "Making a Name in Games." *Information, Communication & Society* 16 (3): 362–80. https://doi.org/10.1080/1369118X.2012.756048.
- ———. 2015. "Everyone Can Make Games!": The Post-Feminist Context of Women in Digital Game Production." *Feminist Media Studies* 15 (4): 576–92. https://doi.org/10.1080/14680777.2014.958867.
- Healey, Gareth. 2016. "Proving Grounds: Performing Masculine Identities in Call of Duty: Black Ops." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/healey.
- Heede, Pieter Van den, Kees Ribbens, and Jeroen Jansz. 2017. "Replaying Today's Wars? A Study of the Conceptualization of Post-1989 Conflict in Digital 'War' Games." *International Journal of Politics, Culture, and Society*, September, 1–22. https://doi.org/10.1007/s10767-017-9267-5.
- Herman, Edward S., and Noam Chomsky. 2002. *Manufacturing Consent: The Political Economy of the Mass Media*. Reprint edition. New York: Pantheon.
- Higgin, Tanner. 2009. "Blackless Fantasy The Disappearance of Race in Massively Multiplayer Online Role-Playing Games." *Games and Culture* 4 (1): 3–26.
- Hirschbiegel, Oliver. 2004. Der Untergang.
- HistoriaGames. 2019. "Inventaire des jeux vidéo historiques." HistoriaGames.com. 2019. http://www.histogames.com/HTML/inventaire.php.

- Hodgkin, Katharine, and Susannah Radstone, eds. 2003. *Contested Pasts: The Politics of Memory*. London; New York: Routledge.
- Höglund, Johan. 2008. "Electronic Empire: Orientalism Revisited in the Military Shooter." *Game Studies* 8 (1). http://gamestudies.org/0801/articles/hoeglund.
- Hoskins, Andrew. 2001. "New Memory: Mediating History." *Historical Journal of Film, Radio and Television* 21 (4): 333–346.
- ———, ed. 2017. Digital Memory Studies: Media Pasts in Transition. London: Routledge.
- Hubbell, Laquana Cooke, Gaines S. 2015. "Working Out Memory with a Medal of Honor Complex." *Game Studies* 15 (2). http://gamestudies.org/1502/articles/cookehubbell.
- Huntemann, Nina B., and Ben Aslinger, eds. 2012. *Gaming Globally: Production, Play, and Place*. 2013th ed. New York, NY: Palgrave Macmillan US.
- Infinity Ward. 2004. Call of Duty 1. PC. Activision.
- Jayemanne, Darshana. 2017. *Performativity in Art, Literature, and Videogames*. Palgrave Macmillan.
- Jesse Fox, Wai Yen Tang. 2016. "Womens Experiences with General and Sexual Harassment in Online Video Games: Rumination, Organizational Responsiveness, Withdrawal, and Coping Strategies." *New Media & Society*. https://doi.org/10.1177/1461444816635778.
- Jin, Dal Yong. 2015. *Digital Platforms, Imperialism and Political Culture*. New York / London: Routledge.
- Johnson, Robin. 2013. "Toward Greater Production Diversity Examining Social Boundaries at a Video Game Studio." *Games and Culture* 8 (3): 136–160.
- ——. 2014. "Hiding in Plain Sight: Reproducing Masculine Culture at a Video Game Studio." *Communication, Culture & Critique* 7 (4): 578–594.
- ——. 2018. "Technomasculinity and Its Influence in Video Game Production." In *Masculinities in Play*, 249–262. Champaigne, IL: Palgrave Macmillan.
- Jørgensen, Kristine. 2010. "Game Characters as Narrative Devices. A Comparative Analysis of Dragon Age: Origins and Mass Effect 2." *Eludamos. Journal for Computer Game Culture* 4 (2): 315–31.
- ———. 2012. "Players as Coresearchers: Expert Player Perspective as an Aid to Understanding Games." *Simulation & Gaming* 43 (3): 374–90. https://doi.org/10.1177/1046878111422739.
- ———. 2019a. "Understanding War Game Experiences: Applying Multiple Player Perspectives to Game Analysis." In *War Games Memory, Militarism and the Subject of Play*, edited by Holger Pötzsch and Phil Hammond, 100–121. Bloomsbury Academic.
- ———. 2019b. "Newcomers in a Global Industry: Challenges of a Norwegian Game Company." *Games and Culture* 14 (6): 660–79. https://doi.org/10.1177/1555412017723265.
- Jørgensen, Marianne W., and Louise J. Phillips. 2002. *Discourse Analysis as Theory and Method*. London/ Thousand Oaks, Calif. / New Dehli: SAGE Publications.
- Joseph, Daniel. 2013. "Videogames Are the Gardens of the Bourgeoise." DROP OUT. HANG OUT. SPACE OUT. May 14, 2013. http://dropouthangoutspaceout.tumblr.com/post/50472859975/videogames-are-the-gardens-of-the-bourgeoise.
- ——. 2017. "Distributing Productive Play: A Materialist Analysis of Steam." PhD Thesis, Toronto: Ryerson University.
- Judge, Alysia. 2019. "'It Was the Right Choice': How the Gears 5 Team Built a Credible Female Hero." *The Guardian*, September 26, 2019, sec. Games.

- https://www.theguardian.com/games/2019/sep/26/how-the-gears-5-team-built-a-credible-female-hero.
- Kafai, Yasmin B., Brendesha M. Tynes, and Gabriela T. Richard. 2016. *Diversifying Barbie and Mortal Kombat: Intersectional Perspectives and Inclusive Designs in Gaming*. Pittsburgh: Carnegie Mellon: ETC Press.
- Kansteiner, Wulf. 2017. "The Holocaust in the 21st Century: Digital Anxiety, Transnational Cosmopolitanism, and Never Again Genocide without Memory." In *Digital Memory Studies: Media Pasts in Transition*, edited by Andrew Hoskins, 122–152. London: Routledge.
- Kapell, Matthew Wilhelm, and Andrew B. R. Elliott. 2013. *Playing with the Past: Digital Games and the Simulation of History*. New York / London: Bloomsbury Publishing USA.
- Keeling, Kara. 2007. The Witch's Flight: The Cinematic, the Black Femme, and the Image of Common Sense. Durham & London: Duke University Press.
- Kempshall, Chris. 2015. *The First World War in Computer Games*. Basingstoke / New York: Palgrave Macmillan.
- Keogh, Brendan. 2018. "Gamers and Managers vs Workers: The Impossible (and Gendered) Standards Imposed on Game Developers." *Overland Literary Journal* (blog). 2018. https://overland.org.au/2018/07/gamers-and-managers-vs-workers-the-impossible-and-gendered-standards-imposed-on-game-developers/.
- Kerr, Aphra. 2017. *Global Games: Production, Circulation and Policy in the Networked Era.* New York / London: Routledge.
- Kingsepp, Eva. 2007. "Fighting Hyperreality with Hyperreality: History and Death in World War II Digital Games." *Games and Culture* 2 (4): 366–375.
- Kirkpatrick, Graeme. 2017. "How Gaming Became Sexist: A Study of UK Gaming Magazines 1981–1995." *Media, Culture & Society* 39 (4): 453–468.
- Kocurek, Carly A. 2015. *Coin-Operated Americans: Rebooting Boyhood at the Video Game Arcade*. Minneapolis / London: University of Minnesota Press.
- Koski, Johannes. 2017. "Reflections of History: Representations of the Second World War in Valkyria Chronicles." *Rethinking History* 21 (3): 396–414. https://doi.org/10.1080/13642529.2016.1256625.
- Kubrick, Stanley. 1987. Full Metal Jacket.
- Laclau, Ernesto, and Chantal Mouffe. 2001. *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics*. Second edition. London; New York: Verso.
- Lammes, Sybille. 2010. "Postcolonial Playgrounds: Games and Postcolonial Culture." *Eludamos. Journal for Computer Game Culture* 4 (1): 1–6.
- Landsberg, Alison. 2004. *Prosthetic Memory: The Transformation of American Remembrance in the Age of Mass Culture*. New York: Columbia University Press.
- ——. 2015. *Engaging the Past: Mass Culture and the Production of Historical Knowledge*. New York: Columbia University Press.
- Lankoski, Patri, and Staffan Björk, eds. 2015. *Game Research Methods: An Overview*. ETC Press
- Lankoski, Petri. 2011. "Player Character Engagement in Computer Games." *Games and Culture* 6 (4): 291–311. https://doi.org/10.1177/1555412010391088.
- Leonard, David. 2004. "High Tech Blackface: Race, Sports, Video Games and Becoming the Other." *Intelligent Agent* 4 (4.2).
 - http://www.intelligentagent.com/archive/Vol4_No4_gaming_leonard.htm.
- ——. 2006. "Virtual Gangstas, Coming to a Suburban House Near You: Demonization, Commodification, and Policing Blackness." In *The Meaning and Culture of Grand*

- Theft Auto: Critical Essays, edited by Nate Garrelts, 49–69. Jefferson, North Carolina / London: McFarland & Company Inc.
- -. 2016. "Grand Theft Auto V: Post-Racial Fantasies and Ferguson Realities." In *The* Intersectional Internet - Race, Sex, Class, and Culture Online, edited by Safiya Umoja Noble and Brendesha M. Tynes, 128–39. Digital Formations. New York: Peter Lang Publishing.
- Leone, Sergio. 1964. A Fistful of Dollars.
- . 1965. For a Few Dollars More.. 1966. The Good, the Bad and the Ugly.
- Linderoth, Jonas. 2015. "Creating Stories for a Composite Form: Video Game Design as Frame Orchestration." Journal of Gaming & Virtual Worlds 7 (3): 279–298.
- Llamas, Stephanie. 2016. "Games Data and Market Research » Hey, Rockstar: Where the Ladies At?" SuperData Research. October 27, 2016. https://www.superdataresearch.com/hey-rockstar-where-the-ladies-at/.
- Lorde, Audre. 2007. Sister Outsider: Essays and Speeches. Edited by Cheryl Clarke. Reprint edition. Berkeley, Calif: Crossing Press.
- Low, Michael. 2017. "How Two Malaysian Studios Contributed to Uncharted: The Lost Legacy." Hardware Zone Malaysia. October 2, 2017. https://www.hardwarezone.com.my/tech-news-how-two-malaysian-studioscontributed-uncharted-lost-legacy.
- Lugo, Jairo, Tony Sampson, and Merlyn Lossada. 2002. "Latin America's New Cultural Industries Still Play Old Games." Game Studies 2 (2).
- Lykke, Nina. 2010. Feminist Studies: A Guide to Intersectional Theory, Methodology and Writing. New York: Routledge.
- MachineGames. 2017. Wolfenstein II: The New Colossus. PC. Bethesda Softworks. -. 2018. Wolfenstein II: The Freedom Chronicles. PC. Bethesda Softworks.
- Magnet, Shoshana. 2006. "Playing at Colonization Interpreting Imaginary Landscapes in the Video Game Tropico." Journal of Communication Inquiry 30 (2): 142-62. https://doi.org/10.1177/0196859905285320.
- Malkowski, Jennifer, and TreaAndrea M. Russworm, eds. 2017. Gaming Representation: Race, Gender, and Sexuality in Video Games. Bloomington: Indiana University Press.
- Martin, Matt. 2019. "Call of Duty: Modern Warfare Rewrites a Controversial U.S. Attack to Blame It on Russia." VG247 (blog). October 28, 2019. https://www.vg247.com/2019/10/28/call-duty-modern-warfare-highway-of-deathrussia/.
- Marx, Karl. 1937. The 18th Brumaire of Louis Bonaparte. Translated by Saul Padover. Moscow: Progress Publishers. https://www.marxists.org/archive/marx/works/download/pdf/18th-Brumaire.pdf.
- Marx, Karl, and Friedrich Engels. 1968. *The German Ideology*. Translated by Tim Delaney and Bob Schwartz. Moscow: Progress Publishers. https://www.marxists.org/archive/marx/works/download/Marx_The_German_Ideolog
- Massanari, Adrienne. 2017. "#Gamergate and The Fappening: How Reddit's Algorithm, Governance, and Culture Support Toxic Technocultures." New Media & Society 19 (3): 329-46. https://doi.org/10.1177/1461444815608807.
- Matei, Stefania. 2015. "Games as a Genre of Historical Discourse. The Past on Fast Forward." presented at the DiGRA International Conference, Leuphana University, Lüneburg, May 14.
- Maxwell, Richard, Jon Raundalen, and Nina Lager Vestberg. 2014. Media and the Ecological Crisis. New York / London: Routledge.

- May, Tim. 2001. *Social Research: Issues, Methods and Research*. 3rd ed. Buckingham, Philadelphia: Open University Press.
- McCall, Jeremiah. 2012. "Historical Simulations as Problem Spaces: Criticism and Classroom Use." *Journal of Digital Humanities* 1 (2). http://journalofdigitalhumanities.org/1-2/historical-simulations-as-problem-spaces-by-jeremiah-mccall/.
- Mir, Rebecca, and Trevor Owens. 2013. "Modeling Indigenous Peoples: Unpacking Ideology in Sid Meier's Colonization." In *Playing with the Past: Digital Games and the Simulation of History*, edited by Matthew Kapell and Andrew B. R. Elliott, 91–106. New York / London: Bloomsbury Publishing USA.
- Molden, Berthold. 2016. "Resistant Pasts versus Mnemonic Hegemony: On the Power Relations of Collective Memory." *Memory Studies* 9 (2): 125–42. https://doi.org/10.1177/1750698015596014.
- Molina-Guzmán, Isabel. 2016. "#OscarsSoWhite: How Stuart Hall Explains Why Nothing Changes in Hollywood and Everything Is Changing." *Critical Studies in Media Communication* 33 (5): 438–54. https://doi.org/10.1080/15295036.2016.1227864.
- Monolith Productions. 2017. *Middle Earth: Shadow of War*. PC. Warner Brothers Interactive Entertainment.
- ——. 2018a. *Desolation of Mordor*. PC. Warner Brothers Interactive Entertainment.
- ——. 2018b. *The Blade of Galadriel*. PC. Warner Brothers Interactive Entertainment.
- Moosa, Tauriq. 2015. "Colorblind: On The Witcher 3, Rust, and Gaming's Race Problem." Polygon. June 3, 2015. https://www.polygon.com/2015/6/3/8719389/colorblind-on-witcher-3-rust-and-gamings-race-problem.
- ———. 2017. "Nazis as the Bad Guys in Videogames? How Is That Controversial? | Tauriq Moosa." *The Guardian*, October 27, 2017, sec. Opinion. https://www.theguardian.com/global/commentisfree/2017/oct/27/nazis-videogames-white-grievance-wolfenstein.
- Möring, Sebastian, and Olli Leino. 2016. "Beyond Games as Political Education—Neo-Liberalism in the Contemporary Computer Game Form." *Journal of Gaming & Virtual Worlds* 8 (2): 145–161.
- Mortensen, Torill Elvira. 2018. "Anger, Fear, and Games: The Long Event of #GamerGate." *Games and Culture* 13 (8): 787–806. https://doi.org/10.1177/1555412016640408.
- Mosco, Vincent. 2009. *The Political Economy of Communication*. Second edition. London: Sage.
- Mou, Yi, and Wei Peng. 2008. "Gender and Racial Stereotypes in Popular Video Games." In *Handbook of Research on Effective Electronic Gaming in Education*, edited by Richard E. Ferdig, 922–937. Hershey/New York: Information Science Reference. https://www.msu.edu/~pengwei/Mou%26Peng_gender%20and%20racial%20stereoty pe.pdf.
- Mukherjee, Souvik. 2015. "The Playing Fields of Empire: Empire and Spatiality in Video Games." *Journal of Gaming & Virtual Worlds* 7 (3): 299–315. https://doi.org/10.1386/jgvw.7.3.299_1.
- ——. 2017. Videogames and Postcolonialism: Empire Plays Back. London: Palgrave Macmillan.
- ———. 2018. "Playing Subaltern: Video Games and Postcolonialism." *Games and Culture* 13 (5): 504–20. https://doi.org/10.1177/1555412015627258.
- Mukherjee, Souvik, and Emil Lundedal Hammar. 2018. "Introduction to the Special Issue on Postcolonial Perspectives in Game Studies." *Open Library of Humanities* 4 (2): 33. https://doi.org/10.16995/olh.309.
- Munslow, Alun. 2007a. Narrative and History. Basingstoke: Palgrave Macmillan.

- ———. 2007b. "Why Should Historians Write about the Nature of History (Rather than Just Do It)?" *Rethinking History* 11 (4): 613–25. https://doi.org/10.1080/13642520701652178.
- Murray, Janet. 1997. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. Mit Press.
- Murray, Soraya. 2017a. "The Poetics of Form and the Politics of Identity in Assassin's Creed III: Liberation." Edited by Gabrielle Trépanier-Jobin. *Kinephanos Journal of Media Studies and Popular Culture*, Gender Issues in Video Games / Problématiques de genre dans les jeux vidéo, , no. Special Issue: 77–102.
- ——. 2017b. *On Video Games: The Visual Politics of Race, Gender and Space*. London New York: I.B. Tauris & Co Ltd.
- Nagy, Peter, and Gina Neff. 2015. "Imagined Affordance: Reconstructing a Keyword for Communication Theory." *Social Media + Society* 1 (2): 2056305115603385. https://doi.org/10.1177/2056305115603385.
- Naughty Dog. 2013. The Last of Us. Playstation 3. Sony Computer Entertainment.
- ——. 2014. *Left Behind*. Playstation 3. Sony Computer Entertainment.
- . 2016a. *Uncharted 4: A Thief's End*. Playstation 4. Sony Computer Entertainment.
- ——. 2016b. *Uncharted: Lost Legacy*. Playstation 4. Sony Computer Entertainment.
- Newzoo. 2019a. "2019 Global Games Market Per Device & Segment." https://newzoo.com/wp-content/uploads/2016/03/Newzoo-2019-Global-Games-Market-per-Segment.png.
- ——. 2019b. "2019 Global Games Market Per Region." https://newzoo.com/wp-content/uploads/2016/03/Newzoo-2019-Global-Games-Market-per-Region.png.
- Nguyen, Josef. 2017. "Digital Games about the Materiality of Digital Games." *Ecozon@: European Journal of Literature, Culture and Environment* 8 (2): 18–38.
- Nieborg, David. 2011. "Triple-A: The Political Economy of the Blockbuster Video Game." PhD Thesis, University of Amsterdam. http://dare.uva.nl/search?arno.record.id=383251.
- Nieborg, David, and Maxwell Foxman. 2018. "Mainstreaming Misogyny: The Beginning of the End and the End of the Beginning in Gamergate Coverage." In *Mediating Misogyny: Gender, Technology, and Harassment*, edited by Jacqueline Ryan Vickery and Tracy Everbach, 111–30. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-72917-6_6.
- Nieborg, David, and Thomas Poell. 2018. "The Platformization of Cultural Production: Theorizing the Contingent Cultural Commodity." *New Media & Society*, April, 1461444818769694. https://doi.org/10.1177/1461444818769694.
- Nieborg, David, Chris Young, and Daniel Joseph. 2019. "Lost in the App Store: The Political Economy of the Canadian Game App Economy." *Canadian Journal of Communication* 44 (2). https://doi.org/10.22230/cjc.2019v44n2a3505.
- Nora, Pierre. 1989. "Between Memory and History: Les Lieux de Mémoire." *Representations*, no. 26: 7–24. https://doi.org/10.2307/2928520.
- ——. 1996. "General Introduction: Between Memory and History." In *Realms of Memory: The Construction of the French Past*, edited by Lawrence D. Kritzman, 1–20. New York: Columbia University Press.
- Norman, Donald A. 1988. The Design of Everyday Things. New York: Basic Books.
- O'Donnell, Casey. 2014. *Developer's Dilemma: The Secret World of Videogame Creators*. Cambridge, MA; London: MIT Press.
- Oliveira, Miguel. 2014. Thralled (version Alpha). http://www.thralled.org/about.html.
- Omi, Michael. 1989. "In Living Color: Race and American Culture." In *Cultural Politics in Contemporary America*, 111–122. New York: Routledge.

- Omi, Michael, and Howard Winant. 1994. *Racial Formation in the United States: From the 1960s to the 1990s*. Second edition. New York / London: Routledge.
- O'Neill, Kevin, and Bill Feenstra. 2016. "Honestly, I Would Stick with the Books': Young Adults' Ideas About a Videogame as a Source of Historical Knowledge." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/oneilfeenstra.
- Ozimek, Anna M. 2019. "Outsourcing Digital Game Production: The Case of Polish Testers." *Television & New Media* 20 (8): 824–35. https://doi.org/10.1177/1527476419851088.
- Packer, Jeremy, and Stephen B. Crofts Wiley. 2012. "The Materiality of Communication." In *Communication Matters: Materialist Approaches to Media, Mobility and Networks*. New York: Routledge.
- Patel, Ansh. 2016. "Imperialism in the Worlds and Mechanics of First-Person Shooters." *Journal of Games Criticism*, July. http://gamescriticism.org/articles/patel-3-a/.
- Paul, Herman. 2011. Hayden White. Cambridge: Polity Press.
- Penix-Tadsen, Phillip. 2019. "Introduction." In *Video Games and the Global South*, edited by Phillip Penix-Tadsen and Gonzalo Frasca, 1–32. Pittsburgh, PA: Carnegie Mellon University.
- Penix-Tadsen, Phillip, and Gonzalo Frasca, eds. 2019. *Video Games and the Global South*. Pittsburgh, PA: Carnegie Mellon University.
- Peterson, Rolfe Daus, Andrew Miller, and Sean Joseph Fedorko. 2013. "The Same River Twice: Historical Representation and the Value of Exploring Societal Concepts in the Total War, Civilization, and Age of Empires Franchises." In *Playing with the Past: Digital Games and the Simulation of History*, edited by Matthew Kapell and Andrew BR Elliott, 33–48. New York / London: Bloomsbury Publishing USA.
- Petitjean, Clément. 2014. "Ernesto Laclau, Theorist of Hegemony." *Versobooks.Com* (blog). April 30, 2014. https://www.versobooks.com/blogs/1578-ernesto-laclau-theorist-of-hegemony.
- Plunkett, Luke. 2014. "Idiots Fight To Keep A Medieval Game White." Kotaku. February 5, 2014. https://kotaku.com/idiots-fight-to-keep-a-medieval-game-white-1516970808.
- Pobłocki, Kacper. 2002. "Becoming-State. Bio-Cultural Imperialism of Sid Meier's Civilization." *Focaal European Journal of Anthropology* 2002 (39): 163–77.
- Polansky, Lana. 2018. "Worse than Scabs: Gamer Rage as Anti-Union Violence." *Rhizome*, October 30, 2018. http://rhizome.org/editorial/2018/oct/30/worse-than-scabs-gamerrager-as-anti-worker-violence/.
- Pötzsch, Holger. 2012. "Framing Narratives: Opening Sequences in Contemporary American and British War Films." *Media, War & Conflict* 5 (2): 155–173.
- ——. 2013. "Ubiquitous Absence." *Nordicom Review* 34 (1): 125–144.
- ——. 2017a. "Media Matter." *TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society* 15 (1): 148–170.
- ———. 2017b. "Selective Realism: Filtering Experiences of War and Violence in First- and Third-Person Shooters." *Games and Culture* 12 (2): 156–78. https://doi.org/10.1177/1555412015587802.
- ———. 2019. "Forms and Practices of Transgressivity in Videogames: Aesthetics, Play, Holger and Politics." In *Transgression in Games and Play*, edited by Kristine Jørgensen and Faltin Karlsen, 45–62. Cambridge, MA; London, England: MIT Press.
- Pötzsch, Holger, and Emil Lundedal Hammar. 2019. "Playing Perpetrators: Interrogating Evil in Videogames about Violent Conflicts." In *The Routledge International Handbook of Perpetrator Studies*, edited by Susanne C. Knittel and Zachary J. Goldberg. London/New York: Routledge.

- Pötzsch, Holger, and Vít Šisler. 2019. "Playing Cultural Memory: Framing History in Call of Duty: Black Ops and Czechoslovakia 38-89: Assassination." *Games and Culture* 14 (1): 3–25. https://doi.org/10.1177/1555412016638603.
- Prescott, Julie. 2014. *Gender Considerations and Influence in the Digital Media and Gaming Industry*. Edited by Julie Elizabeth McGurren. 1 edition. Hershey: IGI Global.
- Prescott, Julie, and Jan Bogg. 2011. "Segregation in a Male-Dominated Industry: Women Working in the Computer Games Industry." *International Journal of Gender, Science and Technology* 3 (1).
 - http://genderandset.open.ac.uk/index.php/genderandset/article/view/122.
- Qiu, Jack Linchuan. 2017. *Goodbye ISlave: A Manifesto for Digital Abolition*. Champaigne, IL: University of Illinois Press.
- Qureshi, Farah. 2018. "Simulating the Community Bank: Postcolonial Capital, ROSCAs, and Game Design." *Analog Game Studies* (blog). March 5, 2018. http://analoggamestudies.org/2018/03/2892/.
- Radstone, Susannah. 2008. "Memory Studies: For and Against." *Memory Studies* 1 (1): 31–39
- Rasmussen, Mikkel Bolt. 2018. "Postfascism, or the Cultural Logic of Late Capitalism." *Third Text* 32 (5–6): 682–88. https://doi.org/10.1080/09528822.2018.1549797.
- Reading, Anna. 2011. "Identity, Memory and Cosmopolitanism: The Otherness of the Past and a Right to Memory?" *European Journal of Cultural Studies* 14 (4): 379–394. https://doi.org/10.1177/1367549411411607.
- ———. 2016. *Gender and Memory in the Globital Age*. Reprint edition. London: Palgrave Macmillan.
- Reichmuth, Philipp, and Stefan Werning. 2006. "Pixel Pashas, Digital Djinns." *ISIM Review* 18: 2.
- Rejack, Brian. 2007. "Toward a Virtual Reenactment of History: Video Games and the Recreation of the Past." *Rethinking History* 11 (3): 411–25. https://doi.org/10.1080/13642520701353652.
- Riffe, Daniel, Stephen Lacy, Frederick Fico, Brendan Watson, Stephen Lacy, Frederick Fico, and Brendan Watson. 2019. *Analyzing Media Messages: Using Quantitative Content Analysis in Research*. Routledge. https://doi.org/10.4324/9780429464287.
- Rigney, Ann. 2016. "Cultural Memory Studies Mediation, Narrative, and the Aesthetic." In *Routledge International Handbook of Memory Studies*, edited by Anna Lisa Tota and Trever Hagen, 65–76. New York: Routledge.
- Robinson, Will. 2014. "Orientalism and Abstraction in Eurogames." *Analog Game Studies* (blog). December 2, 2014. http://analoggamestudies.org/2014/12/orientalism-and-abstraction-in-eurogames/.
- Rochat, Yannick. 2019. "A Quantitative Study of Historical Video Games (1981–2015)." In *Historia Ludens: The Playing Historian*, edited by Alexander von Lünen, Katherine J. Lewis, Benjamin Litherland, and Pat Cullum, 30. New York: Routledge.
- Rosenstone, Robert A. 2006. *History on Film/Film on History*. Harlow, England: Pearson Education.
- Ross, Alison. 2014. Walter Benjamin's Concept of the Image. New York: Routledge.
- Ruberg, Bonnie. 2019. "The Precarious Labor of Queer Indie Game-Making: Who Benefits from Making Video Games 'Better'?" *Television & New Media* 20 (8): 778–88. https://doi.org/10.1177/1527476419851090.
- Russworm, TreaAndrea M. 2016. Blackness Is Burning: Civil Rights, Popular Culture, and the Problem of Recognition. Wayne State University Press.
- ——. 2017. "Dystopian Blackness and the Limits of Racial Empathy in The Walking Dead and The Last of Us." In *Gaming Representation: Race, Gender, and Sexuality in*

Video Games, edited by Jennifer Malkowski and TreaAndrea M. Russworm, 109–28. Indiana University Press. -. 2019. "Video Game History and the Fact of Blackness." *ROMchip* 1 (1). http://www.romchip.org/index.php/romchip-journal/article/view/85. Salter, Anastasia, and Bridget Blodgett. 2012. "Hypermasculinity & Dickwolves: The Contentious Role of Women in the New Gaming Public." Journal of Broadcasting & Electronic Media 56 (3): 401–16. https://doi.org/10.1080/08838151.2012.705199. -. 2017. Toxic Geek Masculinity in Media: Sexism, Trolling, and Identity Policing. 1st ed. 2017 edition. New York, NY: Palgrave Macmillan. Salter, Michael. 2017. "From Geek Masculinity to Gamergate: The Technological Rationality of Online Abuse." Crime, Media, Culture, February, 1741659017690893. https://doi.org/10.1177/1741659017690893. Salvati, Andrew J., and Jonathan M. Bullinger. 2013. "Selective Authenticity and the Playable Past." In *Playing with the Past: Digital Games and the Simulation of History*, edited by Matthew Kapell and Andrew B. R. Elliott, 153–168. New York / London: Bloomsbury Publishing USA. Schiller, Herbert I. 1976. Communication and Cultural Domination. White Plains, New York: International Arts and Sciences. Schut, Kevin. 2007. "Strategic Simulations and Our Past The Bias of Computer Games in the Presentation of History." Games and Culture 2 (3): 213-235. Scott, Ridley. 2001. Black Hawk Down. Serious Game Interactive. 2013. Playing History 2: Slave Trade. PC. Shafeeq, Mohammed, and Anuj Sharma. 2016. "Global Games Developers Making a Beeline to Outsource to India (Tech Trend) (Lead, Fixing Dateline)." Business Standard India, December 16, 2016. https://www.business-standard.com/article/news-ians/globalgames-developers-making-a-beeline-to-outsource-to-india-tech-trend-lead-fixingdateline-116121600310 1.html. Shaw, Adrienne. 2010. "What Is Video Game Culture? Cultural Studies and Game Studies." Games and Culture 5 (4): 403–24. https://doi.org/10.1177/1555412009360414. -. 2012. "Do You Identify as a Gamer? Gender, Race, Sexuality, and Gamer Identity." *New Media & Society* 14 (1): 28–44. -. 2013. "On Not Becoming Gamers: Moving Beyond the Constructed Audience." Ada: A Journal of Gender, New Media, and Technology (blog). June 1, 2013. http://adanewmedia.org/2013/06/issue2-shaw/. -. 2015. "The Tyranny of Realism: Historical Accuracy and Politics of Representation in Assassin's Creed III." Loading... 9 (14). http://journals.sfu.ca/loading/index.php/loading/article/view/157. -. 2017. "Encoding and Decoding Affordances: Stuart Hall and Interactive Media Technologies." Media, Culture & Society 39 (4): 592-602. https://doi.org/10.1177/0163443717692741. Shaw, Adrienne, and Shira Chess. 2015. "A Conspiracy of Fishes, or, How We Learned to Stop Worrying About #GamerGate and Embrace Hegemonic Masculinity." Journal of *Broadcasting & Electronic Media* 59 (1): 208–20. Shirinian, Ara. 2012. "Ten Years of Salary Surveys: An Aggregate Analysis of Game Developers Salaries from 2001-2010." Game Developer Magazine 19 (2): 20–25. Sicart, Miguel. 2008. "Defining Game Mechanics." Game Studies 8 (2): 1–14.

—. 2009. *The Ethics of Computer Games*. Cambridge, MA: MIT Press.

. 2011. "Against Procedurality." *Game Studies* 11 (3). http://gamestudies.org/1103/articles/sicart_ap.

- Silverman, David. 1985. *Qualitative Methodology and Sociology: Describing the Social World*. Aldershot: Gower.
- Sinclair, Brendan. 2015. "Conflict Minerals the Real Link between Games and Violence." GamesIndustry.Biz. June 3, 2015. http://www.gamesindustry.biz/articles/2015-06-03-conflict-minerals-the-real-link-between-games-and-violence.
- ———. 2016. "Conflict Mineral Sourcing Still Hazy for Games Industry." GamesIndustry.Biz. June 7, 2016. http://www.gamesindustry.biz/articles/2016-06-07-conflict-mineral-sourcing-still-hazy-for-games-industry.
- ———. 2017. "Conflict Minerals Progress in Jeopardy." GamesIndustry.Biz. June 5, 2017. http://www.gamesindustry.biz/articles/2017-06-05-conflict-minerals-progress-in-jeopardy.
- Šisler, Vít. 2008. "Digital Arabs Representation in Video Games." *European Journal of Cultural Studies* 11 (2): 203–20. https://doi.org/10.1177/1367549407088333.
- ——. 2009. "Palestine in Pixels: The Holy Land, Arab-Israeli Conflict, and Reality Construction in Video Games." *Middle East Journal of Culture and Communication* 2 (2): 275–292.
- ———. 2016. "Contested Memories of War in Czechoslovakia 38-89: Assassination: Designing a Serious Game on Contemporary History." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/sisler.
- Smale, Stephanie de. 2019a. "Let's Play War: Cultural Memory, Celebrities and Appropriations of the Past." In *War Games Memory, Militarism and the Subject of Play*, edited by Holger Pötzsch and Phil Hammond, 210–37. Bloomsbury Academic.
- ———. 2019b. "Ludic Memory Networks: Following Translations and Circulations of War Memory in Digital Popular Culture." PhD Thesis, University Utrecht.
- ———. 2019c. "Memory in the Margins: The Connecting and Colliding of Vernacular War Memories." *Media, War & Conflict*, February, 1750635219828772. https://doi.org/10.1177/1750635219828772.
- Smale, Stephanie de, Martijn J. L. Kors, and Alyea M. Sandovar. 2019. "The Case of This War of Mine: A Production Studies Perspective on Moral Game Design." *Games and Culture* 14 (4): 387–409. https://doi.org/10.1177/1555412017725996.
- Smith, John. 2016. *Imperialism in the Twenty-First Century: Globalization, Super-Exploitation, and Capitalism's Final Crisis*. New York: Monthly Review Press.
- Smith, Murray. 1995. *Engaging Characters. Fiction, Emotion, and the Cinema*. Oxford: Oxford: Clarendon Press. https://kar.kent.ac.uk/3096.
- Spielberg, Steven. 1998. Saving Private Ryan.
- Srauy, Sam. 2019a. "Professional Norms and Race in the North American Video Game Industry." *Games and Culture* 14 (5): 478–97. https://doi.org/10.1177/1555412017708936.
- ——. 2019b. "Precarity and Why Indie Game Developers Can't Save Us from Racism." *Television & New Media* 20 (8): 802–12. https://doi.org/10.1177/1527476419851081.
- Srnicek, Nick. 2016. *Platform Capitalism*. First edition. Cambridge, UK; Malden, MA: Polity.
- Sterczewski, Piotr. 2016. "This Uprising of Mine: Game Conventions, Cultural Memory and Civilian Experience of War in Polish Games." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/sterczewski.
- ——. 2019. "Machine(s) of Narrative Security: Mnemonic Hegemony and Polish Games about Violent Conflicts." In *War Games Memory, Militarism and the Subject of Play*, edited by Holger Pötzsch and Phil Hammond. Bloomsbury Academic.
- Stone, Oliver. 1986. Platoon.

- Sturken, Marita. 2008. "Memory, Consumerism and Media: Reflections on the Emergence of the Field." *Memory Studies* 1 (1): 73–78. https://doi.org/10.1177/1750698007083890.
- Sucker Punch Productions. 2014a. *Infamous: First Light*. Playstation 4. Sony Computer Entertainment.
- ——. 2014b. *Infamous: The Second Son*. Playstation 4. Sony Computer Entertainment.
- Taylor, Haydn. 2018. "Exploring the Pay Gap: What Does the Data Really Say about the Industry's Gender Imbalance?" GamesIndustry.Biz. April 6, 2018.
 - https://www.gamesindustry.biz/articles/2018-04-05-gender-wage-gap-deep-dive.
- ———. 2019a. "SuperData: US Millennials Spend \$112 a Month on Gaming." GamesIndustry.Biz. June 6, 2019. https://www.gamesindustry.biz/articles/2019-06-06-superdata-us-millennials-spend-usd112-a-month-on-gaming.
- ———. 2019b. "Rocksteady and Creative Assembly under Fire over Video Game Tax Relief." GamesIndustry.Biz. October 10, 2019. https://www.gamesindustry.biz/articles/2019-10-10-rocksteady-and-creative
 - assembly-under-fire-over-video-game-tax-relief.
- Taylor, Keeanga-Yamahtta. 2017. *How We Get Free: Black Feminism and the Combahee River Collective*. Chicago, IL: Haymarket Books.
- Taylor, Nicholas. 2006. "Mapping Gendered Play." Loading... Journal of the Canadian Games Studies Association 1 (1).
- Taylor, Nicholas, and Gerald Voorhees. 2018a. "Introduction: Masculinity and Gaming: Mediated Masculinities in Play." In *Masculinities in Play*, edited by Nicholas Taylor and Gerald Voorhees, 1–19. Palgrave Games in Context. Champaigne, IL: Springer International Publishing. https://doi.org/10.1007/978-3-319-90581-5_1.
- ———, eds. 2018b. *Masculinities in Play*. 1st ed. 2018 edition. Champaigne, IL: Palgrave Macmillan.
- Teuber, Klaus. 1995. Catan. Boardgame.
- Thomas, Dexter. 2015. "I Played 'Slave Tetris' so Your Kids Don't Have To." *Los Angeles Times*, September 7, 2015. http://www.latimes.com/entertainment/herocomplex/la-et-hc-played-slave-tetris-kids-20150904-htmlstory.html.
- Thomsen, Michael. 2018. "Made in China: Every New Video Game You Love." *The Outline*, February 6, 2018. https://theoutline.com/post/3087/outsourcing-blockbuster-video-games-made-in-china-horizon-zero-dawn.
- Timcke, Scott. 2017. *Capital, State, Empire: The New American Way of Digital Warfare*. London: University of Westminster Press. https://doi.org/10.16997/book6.
- Trammell, Aaron. 2016. "How Dungeons & Dragons Appropriated the Orient." *Analog Game Studies* (blog). January 11, 2016. http://analoggamestudies.org/2016/01/how-dungeons-dragons-appropriated-the-orient/.
- Traverso, Enzo. 2019. *The New Faces of Fascism: Populism and the Far Right*. Translated by David Broder. London and New York: Verso Books.
- Treyarch. 2010. Call of Duty: Black Ops. PC. Activision.
- Tripwire Interactive. 2011. Red Orchestra 2: Heroes of Stalingrad. PC. 1C Company.
- Trouillot, Michel-Rolph. 1995. *Silencing the Past: Power and the Production of History*. Boston, Massachuetts: Beacon Press.
- Tschang, F. Ted. 2007. "Balancing the Tensions Between Rationalization and Creativity in the Video Games Industry." *Organization Science* 18 (6): 989–1005. https://doi.org/10.1287/orsc.1070.0299.
- Ubisoft. 2012. Assassin's Creed 3. PC. Ubisoft.
- Ubisoft Montpellier. 2015. Assassin's Creed: Jack the Ripper. PC. Ubisoft.
- Ubisoft Montréal. 2013. Assassin's Creed IV: Black Flag. PC. Ubisoft, Inc.
- Ubisoft Québec. 2013. Assassin's Creed: Freedom Cry. PC. Ubisoft, Inc.

- ——. 2015. Assassin's Creed: Syndicate. PC. Ubisoft.
- Ubisoft Sofia. 2014. Assassin's Creed: Liberation (version HD). PC. Ubisoft, Inc.
- Uricchio, William. 2005. "Simulation, History, and Computer Games." In *Handbook of Computer Game Studies*, edited by Joost Raessens and Jeffrey Goldstein, 327–338. Cambridge, Mass.; London: MIT Press.
- Valentine, Rebekah. 2018. "Which Game Companies Could Be Using Slave Labor?" GamesIndustry.Biz. June 27, 2018. https://www.gamesindustry.biz/articles/2018-06-19-apple-worlds-company-conflict-minerals.
- Warhorse Studios. 2018. Kingdom Come: Deliverance. PC. Deep Silver.
- . 2019. Kingdom Come: Deliverance: A Woman's Lot. PC. Deep Silver.
- Wertsch, James V. 2002. Voices of Collective Remembering. Cambridge University Press.
- Weststar, Johanna, and Marie Josée Legault. 2015. "IGDA Developer Satisfaction Survey 2015 Summary Report." igda.org: IGDA. https://c.ymcdn.com/sites/www.igda.org/resource/collection/CB31CE86-F8EE-4AE3-B46A-148490336605/IGDA%20DSS%202015-SummaryReport Final Sept15.pdf.
- Weststar, Johanna, Victoria O'Meara, and Marie-Josée Legault. 2018. "Developer Satisfaction Survey 2017 Summary Report." International Game Developer Association.
- White, Hayden. 1973. *Metahistory: The Historical Imagination in Nineteenth-Century Europe*. Baltimore and London: The Johns Hopkins University Press.
- ——. 1984. "The Question of Narrative in Contemporary Historical Theory." *History and Theory* 23 (1): 1–33. https://doi.org/10.2307/2504969.
- ———. 1990. *The Content of the Form: Narrative Discourse and Historical Representation*. Reprint edition. Baltimore: John Hopkins University Press.
- Wieder, Ben. 2011. "Researchers' Video Game Puts Players in Japanese-American Internment Camps." *The Chronicle of Higher Education Blogs: Wired Campus* (blog). June 8, 2011. https://www.chronicle.com/blogs/wiredcampus/researchers-video-game-puts-players-in-japanese-internment-camps/31624.
- Wikipedia. 2017. "Category:Video Games with Historical Settings." In *Wikipedia*. https://en.wikipedia.org/w/index.php?title=Category:Video_games_with_historical_settings&oldid=781409733.
- Williams, Dmitri, Nicole Martins, Mia Consalvo, and James D. Ivory. 2009. "The Virtual Census: Representations of Gender, Race and Age in Video Games." *New Media & Society* 11 (5): 815–34. https://doi.org/10.1177/1461444809105354.
- Winnerling, Tobias. 2014. "The Eternal Recurrence of All Bits: How Historicizing Video Game Series Transform Factual History into Affective Historicity." *Eludamos. Journal for Computer Game Culture* 8 (1): 151–70.
- Woodcock, Jamie. 2016. "The Work of Play: Marx and the Video Games Industry in the United Kingdom." *Journal of Gaming & Virtual Worlds* 8 (2): 131–43. https://doi.org/10.1386/jgvw.8.2.131_1.
- Wright, Esther. 2018. "On the Promotional Context of Historical Video Games." *Rethinking History* 22 (4): 598–608. https://doi.org/10.1080/13642529.2018.1507910.
- Yager Development. 2012. Spec Ops: The Line. PC. 2K Games.
- Yee, Nick. 2017a. "Beyond 50/50: Breaking Down The Percentage of Female Gamers By Genre." *Quantic Foundry* (blog). January 19, 2017. https://quanticfoundry.com/2017/01/19/female-gamers-by-genre/.
- ———. 2017b. "Just How Important Are Female Protagonists?" *Quantic Foundry* (blog). August 29, 2017. http://quanticfoundry.com/2017/08/29/just-important-female-protagonists/.

- ———. 2018. "What Men and Women Consider Hardcore Gaming Are Not The Same." *Quantic Foundry* (blog). August 1, 2018. https://quanticfoundry.com/2018/08/01/casual-hardcore/.
- Young, Helen. 2016. "Racial Logics, Franchising, and Video Game Genres The Lord of the Rings." *Games and Culture* 11 (4): 343–64. https://doi.org/10.1177/1555412014568448.
- Zatkin, Geoffrey. 2017. "Awesome Video Game Data 2017." presented at the Game Developer's Conference, San Francisco, California. https://www.gdcvault.com/play/1024054/Awesome-Video-Game-Data.

Part II Research Articles 1-4

Article 1: Counter-Hegemonic Commemorative Play: Marginalized Pasts and the Politics of Memory in the Digital Game Assassin's Creed: Freedom Cry

Hammar, Emil Lundedal. 2017. "Counter-Hegemonic Commemorative Play: Marginalized Pasts and the Politics of Memory in the Digital Game Assassin's Creed: Freedom Cry." *Rethinking History* 21 (3): 372–95. https://doi.org/10.1080/13642529.2016.1256622.

Abstract

In this article, I argue that digital games hold the potential to influence processes of cultural memory related to past and contemporary forms of marginalization. By bringing cultural memory studies into dialogue with game studies, I account for the ways through which digital games and practices of play might influence historical discourses and memory politics pertaining to marginalized identities. In order to demonstrate this, I conduct an analysis of *Assassin's Creed: Freedom Cry* (Ubisoft Québec 2013), a digital game which includes representation of the eighteenth-century transatlantic slave trade and its racist systems. This analysis is then contrasted with statements by two critics, Evan Narcisse and Justin Clark, about how *Freedom Cry* highlights specific marginalized identities and represents the past through the game form. These statements, coupled with my game analysis, make the case for a concept that I term 'counter-hegemonic commemorative play'. This makes visible a form of potentially cathartic power fantasy within a historical struggle, alongside emphasizing a form of designed recognition of marginalized identities within contemporary historical discourses and memory politics.

Producing the Past in the Present - Cultural Memory, Hegemony, & Digital Games

As Erll (2011, 9) asserts, collective and individual pasts are re-enacted and reconstructed across cultures and societies through commemorative dates in the calendar, discussions on reconciliation and historical trauma, public memorial spaces, museum exhibitions and through media like film and literature that depict historical events as entertainment or documentary. These ways of remembering point toward "the interplay of present and past in socio-cultural contexts" (Erll, Nünning, and Young 2010, 4) that takes place through engagements with various discourses and artefacts. The purpose of this argument is not to dismiss historiography or to claim that cultural memory studies is oppositional to history (Erll 2011, 44) but rather to widen the possibilities for thinking about how the past is constructed in different cultural contexts, such as through historical films, literature, and games. Likewise, it is important to note that neither fictional cultural expressions, such as entertainment media, nor allegedly factual ones, such as historiographic documentaries, reflect historical realities as such. Instead both offer representations of the past – "the events, persons, languages, values, etc. they are in fact first creating" (Erll 2011, 114). This does not mean that historical media constructs are necessarily unreal or fabricated, but rather that they represent the conditions for how cultural memory

mechanisms and potentialities of cultural change and renewal. Most importantly, it helps us to realize

^{31 &}quot;Memory studies is therefore not an exercise in nostalgia, but can be a method to discover and reflect the

emerges (Reading 2011, 115). An image of the past is therefore dependent on the articulation of certain selected variables and the exclusion of possible alternatives. This is exemplified in the case of historical game development, where multiple pressures and aims decide what does and does not go into a game, which in turn determine the opportunities for meaning-making and discovery offered to players (Chapman 2013, 62).

Working from this broader position as to how the past is represented in light of the present, narratives become a significant element of historical discourse. In line with White's arguments (1984, 11), narrative and discourse serve as constitutive elements of history and it is through these that individuals and collectives form their understanding of the past. For example, Sturken (2008, 73) posits that films and literature frame how audiences recall and/or form understandings of the two World Wars, the sinking of Titanic, or the Vietnam War. Rosenstone (1995) similarly argues that media representations of the past, films in particular, give rise to a residue of knowledge within contemporary historical and political discourse. Likewise, amongst popular digital games are certain genres that use historical settings and references to allow users to simulate or perform within what is marketed as a "playground for the past" (Kapell and Elliott 2013, 13). Media representations of the past, whether through fictional or non-fictional narratives, articulate certain understandings of the past, which in turn hold meaning potentials that are activated and negotiated by their users.

Because these cultural constructions of the past are produced and disseminated in the present, existing power relationships in the form of hegemony also affect who gets represented and recognised in the construction of the past (Reading 2011, 383). Originally introduced by Gramsci (Femia 1987), hegemony refers to the "production of meaning as a key instrument for the stabilization of power relations" (Jørgensen and Phillips 2002, 32). How social groups are positioned in these power hierarchies can become naturalised to the extent that questioning their positioning becomes incredibly difficult. For example, through a hegemonic process of constructing a national history, people in a specific geographical area might develop a sense of sharing similarities with past groups of people in the same area, irrespective of actual cultural and material differences (ibid. 32). Thus, hegemony as used here refers to the process through which the dominant ideology is reproduced in political and discursive processes, subordinating others and granting consent to the dominant ideology. (Laclau and Mouffe 2001, 105). Hegemony does not appear as an opinion imposed by ruling producers of culture upon the subordinated but as a process that is unknowingly inscribed to temporarily stabilize order. It is through hegemony that marginalized groups are typically either left out of mass-cultural depictions of the past or are at best relegated to banal representations of their culture and identity (Hall 1999, 20), thereby precluding the marginalized from being recognized in processes of cultural memory.

Given the relatively homogenous demographics of the dominant digital game industries in Europe and North America (Edwards et al. 2014, 7-15; Weststar and Legault 2016, 8-12), where the intersecting identities of young adult White heterosexual men are in a clear majority and the representational hegemony related to race, age, ethnicity, class, sexuality, nationality, and gender (Gray 2014; Shaw 2015b; Fron et al. 2007), it is perhaps not surprising that meaning potentials of digital games offer hegemonic articulations of history. As Chapman (2013, 62-63) emphasizes, game developers make

-

³² Note that this genre of games engages history in many different ways, but I restrict my focus to those "wherein a player is in direct control of a historically situated agent" (Kapell and Elliott 2013, 10).

decisions in relation to technological possibilities, what perspective of history is being applied, economic interests, and genre conventions. If this decision-making process is predisposed by the hegemonic structures in digital game industries, I argue that it is useful to acknowledge what is excluded or left out in the attempt to create historical believability in games, which in turn determines a game's opportunities for historical meaning-making offered to players. This is further qualified by the fact that contemporary digital games hold significant social, cultural, and economic currency in the societies in which they proliferate (Sinclair 2015; Brightman 2016). Considering both their prominence as mass entertainment and their hegemonic articulations, it is therefore important to investigate how digital games construct, disseminate, and reinforce processes of cultural memory through their own medium-specific features. It is for this reason that *Freedom Cry* serves as a rich example for analysis of how historical games offer representations of the past for players to activate, negotiate, and perform. This is particularly the case because, as I will argue, the game allows for counter-hegemonic commemorative play.³³

Accordingly, the three aspects outlined above motivate the focus for my article; the nature and function of cultural memory; the importance of digital games as mass cultural entertainment devices offering certain understandings of the past; and the existence of hegemonic power relationships affecting the recognition, or lack thereof, of marginalized intersecting identities in processes of cultural memory. The upshot of these three positions is that digital games have the potential to reinforce or subvert cultural power hierarchies related to identities and processes of cultural memory. It is therefore pertinent to understand what hegemonic and counter-hegemonic mechanisms are articulated through digital games provide meaning potentials that subordinate and/or recognize marginalized groups in the construction of cultural memory.

History as Entertainment Commodity - Freedom Cry & the Assassin's Creed Series

Freedom Cry is a digital game released in 2013 on five different computer platforms, Windows PC, Sony PlayStation 3, PlayStation 4, Microsoft Xbox 360 and Xbox One, both as a standalone product and as a supplement to the associated main entry in the Assassin's Creed series, Assassin's Creed IV: Black Flag (Ubisoft Montréal 2013). Freedom Cry uses the eighteenth century Caribbean and West Indies Sea as its historical setting and it situates players in the role of Adéwalé – the player character of specific interest to this article.

Freedom Cry is an entry in the Assassin's Creed series (2007-), which is published and developed by the multinational game company Ubisoft. Like many other historical cultural expressions, the series uses allegedly historical settings as a convenient background for a commercial entertainment product that lets players take the role of a character within the time-period in question. For example, the first

_

³³ It should be noted that I am analysing matters of white hegemony, colonialism, and transatlantic chattel slavery, aspects of which I benefit from as a person belonging to dominant identity categories (as a white, male author with Danish colonial heritage). This might blind me to some matters of race, gender and class oppression. It needs to be made clear that in addressing issues of oppression, my own lived experiences and access to material and symbolic wealth affect my capacity to fully analyse oppression. The purpose of my article is not to speak on behalf of marginalized groups, but to analyse and uncover racial and gendered hegemonic aspects of cultural memory as symptomized in historical digital games.

entry to the series used the Holy Land during the twelfth century Third Crusade as a setting, the following sequel trilogy of games used Renaissance Italy and sixteenth century Constantinople, the third entry used the American War of Independence, while the fourth used the eighteenth century Caribbean. The 'time-traveling' aspect of *Assassin's Creed* is justified in the overarching narrative of the series as a sort of virtual simulation enabled by the information stored in ancestral DNA sequences. This means that the narrative focuses on the reliving of ancestral memories, which in turn rests on the assumption that history has already taken place. Thus, players are only able to execute certain actions and witness certain events in correspondence with purportedly established historical facts.

What makes *Freedom Cry* stand out from a memory-political perspective is the fact that it centres on the historical trauma of the transatlantic slave trade and the Caribbean slave system. This setting and the game's narrative employ the same basic genre conventions of the series, in terms of controlling a historical agent with the general actions of traversing the environment, killing characters, and sailing. Yet *Freedom Cry* is also a noteworthy intervention into the White male hegemony of mainstream games (Leonard 2003; Williams et al. 2009; Brock 2011; Shaw 2015b; S. Murray 2015; Nakamura 2012) by featuring a Black male protagonist as the core of its narrative.

Ubisoft, a multinational company, prides itself on its use of historical settings to the extent that employees and marketing materials often emphasize that the company consults various historians or relies on historical sources to ensure the authenticity and believability of each game (Kamen 2014; Chapman and Linderoth 2015). The games also endeayour to highlight their adherence to historical knowledge through the inclusion of in-game textual encyclopedias written by Ubisoft's own employed historians (Kamen 2014; Plante 2012; Kotzer 2014; Saphieha 2015). Seemingly, these encyclopedias, alongside the detailed representation of tangible material architecture, fashion, technology, landscape, flora, and fauna, seek to constitute what Köstlbauer refers to as a "claim of historical realism and authenticity" (2013, 170). This invites players to accept the authenticity of the games' simulations of historical, events, cultures, and geography. This allows Ubisoft as the curator of the Assassin's Creed brand to utilise a double-binding mechanism - a reliance on correspondence to established historical fact, while being concurrently able to claim that the narrative is purely fictional with made-up characters and events. This leaves the game to conveniently both be marketed as alluring for its socalled historical authenticity and simultaneously not bound to criticisms of its depictions. Similar to other historical settings appropriated for entertainment purposes under the guise of creative license, the Assassin's Creed series uses history and the notion of historical believability, and yet, through its diegetic justification of 'reliving ancestral memories', the series provides creative license to construct a sort of speculative fiction and include various historical locations, architecture, persons, and events for the player to play with or consume.

Playing the Past through Representation & Procedures

The *Assassin's Creed* series not only represents the past via audio-visual means, but also by allowing players to perform within the constraints of the game. In addition to conventional representational means of memory-making, digital games also offer procedural and performative ones (Galloway 2006; Chapman 2012; Pötzsch and Šisler 2016; Uricchio 2005). Players configure a procedural system that reacts and responds to the input of players. Chapman (2012) argues that focusing only on the historical content of a digital game is therefore insufficient to capture the meanings produced by *playing* a digital game. As digital games are experienced through both audio-visual and procedural means, it is

imperative to look at how "the particular audio-visual-ludic structures of the game operate to produce meaning and allow the player to playfully explore/configure discourses about the past" (ibid. para 4). Concurrently, this produced meaning is only potential and can be actualised or subverted differently in different contexts of play. (Sicart 2014, 7)

To conceptually encapsulate both these aspects of games, I examine what I refer to as the layer of representation and the layer of mechanical system. These layers are derived from the cybermedia matrix, as suggested by Aarseth and Calleja (2009), between mechanical system, representational layer, and finally the decoding role of players as interpretative subjects bringing their own contexts and backgrounds into play. The representational layer in digital games refers to the 'interpretable' representational elements that "players read or observe in order to be able to use and play the game" (ibid. para 6.1). Colloquially, it could be termed as the 'surface' or 'skin' of the game or as the layer that constitutes the audio-visual content through representational means in a spatially simulated world that players interpret. The mechanical system is understood as the machinic operations that predispose the possible frames of play. These possible frames of play can be divided into what is referred to as the rules (Juul 2005, 5) and the mechanics (Sicart 2008). Rules are the formal qualities that structurally contextualize player action insofar as they frame player behaviour, while mechanics are the "methods invoked by agents, designed for interaction with the game state" (Sicart 2008, para 1), colloquially called the 'verbs' of the game. These layers are not exhaustive of what constitutes a digital game, but they are sufficient to explore the formal aspects of how Freedom Cry, as a digital game, contributes to processes of cultural memory and offers instances of counter-hegemonic commemorative play.

Rising up against Slavery in a Virtual Caribbean

Freedom Cry's narrative of rising up against slavery finds its point of departure in the playercharacter, Adéwalé. He is an adult black man from Trinidad who in his childhood escaped slavery to join forces with seafaring pirates in the Caribbean. With not much mention of his social class except as being an ex-slave, the game depicts him as muscular and physically strong and his expositional dialogue signifies intellect, cunning, and ambition. The game's narrative begins with Adéwalé's ship sinking during a storm, and he is washed ashore on Saint-Domingue (today known as Haiti) near the town of Port-au-Prince. In the course of the subsequent narrative events, Adéwalé encounters the oppression of Black characters under French colonial rule. This motivates him to join forces with the local resistance in order to fight back against the slave system. Through his quest to dismantle the slave system, Adéwalé realizes the futility of acting against a colonial power. The more he fights, the more French colonial power increases its violence towards the enslaved population. Some nonplayable characters, such as the Maroons and a local businesswoman by the name of Bastienne Josèphe, are prominently positioned in the narrative with relatively high levels of expositional dialogue and agency, which fosters character dynamics between them and Adéwalé. This allows Adéwalé's fight against the slave system to be challenged and complicated by these characters. For example, Bastienne points out the futility of fighting against the French colonial power as a single individual. As such, the narrative of Freedom Cry offers players a fictional representation of eighteenth century Haitian characters who grapple with an oppressive slave system that in the end proves impossible to dismantle through sheer individual strength. This theme is also in accordance with the series' premise of history having already taken place and therefore unable to be altered by the actions of player-characters. The transatlantic slave trade and Caribbean slave system continue regardless of the player's actions in Freedom Cry.

Through the narrative contextualization of rising up against slavery, the game's mechanical system allows players to free slaves, intervene in the punishment of slaves, capturing slave ships, kill slavers and guards, liberate large slave plantations, rescue imprisoned slaves or buy slaves at slave auctions. The game can largely be divided into two different mechanical systems – one in which the player controls the body of Adéwalé, which affords the methods invoked by players to kill, climb, jump, and walk, or run, and the other in which the player controls Adéwalé's ship, its direction, sailing speed, cannons, mortars, and boarding capabilities. In this way, *Freedom Cry* adheres to the usual basic conventions of the *Assassin's Creed* series – the playable character is able to traverse the landscape and buildings within the confined virtual environment, and hide away from or kill other hostile characters while fulfilling the goals posited by the game. By offering players these methods through its rules and mechanics, *Freedom Cry* grants players considerable power and allows them to overcome the hostile opposition reproduced by the mechanical system and thereby progress through the structure of the game and towards the conclusion of its narrative.

A Holistic Understanding of Representation & Mechanical System

In *Freedom Cry*, the representational layer and the mechanical system work in conjunction to frame the meaning potentials that structure how players might understand the past. When traversing the virtual environment, the playable character of Adéwalé is exposed by virtue of his racialized body in the context of eighteenth century racial and gendered hierarchies. The game's mechanical system includes both the ambient presence of non-violent characters that audibly comment on his appearance as a Black body and explicitly hostile characters that will actively search for and attack Adéwalé on sight. In this way, the relationship between the virtual spaces of *Freedom Cry* and the depicted player-character simulate an oppressive system and its responses to non-hegemonic identities. Danger, vulnerability, and fear of being attacked are explicated in playing Adéwalé within this hegemonic virtual space.³⁴ Although the mechanical system affords players opportunities to overcome these hostile challenges with violent ease, the opposition is still endlessly reproduced. Thus, the game not only represents the player-character as a non-hegemonic identity through its audiovisual layer, but also through the simulation of a marginalized power position found in its mechanical system.

In return, the narrative also contextualizes the mechanical system and appeals to the player to engage morally with the rules of the game. Whilst previous entries in the *Assassin's Creed* series required players to collect arbitrary items or help characters with trivial tasks, such as collecting feathers, fetching and delivering items or safely escorting other characters, *Freedom Cry* asks players to free slaves from brutal plantations or slave ships. If slave overseers detect the player or if the player directly attacks the slave ships, the amount of slaves freed is lessened because overseers start murdering the helpless slaves in the plantation or in the case of the ships the slaves are inadvertently killed by players. This contextualisation seems to attempt to appeal to the player's morality. For example, the developers state that "players responded to this in a very visceral way [...] the next time that players approached a plantation they tended to choose to do [sic] a stealth approach" (Murray and Giard 2014, 09:51-10:10). Although there are many different modes of involvement in gameplay, as seen in Calleja's (2011, 181) player involvement model, *Freedom Cry* motivates moral engagement by

107

³⁴ It should be noted that an earlier entry called Assassin's Creed: Liberation (Ubisoft Sofia 2014) offer up similar procedural simulations of oppressive historical spaces in the intersection of class, gender, and race. For a discussion on this game and its identity politics, cf. (S. Murray 2015)

making players accountable for the loss of enslaved virtual characters. As such, this sort of narrative contextualization of the mechanical system invites the moral engagement of the player while concurrently conveying the brutality of an oppressive slave system.

It is also significant to note that the game never characterises enemy opposition beyond being one-dimensionally evil perpetrators of an abhorrent system. Adéwalé, understandably so, never engages in respectful dialogue with slavers, so the narrative never allows for a characterisation of the individuals reproducing the slave system. This lack of characterization is in line with Hartmann & Vorderer's concept (2010, 94) of moral disengagement factors, where a digital game's portrayal of hostile opposition can engage or disengage moral reflection upon players' own actions in the game world and the characters they respond to. In this sense, *Freedom Cry* does not humanise the perpetrators of the slave trade beyond their deplorable actions against enslaved Black characters. As such, whilst *Freedom Cry* seeks to engage the moral reflection of players in attempting to free slaves, it simultaneously fails to explore the background of the transatlantic slave trade and how individuals might commit immoral actions by virtue of the structures they are acting within. A selective conflict filter that seeks to make the game's central conflict uncomplicated to players (Pötzsch 2015, 5-6) is apparent here. As such, it would appear that Ubisoft Québec does not necessarily prioritize multiplicity and complexity in characterising the slave system, instead favouring a simplistic morality that subsumes the wider historical social, cultural and economic context of such systems.

This said, it is perhaps also important to note that whilst the mechanics grant the player many abilities in overcoming the hostile characters and ships, the mechanical system reproduces these challenges ad infinitum. No matter how many slave ships players board, no matter how many plantations they liberate, no matter how many slaves they free, the game system will constantly renew and reproduce this opposition to the assigned goal of 'rising up against slavery'. This means that the game refuses to offer a counterfactual narrative of the transatlantic slave trade, as players are not able to rewrite history and dismantle the slave system in the Caribbean. 35 By doing so, the mechanical system in Freedom Cry frames the historical event through a procedural rhetoric that demonstrates how unassailable the structural and systemic nature of the slave trade was if one chose to resist as an individual. The game's larger narrative also reinforces this point, as Adéwalé learns at the end of the plot that his ambition to dismantle the atrocious slave system will never be enough and his violent means only serve to escalate French atrocities against the oppressed and enslaved Black bodies in the game. This is epitomised in a scenario in which French escort ships sink their own slave ship due to Adéwalé's resistance. While the slave ship is sinking with its entrapped slaves on board, the player is forced by the mechanical system to board it and attempt to free up to fifteen entrapped slaves before the ship is completely sunk. This tragic experience results in Adéwalé laying down his arms at the request of his allies, due to revenge measures by French colonial powers, thus concluding the narrative. As such, the slave system is both mechanically and representationally confined to being indomitable and players are not allowed to rectify the historical trauma of the Caribbean slave trade.

³⁵ One might counter that this is merely a method for the developers to fill the game with opposition that never runs out, thereby always engaging the player with an experience. However, previous entries normally have the same amount of content that is not constantly reproduced, has end-states and is therefore possible to finish.

In the game's refusal to provide a catharsis to players, it avoids falling into the trap of complacency by returning to the past only to assuage White guilt in the present. The game sets in stone the actual historical events that still to this day affect nations and their citizens for good and bad, so that players who want to escape the historical injustices of the transatlantic slave trade are denied achieving this catharsis through the game. At the same time, *Freedom Cry* offers an empowerment of a marginalized identity without falling into the trap of giving the impression that the transatlantic slave system could only continue because of the lack of resistance by these identities in the past. Instead, the game's procedural message and narrative theme remain concentrated on the fact that the change had to be systemic.

Alternatively, this return to history could also be argued to invoke a 'tyranny of realism' (Shaw 2015c, 21). This particular criticism is levelled at historical games, like the *Assassin's Creed* series, that remain complacently within the grand hegemonic narratives of history. Shaw argues that such designs "close down emancipatory possibilities by refusing to imagine history otherwise" (ibid.). In *Freedom Cry*, neither the player nor the player-character possess narrative agency in the grand scheme of history and the game thus perpetuates the same hegemonic history. Shaw maintains that counter-historical experiences "can be much more powerful and critical when they allow players to imagine "what if" (ibid. 20). This emancipatory imagination is restricted in *Freedom Cry*'s broader narrative, as its ending returns historical events to the status quo and history remains the same.

Simulating Race & Historical Trauma within Hegemony

As I have shown above, the mechanical system of *Freedom Cry*, in relation to its representational layer, makes a meaningful argument about the socio-structural nature of slavery and White hegemony in the eighteenth century in relation to the possible frames of play. These design features go hand in hand to frame scenarios that convey meaning to players that might help to explore or understand discourses about the past in their present. However, it is also important to consider the critical aspects of how the game reproduces problematic meaning potentials in relation to its protagonist's racialised identity due to contexts of contemporary oppression in entertainment media. Amongst other things, the game has been criticized for how it instrumentalises and quantifies the liberation of slaves as a resource to upgrade Adéwalé's mechanical abilities: The more slaves that players liberate, the more abilities and power Adéwalé is granted. Writing on the games criticism website *The Ontological Geek*, Dawson argues that

"to then turn Adéwalé's personal relationship to the institution of slavery and his fight against it into essentially a resource collection minigame feels hypocritical at best; at worst, it undermines the game's message that slaves are not just a resource, but thinking, feeling human beings." (Dawson 2015, para 6).

This criticism fits within Chapman & Linderoth's (2015) analysis of the 'limits of play', which examines games' potential for generating controversy due to fear of representational and ludic characteristics clashing with one another. Controversial, sensitive, and politically charged topics in games risk the possibility of being perceived as trivialised by the ludic nature of play due to the potential for them to become treated as only game objects by the player and thus less respectfully than the theme of their representational aspect is perceived to demand (ibid.,149). This fear seems to be at the root of Dawson's criticism of slaves as a resource. By ascribing the representation of slaves a functional gameplay characteristic, the design of *Freedom Cry* runs the risk of being perceived to contradict itself by trivialising slavery.

In addition to this risk of trivialisation by utilising slaves as a resource, Freedom Cry also depicts the brutality of the slave system in a highly sanitized manner. The pain and the hardships of the slave system are barely identifiable in the expressions of the enslaved characters. Racist language is also removed from the game, perhaps to maintain "its modern, polite sensibilities" (Narcisse 2014a, para 13). Ubisoft Québec's choice to selectively filter out uncomfortable history is in line with other popular entertainment media that include certain aspects, yet exclude others. For example, Köstlbauer (2013, 169) criticises certain historical war games for using the design of landscapes, machinery, architecture, weaponry, documents, and enemy designs to fulfill claims of realism and authenticity, while at the same time excluding other aspects of war, such as civilians, the trauma of warfare, the social and economic consequences of warfare, and so forth. The subject of transatlantic slavery and how oppression is depicted in Freedom Cry is uncomfortable, but it is never too uncomfortable. Its mechanical system and representational layer motivate an emotionally charged experience, but it is nevertheless still encoded for pleasurable mass consumption. As Mukherjee notes on games depicting non-hegemonic identities, amongst them Freedom Cry, "The images [...] are always being manufactured and only represent things that colonial imperialism wishes to show and see. This is what influences how maps are charted and identities fixed" (2016, 12). As some players may wish to play a game for its ludic properties and as easy-to-consume entertainment, the events in Freedom Cry are perhaps to an extent only included when they do not risk making the experience too uncomfortable. In writing on his blog about Assassin's Creed III (Ubisoft Montréal 2012), Patton criticizes such fictional depictions of historical trauma because they are merely "a ploy to sell more units, or just a kneejerk emotional response" (Patton 2014, para 51). He adds, "It's not that they're wrong, it's that they don't go far enough." (ibid, para. 52).

The character of Adéwalé in Freedom Cry can also be interpreted as invoking the problematic stereotype of the 'angry violent Black man' often found in hegemonic White media. This has been argued to negatively contribute to the collective image of Black masculinity (Hall 1997, 262; Winant and Omi 1994, 56). Even in Ubisoft's marketing, Adéwalé is referred to as of "imposing stature" (Ubisoft 2015), thereby unintentionally echoing the many instances of U.S. police justifications for why police officers were 'forced' to shoot and kill Black American men (Garfield 2016, para 2). While strength and agility would obviously be preferable in fighting against a brutal slave system, representation of black masculinity "has been forged in and through the histories of slavery, colonialism and imperialism" and "through such collective, historical experiences black men have adopted certain patriarchal values" (Mercer and Julien, 1994, 136). As such, Adéwalé, as a Black male character, runs into the paradoxical double logic of what Hall calls the "binary structure of the stereotype" (Hall 1997, 263). Like contemporary Black masculinity, Adéwalé has to resort to a sort of 'toughness' against the oppression and violence of White supremacy, while concurrently this 'toughness' is encoded as lethal and menacing in hegemonic media narratives. However, to the credit of Freedom Cry's writers, the game's narrative allows for a deeper and more nuanced characterization of Adéwalé in his interaction with the non-player character Bastiènne Josephine. Here his character is able to show compassion, humor, and kindness, which further the depth of his character beyond onedimensional hegemonic masculinity (Connell and Messerschmidt 2005, 854). Unfortunately, this is only in expository non-playable narrative sequences, while the mechanical system still prioritises violence and domination over others.

The weapons at Adéwalé's disposal also have different connotations when compared to those available to the previous player-characters in the *Assassin's Creed* series. This weaponry casts

Adéwalé as the exotic 'Other' (Said 1978) - while the White male player-character in *Black Flag* uses neatly decorated European swords and flintlock pistols reminiscent of European technological progress, Adéwalé is granted the exoticised machete and the roaring, unsophisticated 'blunderbuss'. The weaponry thereby echoes the more brutal and less refined stereotype of oriental identities, in which the sophistication of European, industrial high culture and technology cannot be obtained or possessed by the marginalized, the implication being that they are not as 'civilized' as European societies, thus echoing Giroux's (1994) description of Whiteness as "[...] a universal marker for being civilized and in doing so posits the Other within the language of pathology, fear, madness, and degeneration." (ibid. 75)

These issues are also exacerbated by the fact that violence is the only means through which players can fight the slave system in Freedom Cry. It is not mechanically possible to appeal to empathy, use diplomatic communication, or other non-violent means that would allow Adéwalé to display less physically intimidating behaviour towards the characters taking part in the slavery. There are instances in which the narrative depicts Adéwalé as intelligent and cunning in the ways in which he seeks to dismantle the slave system, yet mechanically this is not seen beyond certain stealth scenarios in which players should avoid being seen by slavers and eavesdrop on conversations to find out important information. Again, this unfortunate reliance on violence as conflict resolution also ties into the stereotype of Black masculinity as physically fearsome but intellectually weak (Hall 1999, 21). This mechanical limitation is perhaps not surprising given the Assassin's Creed series' genre conventions and the mainstream games industry's predictable reliance on selectively filtering violence as onedimensional (Pötzsch 2015, 3). Freedom Cry has to meet consumer expectations of the established brand as an entertainment product, while also relying on asset reuse from previous entries to save production costs. Yet the re-contextualization of the same mechanics seen in the previous entries alters the reading of them.³⁶ While there is now a non-hegemonic player-character, the abilities are still in line with hegemonic masculinity, in terms of how this character dominates others through pure strength. The stereotype of Black masculinity therefore hangs over this potential interpretation and the intersecting characteristics of gender and race seem to inevitably inform this decoding. Of course, one might counter this criticism by arguing that violence is the only appropriate short-term solution to abolishing a racist slave system aimed at oppressing and eradicating Black bodies. Regardless, it is important to consider how conflict is resolved in Freedom Cry, since such a constraint affects not only how players decode the chosen characters and theme, but also how players express themselves through their situated practices of play within the possibilities enabled by the mechanical system.

The game could also arguably be seen to suffer from failing to explicitly relate the past to the present. It is generally held as important to understand how the past and its representations causally affect or relate to us in the present. In some cases, media fail to provide a historical perspective on how the structures of oppression and past atrocities depicted still affect contemporary societies and postcolonial hierarchies, contributing to the problematic and complacent notion that former colonial

.

^{36 &}quot;By changing the perspective from Edward to Adéwalé the mechanics seemed to be taking on a new meaning and we found that by tweaking them just a little bit, we would be able to craft a new story and raise some very different stakes." (J. Murray and Giard 2014, 8:30-8:55). Here the level designer at Ubisoft Québec touches on the altered player experience entailed by employing the same mechanical system from the previous entries in the series to a different representational layer in *Freedom Cry*.

societies now live in post-racial societies. Given that many social groups and countries have benefitted from the historical conditions of the slave trade, there does seem to be a missed opportunity for *Freedom Cry's* narrative to comment on how the events of the transatlantic slave trade depicted in the game affect nations to this day, particularly given the opportunities opened up by the games simultaneous usage of a present-day narrative by way of the ancestral DNA science-fiction premise. The game does hint at the Maroon resistance and the later Haitian revolution that gave the country its independence from French oppression, but it filters out how France boycotted and blackmailed the independent Haiti to force it to re-pay potential lost profits from the lack of a Haitian slave industry (Phillips 2008. 4-8). Nor does *Freedom Cry* remark on how France has still not repaid Haiti's historical debt, despite calls for debt cancellation in the wake of the Haitian earthquake catastrophe in 2010 (Hay 2015). There seems to be missed opportunities in relation to framing both how individuals and collectives understand the past through the present and how the past affects the present. *Freedom Cry* lets players take on the mantle of fighting against a historical slave system, but it fails to address how this has factored into the state of societies beyond the game itself.

Decoding & Situated Play

The above analysis of *Freedom Cry*'s design features only identifies the dominant frames that could potentially guide player interpretation and activity, but these are only potentials. How players actually decode and actualize these representational and mechanical elements can also provide beneficial insights. In playing digital games, and thereby configuring and interpreting both the representations and the mechanical system, players bring their values, dispositions, experiences, etc. to the game through the framed activity of play (Sicart 2014, 62).

As such, the performances afforded by the game are influenced by the preferences and intentions of the players. This is highly relevant to potential engagements with processes of cultural memory, as players work in dialogue with the game not only to understand the past as it is presented in the game but also to bring their own understandings and predispositions to bear. That is to say players decode through differing discourses the meaning potentials encoded in the game in question (Shaw 2015a, 109). As the accounts by Evan Narcisse and Justin Clark will demonstrate below, player perspectives are significant in understanding the meaning potentials produced by *Freedom Cry*.

The following accounts are from critics Evan Narcisse (who used to write for the online pop-cultural publication *Kotaku* and now writes for *io9*) and Justin Clark (who publishes articles in similar publications, such as *Slate*, *Gamespot*, and *Paste Magazine*). I perceive these accounts to be significant in the sense that they highlight how playing historical games can influence processes of cultural memory related to one's identity. Both Narcisse and Clark give their perspectives on how their own racialised identity as Black men participating in US pop culture factors into the playing of *Freedom Cry*. Their situated play experiences are particularly valuable in this regard since their accounts are not only personal, but also highlight past and contemporary forms of oppression perpetuated through mass-cultural entertainment. It should be noted that I do not claim that their statements in anyway represent what it means to be marginalised in mass-cultural entertainment *in total*. Instead, their accounts of playing *Freedom Cry* illuminate areas related to race, marginalisation, mass entertainment, and processes of commemoration in their own specific ways.

In one instance, Narcisse writes about how the setting of *Freedom Cry* reminds him of his relation to his own family and culture:

Part of it happens in Haiti, where my parents were born. Characters talk in Antillean Kreyol, the mosaic tongue made of French and West African words that I heard while growing up. But, mostly, it reminds me of going to church with my mother. It makes me happy and sad at the same time. [...] It hits on some real feelings that swirl around in the Haitian diasporan soul. [...] Never in a million years did I ever think I'd hear Haitian Kreyol in a video game. And yet, there it was in Freedom Cry, as lilting and percussive as when my mom spoke it. For the few hours I steered Adéwalé though his saga, I didn't feel horribly under-represented or taken for granted in the medium I write about. It's a feeling I could use more of. (Narcisse 2014a, para 1)

The game's lead writer, Jill Murray, echoes this sentiment during a conference presentation dealing with the production of *Freedom Cry*:

It's heartbreaking to hear that expectation that people don't expect to see themselves, so what we really did was set out to try to make a game that would make people feel they are seen. [...] we are really going to focus on what do these people who want to be seen [sic], what do they see in themselves and what would they like us to communicate of their spirit, of their community, of their history. I think that's important, it's a natural human instinct to want to see yourself and your history in stories. (Murray and Giard 2014, 17:10-17:59)

The attempt by Ubisoft Québec to make the virtual setting believable and feature a conscious acknowledgement of non-hegemonic identities ensured that the game ascribes cultural status to the Kreyol language by including it for implied players such as Narcisse who can activate this encoded meaning potential. Similarly, in an interview with the online publication *Giant Bomb*, Narcisse addresses a particular instance in *Freedom Cry* where it is possible to free slaves off an auction block by simply purchasing them from slave traders. However, it is also possible to kill the slave auctioneers. Narcisse states in the interview;

Narcisse: "Right, right, so, you know, it's funny, you mentioned, like buying the slaves off the auction block...uhm...I never did that. I always killed the guys who were selling them..."

Klepek: "Wow, really?"

Narcisse: "Yeah, I never once, like, bought them their freedom, it was always bloody for me, and again, you know that's probably my own personal background dropping into that [...]" (Narcisse 2014b, 00:01-00:28)

Narcisse's statement demonstrates how players bring their own background and moral values into play, especially when confronted with personal involvements like this instance. It shows a form of resistance against the virtual characters who are enacting the slave trade and being actively complicit in the diaspora and genocide of Black virtual bodies. Whilst the game's representation does respond to the player's decided action, the game does not react dynamically to the player's decision, in the sense that these actions do not explicitly matter in the broader context and progress of the game. However, these decisions clearly still have the potential to be meaningful and one might, for example, argue that by paying the slave traders, the player becomes complicit in the slave trade and enables the slave

system. By refusing to do so on principle, Narcisse actively negates the reproduction of a racist capitalist system in the game. This shows how it is possible for players to appropriate agency within the game by refusing to enact one set of potential actions on the basis of one's own moral convictions (Sicart 2008). This experience points to the inherent difference of historical games compared to other forms of historical media in that players are required to activate and configure meaning potentials, often by inserting their own values and perspectives. Clark also highlights this quality of games:

This is not an experience that can be had anywhere else on the planet. This is more than power, this is more than the elucidation of pain. This is catharsis. It's catharsis beyond the one gamers usually think of, of having a shitty day, taking it out on virtual puppets with extreme prejudice. It is having your racial identity, the large scale identity as a minority validated, and given the freedom no slave ever did. It is the ability to exert power over a cultural past that has and continues to affect us to this day. It is not begging for someone to give us, us free [sic]. It is taking it by right and force. (Clark 2014, para 11, my emphasis)

This is exemplary of how games hold potential to influence and engage processes of cultural memory, particularly in relation to marginalised groups. In recounting his feelings about and experience of playing the strong and capable Adéwalé in a power fantasy against virtual White supremacy, Clark pinpoints how digital games can allow for a certain type of ludic performance that not only commemorates the oppression tied to marginalized identities and groups but also allows the active reworking and negotiation of this memory in potentially progressive ways. Clark continues,

It's a power fantasy with a purpose. It serves the same purpose that [Quentin Tarantino's film] Inglorious Basterds serves for Jewish people, and that white people get to find in hundreds of other pieces of media every year. But most importantly, it's validation. It means that black people, their experiences, their ancestry exist outside of the encyclopedia. (ibid. para 16, my emphasis).

Once again, Clark invokes processes of cultural memory related to how marginalised racialised groups are obscured and relegated through a form of historical amnesia. As a mass-cultural digital game, Freedom Cry allows for a specific form of negotiation and performance that validates the existence of a marginalised identity beyond esoteric historiographical encyclopaedia in the processes of remembering the past. By having a game with a representational layer and a mechanical system that simulates the historical trauma of the transatlantic slave trade, whilst representing and allowing players to act as a Black protagonist and engage in a historical struggle, the game enables a particular form of awareness and produces a symbolic significance in relation to the collective cultural memory in the player's present. Freedom Cry therefore stands as an example of how the representational layer and mechanics can work together to form an experience that commemorates the oppressive systems of the past, whilst providing opportunities to resist this memory in the face of being an exposed identity in hostile spaces. Both of Narcisse's and Clark's statements highlight what the game meant for them in their situated play experiences. Despite its flaws detailed earlier, Freedom Cry accentuates a masscultural way of simulating marginalised existences in both the past and present, giving inclusive acknowledgement to underrepresented cultures and identities. Freedom Cry is not without its problems in its racial dynamics in the context of contemporary White hegemony, but it also points

towards the ways in which digital games can open up for a recognition of marginalized past and present experiences.³⁷

As such, Freedom Cry has the potential to influence processes of cultural memory related to marginalized identities and contemporary and past forms of oppression through practices of play. I term such activation of critical meaning potentials 'counter-hegemonic commemorative play'. By this, I mean instances where a game's design features allow players to playfully negotiate, and perform against, contemporary hegemony thereby influencing processes of cultural memory. As such, counterhegemonic commemorative play does not only recognize the past in a symbolic manner through representational means, but also allows players to perform and actively resist the depicted past hegemony in a potentially cathartic way. While Clark's mention of the catharsis of *Inglorious* Basterds is comparable, it is not equivalent – the film does not allow individuals to perform and actively resist the historical trauma of Nazi oppression, whereas Freedom Cry offers performative counter-hegemonic experiences through its mechanical system. This is one of the essential aspects of counter-hegemonic commemorative play, where players are able to virtually act out struggles against past and contemporary oppression. Freedom Cry strikes a rather clever balance between allowing cathartic moments of counter-hegemonic play by providing opportunity for individual resistances and yet still emphasising the structural nature of oppression and the difficulty of individual resistance against such hegemonic structures. Despite potentially problematic aspects, arguably in large part due to the capitalist and White hegemonic contexts in which they are created, my analysis, coupled with the statements by Narcisse and Clark, demonstrates how digital games are potentially able to progressively contribute to processes of cultural memory associated with oppression and marginalisation. Narcisse summarizes both the success and failure of Freedom Cry as popular cultural product thusly:

What Adéwalé [...] can represent is a placebo for those historical voids. It's a placebo made out of popcorn, sure. But these [...] characters' collective existence manages to soothe nonetheless because it's evidence that creative people see value in an ancestral line like mine. (Narcisse 2013, para 12)

Counter-hegemonic commemorative play - Recognition of identity & memory

In total, counter-hegemonic commemorative play is a playfully enacted, mediated form of commemoration that emphasizes the memory politics of marginalised identities and groups. It follows the politics of recognition (Taylor 1994; Galeotti 2002) in affirming and acknowledging other ways of life by highlighting non-hegemonic differences and identities.

As illustrated in the statements by Narcisse and Clark, digital games hold the capacity for this sort of recognition, particularly in regards to how media are able to reinforce or question symbolic power

=

³⁷ This echoes Browne (2014) analysis of the *Assassin's Creed* series as "both a 'Game of Empire' that deploys the strategies of the colonizer, while simultaneously being a 'Game of Multitude' that valorizes the deeds, agency, and cultural richness of an often-subjugated group." (ibid.)

hierarchies related to identities. I maintain that historical games possess the capability to enable the legitimacy and acceptability of marginalised identities in the same manner as hegemonic identities (Galeotti 2002, 100-1) by offering counter-hegemonic commemorative play. Given that narratives influence processes of cultural memory through various cultural artefacts, such as monuments, museums, calendar dates, documentaries, films, literature, and games (Erll 2011; Assmann and Czaplicka 1995; Sturken 2008; Landsberg 2015; Reading 2011), it is important to analyse them in order to draw out the ways in which their meaning potentials motivate specific understandings of the past in the light of the present. It seems clear that digital games are able to meaningfully engage, or even challenge, understandings of the past. Engaging a digital game can potentially hold deep mnemonic significance to some players, as demonstrated by Narcisse and Clark. There are certain encoded elements in digital games, such as virtual spaces, character representation, mechanical systems enabled by the software code, and a broader narrative, which all go together to simulate a historical experience that potentially informs and relates to processes of cultural memory, and, importantly, lets players playfully activate, negotiate and perform these processes. Additionally, it is significant to understand how marginalised identities are encoded in these artefacts, if at all. As Young (1990, 59) states, asymmetrical power relationships and oppressive structures between different social groups and certain identities are reproduced and reflected in media. This makes it imperative to understand how games, as a wide-reaching entertainment medium, reinforce or subvert these ideologies, especially with regard to how the past is remembered or forgotten in the present.

It is equally central, however, to note that this symbolic recognition of identities in processes of cultural memory does not necessarily lead to material benefits, as argued by Fraser (1987, 131), i.e. being represented and recognized in an entertainment product like *Freedom Cry* does not make up for postcolonial effects on Haitian society and culture, or the African diaspora caused by the slave trade, or racially and gendered oppression writ large. This does not mean that aspects of recognition should be discounted, but rather that discussions on hegemony and inequality should keep both material and symbolic wealth in mind. As Butler (1997, 33) has argued in relation to symbolic wealth, recognition and acknowledgement of non-hegemonic identities do matter in addition to material considerations. Thus, since games allow for playful performances through their design features, it is fruitful to understand how they can serve as inclusive, empowering and cathartic playful objects for marginalising conditions, both within and outside of media representation. My analysis of *Freedom Cry* and the personal accounts by Narcisse and Clark highlight the mnemonic potentials for such performances related to marginalisation in the present through the form of digital games.

Conclusion

By enabling a form of potentially cathartic power fantasy within a historical struggle, along with the symbolic representation of non-hegemonic identities, the developers of *Freedom Cry* open up for players to activate counter-hegemonic commemorative play. The game therefore enables the recognition of marginalised identities and histories within larger frameworks of cultural memory. The decision to contextualise its genre conventions within a historical trauma as a non-hegemonic identity allows the reconfiguration of how players can relate to and play with specific processes of cultural memory. As such, by providing frames in which players are able to potentially negotiate and appropriate their understanding of the past through practices of play, game developers can design for counter-hegemonic commemorative play. Given the historical and contemporary oppression of the groups and identities in question, I have argued here that digital games have the ability to contribute to processes of understanding the past in the present in their own media-specific way as simulations. My

conclusions also imply that game developers are not only able to utilize this aspect to their creative advantage, but they also possess the ability and power to rectify or nuance the reproduced memories of historical oppression and marginalization through counter-hegemonic commemorative play, i.e. they are able to provide structures that allow players to activate, perform and recognise marginalised identities in the present. As Sicart states,

Creators who are invested in the aesthetic and ethical possibilities of games should care about the design of the spaces of play where appropriation happens. (Sicart 2013, 66)

These conclusions also have implications for historiography, as they demonstrate how digital games allow for media-specific configurations of historical discourses, in which players can actively bring their own values and experiences to bear. Digital games allow performances within the constraints of both the representational layer and mechanical system and this can feed into processes of cultural memory and thus how players actively remember the past. Given these conclusions and the fact that contemporary hegemonic power hierarchies, processes of cultural memory and mediated cultural expressions intertwine in how collectives and individuals remember the past, it therefore seems that the media-specific affordances of digital games have the potential to play a significant part in these processes.

Acknowledgements

I would like to thank Adam Chapman and Holger Pötzsch for thoroughly constructive and insightful perspectives on this article.

References

- Aarseth, Espen, and Gordon Calleja. 2009. "The Word Game: The Ontology of an Undefinable Object." Paper presented at the Philosophy of Computer Games Conference, Oslo, August 13-15.
- Assmann, Jan, and John Czaplicka. 1995. "Collective Memory and Cultural Identity." *New German Critique* 65: 125–33. Cultural History/Cultural Studies (Spring Summer, 1995), doi:10.2307/488538.
- Brightman, James. 2016. "Mobile to Overtake PC in \$99.6bn Global Games Market Newzoo." *GamesIndustry.biz.* http://www.gamesindustry.biz/articles/2016-04-21-mobile-to-overtake-pc-in-usd99-6bn-global-market-newzoo. Accessed June 17 2016.
- Brock, André. 2011. "When Keeping It Real Goes Wrong': Resident Evil 5, Racial Representation, and Gamers." *Games and Culture* 6 (5): 429–52. doi:10.1177/1555412011402676.
- Browne, Pierson. 2014. "Equal Opportunity Murder: Assassin's Creed, Games of Empire, Colonial Strategies and Tactical Responses." Paper presented at the DiGRA International Conference, Utah, August 3.
- http://content.lib.utah.edu/utils/getfile/collection/EHSL_DiGRA/id/60/filename/101.pdf. Butler, Judith. 1997. "Merely Cultural." *Social Text 52/53* 15 (3 & 4 (Autumn–Winter, 1997)): 265–
- Butler, Judith. 1997. "Merely Cultural." *Social Text 52/53* 15 (3 & 4 (Autumn–Winter, 1997)): 265–277. doi:10.2307/466744.
- Calleja, Gordon. 2011. *In-Game: From Immersion to Incorporation*. Cambridge, MA: MIT Press. Chapman, Adam. 2012. "Privileging Form Over Content: Analysing Historical Videogames." *Journal of Digital Humanities* 1 (2). http://journalofdigitalhumanities.org/1-2/privileging-form-over-content-by-adam-chapman/.
- ———. 2013. "'Affording History': Applying the Ecological Approach to Historical Videogames." In *Playing with the Past: Digital Games and the Simulation of History*, edited by Matthew Kapell and Andrew BR Elliott, 61–73. New York / London: Bloomsbury Publishing USA.

- Chapman, Adam, and Jonas Linderoth. 2015. "Exploring the Limits of Play." In *The Dark Side of Game Play: Controversial Issues in Playful Environments*, edited by Torill Elvira Mortensen, Jonas Linderoth and Ashley M. L. Brown, 137–53. London: Routledge.
- Clark, Justin. 2014. "Black Steel In The Hour of Chaos: Assassin's Creed and the Power of Representation." *Paste Magazine*. http://www.pastemagazine.com/articles/2014/11/black-steel-in-the-hour-of-chaos-assassins-creed-a.html.
- Connell, R. W., and James W. Messerschmidt. 2005. "Hegemonic Masculinity: Rethinking the Concept." *Gender & Society* 19 (6): 829–859. doi:10.1177/0891243205278639.
- Dawson, Tom. 2015. "Human Resources." *The Ontological Geek*. Accessed June 29, 2015. http://ontologicalgeek.com/human-resources/.
- Edwards, Kate, Johanna Weststar, Wanda Meloni, Celia Pearce, and Marie Josée Legault. 2014. "IGDA Developer Satisfaction Survey 2014 Summary Report." igda.org: IGDA. http://c.ymcdn.com/sites/www.igda.org/resource/collection/9215B88F-2AA3-4471-B44D-B5D58FF25DC7/IGDA_DSS_2014-Summary_Report.pdf.
- Erll, Astrid. 2011. Memory in Culture. Hampshire: Palgrave Macmillan UK.
- Erll, Astrid, Ansgar Nünning, and Sara B. Young. 2010. A Companion to Cultural Memory Studies: An International and Interdisciplinary Handbook. Berlin: Walter de Gruyter.
- Femia, Joseph V. 1987. *Gramsci's Political Thought: Hegemony, Consciousness and the Revolutionary Process*. Oxford: Clarendon Press.
- Fraser, Nancy. 1987. "Women, Welfare and the Politics of Need Interpretation." *Hypatia* 2 (1): 103–121. doi:10.1111/j.1527-2001.1987.tb00855.x.
- Fron, Janine, Tracy Fullerton, Jacquelyn Ford Morie, and Celia Pearce. 2007. "The Hegemony of Play." In *Situated Play: Proceedings of Digital Games Research Association 2007 Conference. Tokyo, Japan*, 1–10. September 24-27, Tokyo: ludica.org.uk. http://ict.usc.edu/pubs/The% 20Hegemony% 20of% 20Play.pdf.
- Galeotti, A. E. 2002. Toleration as Recognition. Cambridge: Cambridge University Press.
- Galloway, Alexander R. 2006. *Gaming: Essays on Algorithmic Culture*. Minnesota / London: University of Minnesota Press.
- Garfield, Gail. 2016. "Violence and the Black Male Body." *Reinventing Peace*. May 11. https://sites.tufts.edu/reinventingpeace/2016/05/11/violence-and-the-black-male-body/.
- Giroux, Henry A. 1994. *Disturbing Pleasures: Learning Popular Culture*. New York / London: Routledge.
- Gray, Kishonna L. 2014. Race, Gender, and Deviance in Xbox Live: Theoretical Perspectives from the Virtual Margins. Waltham / Oxford: Elsevier.
- Hall, Stuart. 1997. "The Spectacle of the 'Other." In *Representation: Cultural Representations and Signifying Practices*, edited by Stuart Hall, 223–90. London/ Thousand Oaks, Calif. / New Dehli: Sage Publications.
- ——. 1999. "The Whites of Their Eyes Racist Ideologies and the Media." In *Gender, Race and Class in Media A Text Reader*, edited by Gail Dines and Jean M. Humez, 18–22. London/Thousand Oaks, Calif. / New Dehli: SAGE Publications.
- Hartmann, Tilo, and Peter Vorderer. 2010. "It's Okay to Shoot a Character: Moral Disengagement in Violent Video Games." *Journal of Communication* 60 (1): 94–119. doi:10.1111/j.1460-2466.2009.01459.x.
- Hay, Mark. 2015. "Why France Should Pay Haiti \$18+ Billion Immediately." *Modern Notion*. Accessed June 19, 2016. http://modernnotion.com/france-pay-haiti-18-billion-immediately/.
- Jørgensen, Marianne W., and Louise J. Phillips. 2002. *Discourse Analysis as Theory and Method*. London/ Thousand Oaks, Calif. / New Dehli: SAGE Publications.
- Juul, Jesper. 2005. *Half-Real: Video Games between Real Rules and Fictional Worlds*. Cambridge, MA: The MIT Press.
- Kamen, Matt. 2014. "Assassin's Creed Historian on Merging the Past with Fiction." *Wired UK*. http://www.wired.co.uk/news/archive/2014-10/23/assassins-creed-unity-interview-maxime-durand. Accessed June 29, 2016
- Kapell, Matthew Wilhelm, and Andrew B. R. Elliott. 2013. *Playing with the Past: Digital Games and the Simulation of History*. New York / London: Bloomsbury Publishing USA.

- Köstlbauer, J. 2013. "The Strange Attraction of Simulation: Realism, Authenticity, Virtuality." In *Playing with the Past: Digital Games and the Simulation of History*, edited by Andrew B. R. Elliott and Matthew Kapell, 169–83. New York / London: Bloomsbury Publishing USA.
- Kotzer, Zack. 2014. "Meet the Historian Behind 'Assassin's Creed Unity'." *Motherboard*. http://motherboard.vice.com/read/meet-the-historian-behind-assassins-creed-unity. Accessed May 13, 2016.
- Laclau, Ernesto, and Chantal Mouffe. 2001. *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics*. New York: Verso.
- Landsberg, Alison. 2015. Engaging the Past: Mass Culture and the Production of Historical Knowledge. New York: Columbia University Press.
- Leonard, David. 2003. "Live in Your World, Play in Ours': Race, Video Games, and Consuming the Other." SIMILE: Studies In Media & Information Literacy Education 3 (4): 1–9.
- Mercer, Kobena, and Isaac Julien. 1994. "Black Masculinity and the Sexual Politics of Race." In *Welcome to the Jungle: New Positions in Black Cultural Studies*, Kobena Mercer, 131–70. London; New York: Routledge.
- Mukherjee, Souvik. 2016. "Playing Subaltern Video Games and Postcolonialism." *Games and Culture*. DOI:10.1177/1555412015627258.
- Murray, Jill, and Hugo Giard. 2014. "Beyond Fun: Difficult Topics Inspire Story and Design." Paper presented at *Game Developer's Conference 2014*. San Francisco, CA, March 17-21, 2014. http://www.gdcvault.com/play/1020487/Beyond-Fun-Difficult-Topics-Inspire.
- Murray, Soraya. 2015. "Three Faces of Aveline: An Intersectional Feminist Reading of Assassin's Creed III: Liberation." Paper presented at *Histoire Des Problématiques de Genre Dans Les Jeux /History of Gender in Games Symposium*. Montréal (Quebec), Canada, June 26, 2015. https://www.youtube.com/watch?v=HZbtdh-ixMM.
- Nakamura, Lisa. 2012. "Queer Female of Color: The Highest Difficulty Setting There Is? Gaming Rhetoric as Gender Capital." *Ada: A Journal of Gender, New Media, and Technology*, no. 1(November). doi:10.7264/N37P8W9V.
- Narcisse, Evan. 2013. "This Is Why We Need More Black People Making Video Games." *Kotaku*. http://kotaku.com/5987766/this-is-why-we-need-more-black-people-making-video-games. Accessed April 7, 2015.
- ———. 2014a. "A Game That Showed Me My Own Black History." *Kotaku*. http://kotaku.com/agame-that-showed-me-my-own-black-history-1486643518. Accessed August 1, 2014.
- ——. 2014b. "Giant Bomb's Interview Dumptruck The Ethics of Freedom Cry Giant Bomb." http://www.giantbomb.com/podcasts/the-ethics-of-freedom-cry/1600-764/. Accessed April 7 2015.
- Patton, Jamie. 2014. "Colonising History: The Culture and Politics of Assassin's Creed." *James Patton*. http://james-patton.net/2014/11/29/colonising-history-the-culture-and-politics-of-assassins-creed/. Accessed April 7 2015.
- Phillips, Anthony. 2008. "Haiti, France and the Independence Debt of 1825." *Canada Haiti Action Network*. http://canadahaitiaction. ca/content/haiti-france-and-independence-debt-1825-0.
- Plante, Chris. 2012. "Assassin's Creed 3' Team Historian Talks Inspirations." *Polygon*. September 24. http://www.polygon.com/gaming/2012/9/24/3367434/assassins-creed-3s-team-historian-talks-inspirations. Accessed May 13. 2015.
- Pötzsch, Holger. 2015. "Selective Realism Filtering Experiences of War and Violence in First- and Third-Person Shooters." *Games and Culture*. doi:10.1177/1555412015587802.
- Pötzsch, Holger, and Vít Šisler. 2016. "Playing Cultural Memory Framing History in Call of Duty: Black Ops and Czechoslovakia 38-89: Assassination." *Games and Culture*. doi:10.1177/1555412016638603.
- Reading, Anna. 2011. "Identity, Memory and Cosmopolitanism: The Otherness of the Past and a Right to Memory?" *European Journal of Cultural Studies* 14 (4): 379–394. doi:10.1177/1367549411411607.
- Rosenstone, Robert A. 1995. "The Historical Film as Real History." *Filmhistoria Online* 5 (1): 5–23. Said, Edward W. 1978. *Orientalism*. New York: Vintage Books.

- Saphieha, Chad. 2015. "How Historians and Artists Crafted a 'Highly Authentic Impression' of London for Assassin's Creed Syndicate." *Financial Post*. http://business.financialpost.com/fptech-desk/post-arcade/how-historians-and-artists-crafted-a-highly-authentic-impression-of-london-for-assassins-creed-syndicate. Accessed May 13 2016.
- Shaw, Adrienne. 2015a. "Dialectics of Affordances: Stuart Hall and the Future of New Media Studies." *Culture Digitally*. http://culturedigitally.org/2015/06/dialectics-of-affordances-stuart-hall-and-the-future-of-new-media-studies/.
- ———. 2015b. *Gaming at the Edge: Sexuality and Gender at the Margins of Gamer Culture*. Minneapolis: University of Minnesota Press.
- ———. 2015c. "The Tyranny of Realism: Historical Accuracy and Politics of Representation in Assassin's Creed III." *Loading...* 9 (14): n.p. http://journals.sfu.ca/loading/index.php/loading/article/view/157.
- Sicart, Miguel. 2008. "Defining Game Mechanics." Game Studies 8 (2): 1–14.
- ——. 2013. Beyond Choices: The Design of Ethical Gameplay. Cambridge, MA: MIT Press.
- . 2014. *Play Matters*. Cambridge, MA: MIT Press.
- Sinclair, Brendan. 2015. "Gaming Will Hit \$91.5 Billion This Year Newzoo." *GamesIndustry.biz*. http://www.gamesindustry.biz/articles/2015-04-22-gaming-will-hit-usd91-5-billion-this-year-newzoo. Accessed November 2, 2015.
- Sturken, Marita. 2008. "Memory, Consumerism and Media: Reflections on the Emergence of the Field." *Memory Studies* 1 (1): 73–78. doi:10.1177/1750698007083890.
- Taylor, Charles. 1994. "The Politics of Recognition." In *Multiculturalism*, edited by Amy Gutmann, 25–74. New Jersey: Princeton University Press.
- Ubisoft. 2015. "Assassin's Creed® Freedom Cry Game & Trailer | Ubisoft (US)." Accessed November 9. http://assassinscreed.ubi.com/en-us/games/assassins-creed-freedom-cry.aspx.
- Ubisoft Montréal. 2012. Assassin's Creed III. PC. Ubisoft, Inc.
- ——. 2013. Assassin's Creed IV: Black Flag. PC. Ubisoft, Inc.
- Ubisoft Québec. 2013. Assassin's Creed: Freedom Cry. PC. Ubisoft, Inc.
- Ubisoft Sofia. 2014. Assassin's Creed: Liberation (version HD). PC. Ubisoft, Inc.
- Uricchio, William. 2005. "Simulation, History, and Computer Games." In *Handbook of Computer Game Studies*, edited by Joost Raessens and Jeffrey Goldstein, 327–338. Cambridge, MA: MIT Press.
- Weststar, Johanna, and Marie Josée Legault. 2015. "IGDA Developer Satisfaction Survey 2015 Summary Report." igda.org: IGDA. https://c.ymcdn.com/sites/www.igda.org/resource/collection/CB31CE86-F8EE-4AE3-B46A-148490336605/IGDA%20DSS%202015-SummaryReport_Final_Sept15.pdf.
- White, Hayden. 1984. "The Question of Narrative in Contemporary Historical Theory." *History and Theory* 23 (1): 1–33. doi:10.2307/2504969.
- Williams, Dmitri, Nicole Martins, Mia Consalvo, and James D. Ivory. 2009. "The Virtual Census: Representations of Gender, Race and Age in Video Games." *New Media & Society* 11 (5): 815–34. doi:10.1177/1461444809105354.
- Winant, Howard, and Michael Omi. 1994. *Racial Formation in the United States: From the 1960s to the 1990s*. London: Routledge.
- Young, Iris Marion. 1990. *Justice and the Politics of Difference*. Princeton, N.J.: Princeton University Press.

Article 2: Playing Virtual Jim Crow in Mafia III - Prosthetic Memory via Historical Digital Games and the Limits of Mass Culture

Hammar, Emil Lundedal. 2020. "Playing Virtual Jim Crow in Mafia III - Prosthetic Memory via Historical Digital Games and the Limits of Mass Culture." *Game Studies* 20 (1). http://gamestudies.org/2001/articles/hammar.

Short description

This article applies the concept of prosthetic memory to Mafia III in order to discuss the significance of both contexts of production and reception in determining memory-making potentials of historical digital games with attention to racialized oppression in and beyond games.

Abstract

This article critically evaluates Alison Landsberg's concept of prosthetic memory by applying it to the historical digital game *Mafia III*. Via an array of player perspectives, I emphasize how players activate the game's prosthetic memory-making potentials of 1960s Southern US in relation to white supremacy, masculinity, and counter-hegemony. Yet despite its explicit politics, I argue that *Mafia III*'s context of production limits critical practices of play. Likewise, I consider instances of non-black players who recreationally consume *Mafia III*'s politics. I thereby show the significance of racial and materialist approaches to memory-making in games when considering the exploitative relations across the contexts of both production and consumption of digital games. As such, I argue that promises of empathy and alliances via mass media, as prosthetic memory holds, are inadequate in contemporary white supremacist, patriarchal capitalism, and accordingly, materialist and power-hierarchical approaches to games enable deeper understandings of their negotiated meaning-potentials.

Introduction

Relatively little attention in both game and memory studies has been paid to Alison Landsberg's concept of 'prosthetic memory' and its role in analyzing historical digital games, especially with regards to its political promises. As a mass cultural medium, historical digital games are ripe for analyzing how understandings of the past are formed in the present and their political ramifications. This article contributes to this dialogue by bringing prosthetic memory to bear on *Mafia III* (Hangar 13 & 2K Czech, 2016) with special attention to its contexts of production and reception, and racialized oppression in and beyond the game itself. As I argue, consideration to these contexts is significant for the analysis of cultural memory in games, as it exposes the tensions derived from contemporary power hierarchies, such as race, in how the political economy of a game tends to structure its form, which in turn is received and negotiated by players in their own contexts.

First, I define the affective potentials of prosthetic memory shaped by mass cultural media, and their empathetic potential to foster political alliances across differences of identity. Then I critically apply prosthetic memory to an analysis of *Mafia III*, a game that situates players in 1960s US white supremacy in New Orleans during the Civil Rights era. In applying the concept, I use my own and publicly available player testimonies by Anglophone scholars, writers, and critics to draw out *Mafia III*'s memory-making potentials, which in turn highlights how its form predisposes practices of play. Through these perspectives, I investigate how the game invites prosthetic relations to a past and an

identity which some players have not lived, with an attention to the game's use of racial violence and Jim Crow laws. In line with Landsberg's claim that mass-disseminated memories elicit affective responses to motivate political alliances across differences, *Mafia III* might similarly be seen to invite empathetic relations to black political struggles for players unfamiliar with racialized oppression. However, similar to TreaAndrea Russworm's (2017) and David Leonard's (2016) arguments on the promise and limits of 'racial empathy' through digital games, I criticize the empathetic potential of prosthetic memory by introducing critical race-theoretical and materialist perspectives, which suggest that mass culture and its political-economic conditions churn out products for pleasurable consumption by dominant audiences divorced from political action and genuine empathy. In turn, these criticisms problematize the viability and promise of prosthetic memory and point to the complexity and ambivalences of the cultural memory found in mass cultural products such as *Mafia III* and the global power hierarchies that produce them. Finally, I argue that such promises of memory-making need to be re-evaluated and instead must consider relations of power and political economy of mass culture to better encapsulate the implications of memory-making.

Cultural & Prosthetic Memory

Cultural memory studies focuses on how culture mediates the past in the present via artifacts "from hand-crafted manuscripts to the printing of books, from the crafted singular image to the mass production of photography and films." (Reading, 2016, p. 1). On the basis of these cultural expressions, individuals and collectives interpret and negotiate the past in sociocultural contexts (Erll, 2011, p. 101). By analyzing these objects and considering the differing affordances of their various forms (Rigney, 2016, p. 67), it is possible to identify certain memory-making potentials that audiences might, or might not, activate. Here, Landsberg (2004, 2015) proposes the concept of prosthetic memory [1] to account for how mass cultural media can create an artificial 'mnemonic limb' for their audiences. For instance, she argues that the audiovisual nature of film has altered people's bodily relation to the past to the extent that audiences of mass culture are now vicariously relating to a historical event "as an experience that they have actually lived through." (2004, p. 180). Referencing phenomenological approaches to film spectatorship as embodied experience (Sobchack, 1992), Landsberg is interested in how mass media, such as film, "[...] engages us in a bodily way: haptically, aurally, visually." (2015, p. 30). Thus, when watching a historical film about the Holocaust, for instance, audiences are physically affected by and emotionally identifying with what happens on screen. This bodily, affective engagement enables audiences to form what Landsberg calls 'a mnemonic limb', meaning a sensuous prosthesis formed from the affective engagement with historical mass media, i.e. cultural constructions. As such, prosthetic memory refers to how contemporary mass media enables the formation of sensuous mnemonic limbs in audiences. Since its introduction, prosthetic memory has been applied across studies of cultural memory and media (e.g. Arnold-de Simine, 2013; Hirsch, 2012; Koss, 2006; Tybjerg, 2016), yet only two articles explicitly apply prosthetic memory to documentary games (Andersen, 2015) and military shooters (Cooke & Hubbell, 2015), respectively, but without much consideration to its political-economic implications. This consideration serves as the motivation for this article.

Opposing "those critics who see the commodification of mass culture in purely negative terms" (2004, p. 20), Landsberg optimistically claims that this affect via mass media enables the formations of political alliances between social groups (2015, p. 3), where audiences establish empathetic relations to the other groups (ibid, pp. 32-33). Landsberg uses Deborah Gould's (2010) research on how affect motivates politics to state that prosthetic memory's affect drives audiences to empathy and political

action. She exemplifies this with the depiction of black US diaspora in the film Rosewood (Singleton, 1997) and the TV-series Roots (1977) from which, according to her, non-Black US people can learn "to see the world through black eyes", which "[...] might have a radical effect on both their worldview and their politics." (Landsberg 2004, p. 83). By forming an affective relation to the Black US diasporic past via the audiovisual medium of television and film, prosthetic memory "might be instrumental in generating empathy and [...] an ethical relation to the other" (ibid., p. 149). This empathy is enhanced further by the mass production of culture in contemporary global capitalism, in which "commodification [...] makes images and narratives widely available to people who live in different places and come from different backgrounds, races, and classes. [...] (2004, p. 21). From this perspective, the extensive reach enabled by mass cultural media allows for a widely disseminated politics of recognition and empathy between disparate groups in the formation of prosthetic memory. Similar research on empathy in games have found place in game studies (de Wildt, Apperley, Clemens, Fordyce, & Mukherjee, 2019; de Wildt & Aupers, 2019; Fordyce, Neale, & Apperley, 2018; Leonard, 2020; Russworm, 2017; Smethurst & Craps, 2014; Wilde & Evans, 2019), a discussion I critically return to later in this article.

Chief among the critics of prosthetic memory, Berger (2007) wonders if we have not always used prosthetics to learn what others feel and think and that text likewise produce sensuous memories for their readers. Berger also contends that Landsberg builds "on a now longstanding scholarly literature that finds subversive, counter-hegemonic, liberatory potentials in popular and mass culture." (ibid. p. 601). Thus, he argues, prosthetic memory is not novel or different from previous insights into how people communicate through media and form understandings of the past and each other. In her response, Landsberg states that it is the mass commodification that sets prosthetic memory apart from previous technologies of memories, "all for the price of a ticket" (Landsberg 2007, p. 628). Her goal, she argues, is "not to be a defender of the global economy" (ibid.), but rather find the radical potential in mass culture. Yet as I will show later, the concept of prosthetic memory overlooks the material conditions of mass culture, its political economy, and its hegemonically structured consumption that disarm the political potentials of prosthetic memory. As research into the global production networks of contemporary digital mass media shows, the inherent environmentally degrading (Maxwell, Raundalen, & Vestberg, 2014), inhumane and exploitative conditions (Fuchs, 2017; Qiu, 2017) that enable mass media may exclude whatever empathetic potential for inclusion and understanding such media might enable on the level of reception. This is especially evident with contemporary digital games, which rely on these global production networks (Kerr, 2017) that in turn, I argue, predispose form to reiterate a hegemonic status quo, thereby challenging Landsberg's view on the radical potential of mass media.

Digital games and memory

While Landsberg focuses on historical films and museums, my contribution moves the analysis to historical digital games. Here, games operate at two levels of meaning-making -- the sign level of audiovisual representation and the system level of mechanics and rules executed by the procedural nature of digital games as software (Aarseth & Calleja, 2015). It is through this mechanical system that games structure player behavior and, along with the signifying level, that enable players to activate their agency in the context of past settings (Pötzsch & Šisler, 2019; Uricchio, 2005). This process is what Chapman refers to as "the particular audio-visual-ludic structures of the game" that "produce meaning and allow the player to playfully explore/configure discourses about the past" (Chapman 2012, p. 42). For example, as I have argued, the historical game *Assassin's Creed Freedom*

Cry (Ubisoft Québec, 2013) uses the endless mechanical reproduction of slave ships to frame "the historical event through a procedural rhetoric that demonstrates how unassailable the structural and systemic nature of the slave trade was if one chose to resist as an individual" (Hammar, 2017, p. 380). In this example and others (Chapman, 2016; de Smale, 2019; Ford, 2016; Mir & Owens, 2013; Mukherjee, 2017; Murray, 2017; Pötzsch & Hammond, 2019; Shaw, 2015b; Sterczewski, 2016), historical digital games invite players to activate memory-making potentials on the level of both sign and mechanical system. Mafia III similarly uses the interplay of these two levels to form a mnemonic limb and thus serves as a potentially rich example of how digital games invite understandings of the past and how these are formed differently depending on players' activation of their memory-making potentials³⁸.

Mafia III's blend of organized crime fiction and 1960's racial memory politics

As the third game in the *Mafia* series, *Mafia III* follows the same open-world action template that the Grand Theft Auto series (Rockstar North, 1997) made popular -- moving, driving, and limited social interaction with non-playable characters in US urban cities interceded by action-filled combat against virtual antagonists. The first two Mafia games drew on the popular genre conventions of Italian organized crime of New York in the 20th century, thus echoing the popular organized crime genre in film à la Coppola and Scorsese. In Mafia III, the central theme is still US organized crime, but contextualized by 1960s US white supremacy in a fictional rendition of New Orleans, called New Bordeaux. Here, players follow the 23-year old black Vietnam-veteran Lincoln Clay and his vengeful rise through Louisianan organized crime. The plot begins with Clay returning from the Vietnam War and becoming involved in local organized crime via his surrogate family. After helping the Italian Mafia out, they murder Clay and his family. Clay survives and sets out to enact his revenge by conquering the businesses and assassinating leaders of the Italian mafia. With the help of Cassandra (a Haitian crime lord), Vito (an Italian Mafioso), Burke (an Irish mob leader), and Donovan (an ex-CIA agent), Clay ascends the crime hierarchy via brute force and violence while enveloped in the setting of 1960s Southern US white supremacy. Thus, the narrative, the action-filled combat, and the relatively more tranquil moments of inhabiting and navigating a virtual representation of 1960s New Orleans and its racialized stratification, comprise the game's affective formation of prosthetic memory.

The mnemonic hegemony of violence

In *Mafia III*, players control Clay via a controller or keyboard & mouse interface from a third-person visual perspective. In activating the game's mechanical system, players' primary interactions with the gameworld is violence towards non-playable characters. This is seen where there is a plethora of ways to kill other characters -- beating them, shooting them with a wide array of firearms, driving over them, stabbing them, choking them, and so forth. In addition, the reactions by enemies are animated and presented in high detail with multiple hours of labor spent on depicting the brutality enacted upon these virtual bodies. For example, when players choose to engage a non-playable character via the game's 'Brutal Takedowns', the external camera changes into a fixed camera position with a low field of vision that focuses on the melee execution. If they press the contextual action button on their

³⁸ Methodologically, an assessment of the memory-making of games either "focuses on actual practices of play or that analyzes the formal properties through which such practices are limited and predisposed" (Pötzsch and Šisler 2016, p. 6) I employ both approaches in my analysis of *Mafia III*.

controller or keyboard, a complex set of motion-captured animations are triggered, where Clay, for instance, punches the enemy character in the stomach so that he bends over, swiftly followed by Clay slamming his military knife through the back of the skull of the enemy character. Along with this brutal set of animations, the audio of the game plays out a relatively loud and deep sound to signal that something noteworthy is taking place, along with the screams of the enemy character and the sounds of punching and knifing through flesh. In addition to both the visuals and the audio depicting the brutality and signifying the audiovisual prominence of this melee kill, the game also sends haptic signals by triggering the two vibration motors of the game controller.

This example, and many similar violent interactions with non-playable characters in *Mafia III's* gameworld, highlights how the game's memory-making emphasizes violence, where camera positioning, complex motion-captured animations, and audio and tactile feedback to players help fetishize it. This priority by the developers arguably means that players form sensuous memories around domination and violence towards others.

For a prosthetic relation to occur, Landsberg (2015, p. 30) writes, audiences have to empathize with the depicted characters and their past. In order to retain player-empathy for a character engaging in mass slaughter, *Mafia III* game justifies it in two ways; on one hand, Clay is avenging his family (Blackmon 2017, p. 100), thereby following the received trope of the 'evil deed' (Pötzsch 2013, p. 130) that implicitly justifies the violence conducted by players in the game. Second, this simulated violence is further justified with the use of selective conflict filters (Pötzsch 2017), wherein enemies show little humanity and agency. Likewise, by locating it within 1960's US white supremacy, racist white characters serve as prime cannon fodder, while concurrently never surrendering or showing helplessness - i.e. the game's depictions of violence "morally disengage users by framing violence against seemingly alive characters as an "okay action."" (Hartmann 2017).

This priority is not necessarily the will of the workers at Hangar 13 and 2K Czech, but due to the political economy of the games industry (author removed). The publisher 2K Games, like many other investors, sought to reduce financial risks by replicating tried-and-true formula - utilizing genre conventions, meeting predictable consumer expectations, and targeting imagined demographics (Srauy 2017). This speaks to an implicit convention within game production and publishing, where higher costs necessitate conservative design that has been honed and evolved over decades (Nieborg 2011; Dyer-Witheford and Sharman 2005). As some game writers have professed (Bustillos 2013; Parkin 2015; Hamilton 2013; Robertson 2013), their purpose is to somehow write violent, but relatable characters. Moreover, already when the concept was being developed, 2K Games questioned the size of the potential market due to the game's racial politics³⁹. Again, the design ideal to meet assumed expectations of investors and imagined consumers requires that *Mafia III* frames possible memorymaking potentials to revolve around violence, thereby influencing players' prosthetic relation to the game's historical setting and political topics.

Zelnick, chief executive at Take-Two Interactive. But that quickly turned into a discussion of how to authentically depict the time period without being exploitative or preachy, he said.» (Tsukayama 2016)

³⁹ «There were some early discussions about whether this choice would narrow the game's audience, said Strauss

The mnemonic hegemony of masculinity

In addition to this justification of violence, Clay's character lines up with hegemonic masculinity (Connell & Messerschmidt, 2005), via prioritizing the traits of domination, invulnerability, and toughness at the expense of traits like compassion, fragility, and weakness. The scholar Samantha Blackmon observes that Clay is driven "by ambition. He wants to take control of the criminal enterprises within all of New Bordeaux" (2017, p. 100), a claim which is nuanced by the fact that Lincoln implicitly liberates the communities by potentially giving control of rackets to others if players choose one of the three endings to the game's narrative. The scholar TreaAndrea Russworm remarks in an interview that Clay is not given the opportunity to develop a social relationship that would allow him to display warmth, empathy, and vulnerability beyond his surrogate relationship with Father James (SpawnOnMe, 2016). Moreover, the game's side-activities similarly follow a certain vision of masculinity: Collecting car magazines, Playboy magazines, 1960s music album covers, and taking down communist propaganda posters. Ergo, what gets included and prioritized in the prosthetic memory-making potentials of Mafia III is a certain type of capitalist hegemonic masculinity that emphasize violence, car fetishism, heterosexual titillation, and anti-communism. This hegemonic masculinity also comes at the expense of women in the narrative, where for instance Blackmon identifies how the game reduces the depicted sex workers of New Bordeaux to commodities where Clay is engaging them "not for the sake of freeing the women, but rather because breaking up the prostitution ring will ruin the business of the Sal Marcano [...] who has murdered his family." (Blackmon 2017, p. 104). Given the Mafia series and the genre that Mafia III follows, this hegemonic masculinity seems mandatory and consequently also affects the type of affective relation to the past that prosthetic memory draws attention to.

Counterhegemonic commemorative play

In spite of this focus on both violence and masculinity, Mafia III manages to differ because it is "obsessed not just with violence but the context that this violence happens in.", as the game critic Javy Gwaltney (2016) writes. I.e. the game centers a black male character navigating 1960s US white supremacy, where its setting, plot, and characters explicitly invoke the racial politics of 1960s U.S. Given Clay's identity as a biracial⁴⁰ main protagonist, he is an atypical character in the landscape of mainstream digital games, where typically white, heterosexual, US men in their twenties to thirties dominate (Fron, Fullerton, Morie, & Pearce, 2007; Gray, 2014; Shaw, 2015a; Williams, Martins, Consalvo, & Ivory, 2009). Likewise, where other high-budget game productions would usually conceal their implicit politics to appease their imagined audiences and avoid financial risk, Mafia III explicitly embraces its racial memory politics of the 1960s Southern US. It is through both Clay as the player-character and the game's racial politics that the game allows for certain cathartic practices of play. As I have argued (Hammar, 2017), some historical digital games allow for counter-hegemonic play where players activate and play against contemporary hegemony. For example, after playing Mafia III, the critic Tanya DePass (2016) writes that "[T]here is cathartic glee of slamming a racist in the chest as he called me 'boy' for merely walking by." Similar testaments have been professed by the critic Tariq Moosa (2016), who found it "cathartic to play a video game that acknowledges the reality

⁴⁰ Hangar 13 went for a mixed-race protagonist to emphasize the so-called one-drop rule: Regardless of the degree of black skin tone, Lincoln Clay is still targeted by US white supremacy. As the character Father James points out in a cutscene in the game: "Not that it mattered — back then if you look black, you black. Same as today, I suppose." Yet this decision might also be read as a form of colorism that only allows lighter-skinned representation rather than dark-skinned ones. (Hunter 2007)

of racism and says: things don't have to be this way", while the critic Terrence Wiggins (2016) professes that "it's all cathartic because we live in a time where a powerful man is allowed to run for the highest public office [Donald Trump] on the ideals of the enemies you face in this game, ideals that should be forgotten detritus from our shameful past.". Yussef Cole underscores this pleasurable catharsis:

After all, is there anything more satisfying than being able to punch the lights out of a store clerk who says your kind doesn't belong here, who is threatening to bring the police down on your head? (Cole 2018)

The game's marketing also embraced this cathartic play, where a two-second clip of Clay mowing down Ku Klux Klan members with an automatic rifle was turned into a looping animated image by people looking forward to playing the game (Salazar-Moreno, 2016). This promotional strategy (Wright, 2018) also further complicates prosthetic memory in the sense that although *Mafia III* depicts a past that these players supposedly have not lived; their activation of the game's memory-making potentials relates to their own present-day marginalization and oppression.

Foreclosed avenues of counter-hegemony

Yet a critical reader might reasonably ask to what degree is *Mafia III* counter-hegemonic? Given the game's emphasis on violence and US masculinity, the game only allows for contexts of counter-hegemonic play when the theme of revenge suits it. For instance, while the game allows players to kill a variety of white supremacists, it implicitly condones capitalism, domination, and US culture in such ways that these other political topics are taken for granted. The critic Miguel Penabella deftly juxtaposes the limits of counter-hegemony *Mafia III* in:

The unimpeded triumph of black subjectivity amidst racialized violence proves to be a power fantasy, and all the game can do is simply relegate Lincoln within the same capitalist system of institutionalized oppression. He earns money and topples the mafia but remains separated from political engagement. [...] Lincoln is rewarded for being part of the same power structure of [sic] his oppressors, reducing success to one's ability to simply make money. Rather than a fundamental destabilization of power, the same structures are maintained under the guise of completing the overall campaign. (Penabella 2016)

In the game, Clay seems to solely focus on his revenge, while killing racists is merely a bonus – i.e. he is only *coincidentally* concerned with Black justice. Thus, the game enables, but does not enforce counter-hegemonic play, thereby appealing to a wider audience who otherwise would be averse to fighting white supremacy. The lead writer William Harms corroborates this in an interview: "*Mafia III* is not a game about racism. There's racism in the game, but our intent was never to make a game about that. It's what we call a pulpy revenge tale […]» (Martin 2016) ⁴¹ This schism between organized crime fiction and a counter-hegemonic pro-black vision of the past emerges in a scene

⁴¹ The PR strategy of limiting the perception of *Mafia III* as an anti-racist and explicitly political game is indicated in various interviews up to the game's release, where multiple employees of Hangar 13 repeat the refrain that 'the game is not about racism' and that they do not want to be 'preachy' or 'stand on a soapbox'. This is presumably repeated to avoid public controversy that would limit potential sales

where captain Cassandra tells Clay that "the only way black folk stand a chance in this city is if we commit to each other", in opposition to Clay's obsession with revenge. Here the writers, via Cassandra, comment on Clay's personal ambition versus the more emancipatory potentials of dismantling white supremacy. The game's reliance on Clay's revenge against the Italian mafia as the core part of his motivation obscures the radical potential in centering US black emancipation. Russworm rightly argues that she would have preferred for the developers to go all the way by allowing players to ultimately turn *Mafia III*'s designed power-fantasy "[...] on the state once and for all, because that's the fantasy, that's the ultimate realization of this fantasy -- can revolution be fully realized? [...] personal revenge is not the fantasy, it's not enough. [...] it's revolution that we want" (SpawnOnMe, 2016, sec. 01:37:21). The game already offers up radical commentary and some instances of counterhegemonic commemorative play, yet the main thematic plot of Clay is once and for all confined within the genre of organized crime and revenge fantasy. *Mafia III* thus excludes emancipatory memory-making potentials by relying on genre and the assumed tastes of hegemonic audiences (cf. Shaw, 2015b), something that Russworm (2016) also identifies as the problem of recognition in pop-cultural renditions of the era.

Past and contemporary memory politics

Still, when compared to other high-budget mainstream digital games that usually shy away from overt political commentary, *Mafia III* stands out with its prominent depiction of race relations in the 1960's US. Already in the first moments of the game, Clay is called a racial slur by a white character; while his white partner in crime is empty-handed, he must carry big, heavy money bags like a mule; and his presence in white spaces is dismissed by a white security guard as the problems of "Affirmative action [...] The whole country's spinning around the goddamn toilet. [...] Sad day when a God-fearing white man can't get a job, but any old n— who staggers in is hired on the spot." Already here, the game aggressively signals to players the racial memory politics that await them.

Additionally, while driving around New Bordeaux, players can cycle through different radio stations where for example one white radio host professes white supremacist rhetoric across the airwaves, while on another station called 'The Hollow Speaks', a black radio host proclaims dreams of revolution, black power, anti-imperialism, and emancipation from centuries-long oppression. These commentaries are not confined to the game's fictional world, as the game coincidentally parallels contemporary black US struggles. For instance, one news story revolves around two black men who are shot by Hollis Dupree, a white war veteran, when they asked him for help after their car broke down. As cultural commentators have pointed out (SpawnOnMe, 2016), this story is strikingly like the case of Renisha McBride who was killed under similar circumstances in 2013. Yet Haden Blackman, the director of the game, claims that they did not anticipate these similarities to contemporary struggles against white supremacy, so the motivation for the game's tie-in with political movements and events were supposedly accidental (Brightman, 2016). Despite this claim, Mafia III still manages to touch on these different stories with commentary apt for the cyclical process of racist violence, injustice in the US legal system, and police authorities that further white supremacy in the US, something of which applies well to how cultural memory always is created in the present. As Blackman went on to say

Ultimately... if the game can make people think a little bit about race and remind them that Lincoln's experience in 1968 is very different than the experience most of us would have had, and it's similar maybe to some of the experiences some people of color have

today, then we've done our job because we've made people think about something that they're not used to thinking about certainly while playing a video game.» (Brightman 2016)

This relating the past to the present is echoed in the game's opening text, which states that the developers "felt that to not include this very real and shameful part of our past would have been offensive to the millions who faced -- and still face -- bigotry, discrimination, prejudice, and racism in all its forms" (my emphasis). The hosts Cicero Holmes and Kahlief Adams remark on this commemoration that it was a "powerful statement", but also "a preface for white people" (SpawnOnMe, 2016, sec. 01:03:35), as it is meant to highlight the game's similarities to current US white supremacy, something that might be obvious to US players of color, but perhaps not to those unaffected. These observations arguably indicate this opening text was intended for, i.e. those groups who are not exposed to contemporary forms of racist discrimination and for whom the developers felt it necessary to emphasize that racism still exists today. As such, these instances of relating the past to present injustices affirm the affective formation of prosthetic memory in *Mafia III* as not just a commentary about past injustices, but also contemporary ones.

Virtual Jim Crow

Moving from its memory politics, I now investigate how *Mafia III*'s racialized spaces invite prosthetic memory-making potentials in relation to power hierarchies. E.g. Clay's presence as a black man is highlighted throughout the game's virtual spaces. In a cutscene where Clay is introduced to the white Italian mafia at the crime boss Marcano's mansion, a white upper-class woman openly stares at him as he walks through the mansion. Later, another white woman clutches her purse while Clay walks past her. As the critic Shareef Jackson testifies in his analysis of the game: "I've been in those situations now, where if I go in certain offices or to a certain client, and I'm one of the few black people there, and I see this and I notice this and I have other people comment on it, so this is real, real stuff." (Shareef Jackson, 2016, sec. 16:10). Wiggins similarly tells that that "much like Lincoln Clay in New Bordeaux, I didn't feel uncomfortable in rich white areas because I didn't feel like I belonged or was wanted." (2016). As such, *Mafia III*'s narrative explicitly treats these racialized spatial dynamics between individual and white supremacy that in turn impact the affective formation of players' prosthetic memory.

In addition to this narrative representation, the game's mechanical system also simulates race relations via spatial and timed triggers. Depending on the racial make-up of the neighborhood players are in, pedestrians will yell racial slurs at Clay when players are near them (Wawro 2017). Similarly, each neighborhood's racial and class structure also determines how fast police authorities respond to a reported crime; in white affluent neighborhoods, police arrive much faster after characters witness Clay committing a crime than in poorer, black neighborhoods. Likewise, white characters are more likely to call the police if they notice Clay walking around in their vicinity. Here, racial power dynamics are coded into the game that changes states based on the relation between agent and

structure (Harrell 2013, p. 62). This narrative and mechanical representation of racialized spaces of *Mafia III* could aptly be called 'a virtual Jim Crow', 42.

This simulation also proves to be a refreshing subversion of other mainstream open-world action games, such as the *Grand Theft Auto* series. For instance, it is common in the genre to offer different shop-locations that sell commodities for the player to acquire, such as weapons, items, cars and food that replenishes the health of player-characters. *Mafia III* mimics this aspect similarly with markers on the 2D map showing shops the player can enter, but it subverts this convention via its virtual Jim Crow. Here, the shops in *Mafia III* with white owners follow the racial segregation laws and therefore exclude players from entering and procuring items. For instance, bars and restaurants will have a 'No Coloreds Allowed' sign in the storefront, and if players enter, the owners and patrons will verbally abuse Clay and call the police on him. Thus, if players expect a game that functions similarly to the conventional open-world action game, *Mafia III*'s subversion might elicit reflection on spatial access and genre conventions. In this way, the game disrupts the mainstream games industry's design reliance on a just and fair meritocracy (Nakamura 2017, pp. 247–8), where publishers otherwise usually let players believe in a fair and just system that awards players.

Through the lens of the prosthetic memory concept, it could therefore be argued that *Mafia III*'s simulation of white supremacy invites non-black players to form a mnemonic limb of an experience they have not lived. *Mafia III* exposes players to the audiovisual and virtual texture of everyday racism and more importantly, the institutional and structural forms of oppression based on one's identity (Murray 2017). Landsberg's concept might therefore leads us to the claim that the game as a mass-product could help foster empathy in non-black players, since such groups are taking part in events from the point of view of a marginalized group. Thus, the game's prosthetic memory as a mass medium might help such players understand the lethality of being a racialized minority and thereby foster an allegiance with the politics that strive to dismantle white supremacy.

The limits of empathy via mass media

Yet if a historical mass cultural medium merely offers an Aristotelian catharsis (Dickey 2015, p. 50) or a pleasure in the pain of others (Sontag, 2004), it is difficult to see political action and allegiance external to *Mafia III*. For instance, just because a white adult man like myself plays the game does not mean I commit to the political actions needed to rectify past and contemporary injustices towards black US citizens (Russworm 2017, p. 120). Thus, empathy via prosthetic memory needs to be properly considered and evaluated for its optimistic promises of recognition⁴³.

⁴² Similar dynamics can be seen in *Assassin's Creed: Liberation* (Ubisoft Sofia 2014) that stars a black female player-character in 18th century New Orleans. Cf. Murray (2017) for a thorough analysis of this game's identity-specific spaces across class, race, and gender.

⁴³ For example, based on her game *Dys4ia* (anthropy, 2012), a game dealing with gender transition, anna anthrophy argues that when a heteronormative cis-identity plays *Dys4ia*, it does not necessarily follow that the player knows what it means to transition from one gender to another. In response, anthropy created *the Road to Empathy* (2015) to criticize the illusion that when playing "a 10-minute game about being a transwoman, don't pat yourself on the back for feeling like you understand a marginalized experience." (D'Anastasio, 2015). In

It is here that bell hooks' concept of 'eating the Other' (1992, p. 21) sheds light on the power position of who is positioned towards who. She argues that oppressed groups are sometimes used in media for consumption by those with spending power. In such cases, marginalized identities are made exotic for dominant identities where the latter fetishizes and consumes the former without a worry or care for the implications of living like this, something that might well apply to Mafia III and unaffected audiences. The commodification of race allows certain groups to become an alternative playground and the tension is located between enabling empathy versus commodifying it. For example, Lisa Nakamura (1995) has analyzed the implications of identity tourism in online virtual worlds, where players of a dominant group adopt marginalized identities in various ways without any personal consequences, while more recently, Souvik Mukherjee (2017, 2018) analyzed the formation of colonizing and colonized players through a postcolonial lens. More broadly considered, within game studies, David Leonard (2004, p. 7) has classified what he terms as 'high-tech black-face' in games where upperclass white Americans adopt virtual lower-class Black bodies without worrying about the implications of what such a lived experience actually entails beyond the game itself, as Leonard (2016) later would go on to argue when he contrasts the recreational playing of Grand Theft Auto V (Rockstar North, 2013) to the Movement for Black Lives in Ferguson in 2013. Robbie Fordyce, Timothy Neale, and Tom Apperley (2016) further this topic in their analysis of *Everyday Racism* (All Together Now, 2015), a mobile game that simulates what it means to experience racism daily. Here, "avatars of colour enable socially progressive acts of empathy", but also as "available, fluid, and disposable" (Fordyce, Neale, & Apperley, 2016) for white players. I posit that such dynamics are relevant for understanding Mafia III where non-Black players might leisurely engage with it as merely an entertainment product divorced from the racialized experiences and history of U.S. racism. For example, in a guest lecture, Kishonna Gray argues that Mafia III allows for racial tourism in the sense that non-black players get to play as a black man in the 60s, but they "can leave [and are] just there recreationally" (2017, sec. 01:04:50). DePass reverses this observation when she writes that "we don't get to conveniently turn off our blackness as we try to go out and survive another day." (2016). At the same time, however, recall that critics such as Jackson, Moosa, Russworm, DePass, Wiggins and Cole explicitly professed their appreciation of the game's power fantasy against white supremacy. For the analysis of games, both the critical analysis of dominant audiences 'playing the Other' as well as marginalized players appropriating a game's meaning potentials to their own ends help highlight the tensions of who is playing, but also to who the game is designed for. Therefore, critical perspectives on both majority and minority players as the ones that I have included throughout help detangle the intricacies of who is consuming who or what with regards to the formation of a prosthetic memory through Mafia III.

Conclusions and future directions

Broadly considered, this article has affirmed the significance of analysis at both the level of production and reception, where the former tends to structure the substance and form of the latter (Mosco, 2009, p. 224). The inclusion of a variety of critical perspectives in the analysis of games can

fact, empathy via media has been and still appears to be a marketing point to advertise the next, new media product that technology industries try to sell, as seen with the contemporary virtual reality headsets and their creators' insistence on these machines' capability to create even more empathy (Kastrenakes, 2017). As Wendy HK Chun (2016) observes, every day the news displays images of societal injustices, refugees, and war, yet people are not driven to action. The point being that mass media does not necessarily lead to actual political action. Instead, as Robert Yang notes on his blog on empathy via virtual reality, "I don't want your empathy, I want justice!" (Yang, 2017)

aid as everyday research instruments to account for the multiplicity of meaning potentials that players activate and negotiate, while still paying attention to the broader political-economic background of the contemporary digital games industry that determine the type of hegemonic or counter-hegemonic experiences available to players. My analysis has shown that the concept of prosthetic memory can be used to highlight the memory-making potentials of historical digital games, but with reservations. Additionally, I have shown that digital games convey affective memory-making potentials that players appropriate for themselves as exemplified with Mafia III, where player contexts and contemporary power relations predispose what type of mnemonic limb is created. Here, the games industry's hegemony of violence and masculinity at the level of production tends to predispose the ways that players play with the past, yet this also offers instances of counterhegemonic commemorative play. Furthermore, the game's virtual Jim Crow simulates experiences that might be unfamiliar to those unaccustomed to structural and spatial oppression. In contrast, my analysis also complicated this relationship by highlighting who is forming this prosthetic memory and under which circumstances. Via critical-race and materialist approaches, I argued that mass culture can serve as pleasurable entertainment for hegemonic audiences via global production networks. With Mafia III, non-black players can dabble with simulated white supremacy in the game, yet still turn off the computer without those same worries and potentially without any immediate urge to act on behalf of others. Beyond the game itself, Reading's (2014) materialist approach to cultural memory shows that memory-making via contemporary digital technology relies on the exploitation of workers and the devastation of nature that in turn predispose the memory-making potentials within the medium in question. From the slave labor mining minerals in the Democratic Republic of Congo, to the exploited wage slaves in Chinese tech-factories assembling the media devices to consumers, to the precarious working conditions of software developers in North America and in cheaply outsourced countries like Malaysia and Vietnam, to the e-waste dumps in Nigeria and China, perhaps the question of empathy and political alliances via mass media come at a cost that many, including presumably Landsberg, probably would not be willing to pay. Digital games like Mafia III depend on these unequal global production networks between the exploited and the exploiter, and so too are they affected by their context of production. Thus, the question is if radicalism at the level of meaning in Mafia III ever can resist the exploitative and destructive effects of the imperialist capitalism producing the form. I.e. text (in all its forms) constrains audiences and is itself constrained by relations of production and cultural hegemony. These textual frames invite meaning potentials that are then actively negotiated by situated audiences.

Thus, both contexts of production and consumption should limit the radical potential mass media might hold for political alliances via prosthetic memory. In turn, it is crucial that we consider the power hierarchies of the social contexts in which memory-relevant media are produced, received and adopted. While we should not neglect the significance of counter-hegemonic media that are valuable in themselves (Shaw 2015a, p. 217), neither should we close our eyes to the exploitative system they derive from. Therefore, despite Landsberg's optimism towards mass cultural media and political alliances, it is not a given that mass cultural media fosters empathy in audiences. Yet it is also evident in the playful negotiations by players like DePass, Wiggins, Russworm, Cole, and many others, that historical games like *Mafia III* and their memory-making potentials highlight an important conduit and reflection for the systematic struggles that they inhabit, and others perpetuate. This is the tension that optimists and pessimists of mass culture need to be aware of, and in turn, consider materialist and

power-hierarchical approaches to their analysis of media in order to enable deeper understandings of their negotiated meaning-potentials.

References

- Aarseth, Espen, and Gordon Calleja. 2015. "The Word Game: The Ontology of An Undefinable Object." In *Proceedings of the 10th International Conference on the Foundations of Digital Games*, 1–8. Pacific Grove, CA, USA.
 - http://www.fdg2015.org/papers/fdg2015_paper_51.pdf.
- All Together Now. 2015. Everyday Racism. IOS, Android.
- Andersen, Carrie. 2015. "'There Has To Be More To It': Diegetic Violence and the Uncertainty of President Kennedy's Death." *Game Studies* 15 (2). http://gamestudies.org/1502/articles/andersen.
- anthropy, anna. 2012. Dys4ia. PC.
- ———. 2015. *The Road to Empathy*. https://www.arthaps.com/show/anna-anthropy-presents-the-road-to-empathy-1.
- Arnold-de Simine, Silke. 2013. *Mediating Memory in the Museum: Trauma, Empathy, Nostalgia*. Palgrave Macmillan Memory Studies. Basingstoke: Palgrave Macmillan.
- Berger, James. 2007. "Which Prosthetic? Mass Media, Narrative, Empathy, and Progressive Politics." *Rethinking History* 11 (4): 597–612. https://doi.org/10.1080/13642520701652152.
- Blackmon, Samantha. 2017. "Be Real Black For Me': Lincoln Clay and Luke Cage as the Heroes We Need." *CEA Critic* 79 (1): 97–109. https://doi.org/10.1353/cea.2017.0006.
- Brightman, James. 2016. "Mafia III Has 'Allowed Me as a White Developer to Make Connections with People of Color." GamesIndustry.Biz. May 12, 2016. http://www.gamesindustry.biz/articles/2016-12-05-mafia-iii-has-allowed-me-as-a-white-developer-to-make-connections-with-people-of-color.
- Bustillos, Maria. 2013. "On Video Games and Storytelling: An Interview with Tom Bissell." *The New Yorker*, March 19, 2013. https://www.newyorker.com/books/page-turner/on-video-games-and-storytelling-an-interview-with-tom-bissell.
- Chapman, Adam. 2012. "Privileging Form Over Content: Analysing Historical Videogames." Edited by Daniel Cohen, Joan Fragaszy Troyano, Sasha Hoffman, and Jeri Wieringa. *Journal of Digital Humanities* 1 (2): 42–46.
- ———. 2016. "It's Hard to Play in the Trenches: World War I, Collective Memory and Videogames." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/chapman.
- Chun, Wendy Hui Kyong. 2016. "Keynote." presented at the Weird Reality, Carnegie Mellon University, Pittsburgh, PA, October 6.
- Cole, Yussef. 2018. "White Supremacy, Black Liberation, and the Power Dynamics of Gun Violence." Waypoint. March 19, 2018. https://waypoint.vice.com/en_us/article/kzxevx/white-supremacy-black-liberation-and-the-power-dynamics-of-gun-violence.
- Conditt, Jessica. 2016. "The Historical Research behind the Biracial Antihero in 'Mafia III." Engadget. August 10, 2016. https://www.engadget.com/2016/08/10/mafia-iii-race-historical-accuracy-interview/.
- Connell, R. W., and James W. Messerschmidt. 2005. "Hegemonic Masculinity: Rethinking the Concept." *Gender & Society* 19 (6): 829–859. https://doi.org/10.1177/0891243205278639.
- Cooke, Laquana, and Gaines S. Hubbell. 2015. "Working Out Memory with a Medal of Honor Complex." *Game Studies* 15 (2). http://gamestudies.org/1502/articles/cookehubbell.
- D'Anastasio, Cecilia. 2015. "Why Video Games Can't Teach You Empathy." Motherboard. May 15, 2015. https://motherboard.vice.com/en_us/article/empathy-games-dont-exist.
- DePass, Tanya. 2016. "Ride or Die: Mafia III Review." *The Ontological Geek* (blog). November 6, 2016. http://ontologicalgeek.com/ride-or-die-mafia-iii-review/.
- Dickey, Michele D. 2015. *Aesthetics and Design for Game-Based Learning*. Digital Games and Learning. New York: Routledge.
- Dickinson, Greg, Carole Blair, and Brian L. Ott. 2010. *Places of Public Memory: The Rhetoric of Museums and Memorials*. University of Alabama Press.

- Dyer-Witheford, Nick, and Zena Sharman. 2005. "The Political Economy of Canada's Video and Computer Game Industry." *Canadian Journal of Communication* 30 (2). http://www.cjconline.ca/index.php/journal/article/view/1575.
- Erll, Astrid. 2011. Memory in Culture. Hampshire: Palgrave Macmillan UK.
- Ford, Dom. 2016. "EXplore, EXpand, EXploit, EXterminate': Affective Writing of Postcolonial History and Education in Civilization V." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/ford.
- Fordyce, Robbie, Timothy Neale, and Thomas H. Apperley. 2018. "Avatars: Addressing Racism and Racialised Address." In *Woke Gaming: Digital Challenges to Oppression and Social Injustice*, 231–51. Seattle: University of Washington Press. https://research.monash.edu/en/publications/avatars-addressing-racism-and-racialised-address.
- Fordyce, Robbie, Timothy Neale, and Tom Apperley. 2016. "Modelling Systemic Racism: Mobilising the Dynamics of Race and Games in Everyday Racism." *The Fibreculture Journal*, no. 27: Networked War/Conflict. https://doi.org/10.15307/fcj.27.199.2016.
- Fron, Janine, Tracy Fullerton, Jacquelyn Ford Morie, and Celia Pearce. 2007. "The Hegemony of Play." In *Situated Play*. Tokyo. http://ict.usc.edu/pubs/The%20Hegemony%20of%20Play.pdf.
- Fuchs, Christian. 2017. "Capitalism, Patriarchy, Slavery, and Racism in the Age of Digital Capitalism and Digital Labour." *Critical Sociology*, February, 0896920517691108. https://doi.org/10.1177/0896920517691108.
- Gould, Deborah. 2010. "On Affect and Protest." In *Political Emotions*, edited by Janet Staiger, Ann Cvetkovich, and Ann Reynolds, 1 edition, 18–44. New York: Routledge.
- Gray, Kishonna Leah. 2014. *Race, Gender, and Deviance in Xbox Live: Theoretical Perspectives from the Virtual Margins*. Waltham / Oxford: Elsevier.
- ———. 2017. "The Digital Story That Games Tell Buffoons, Goons, and Pixelated Minstrels." Maryland Institute for Technology in the Humanities, February 7. https://umd.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=4184a8f9-58fd-42a2-ae51-0be352dfae32.
- Gwaltney, Javy. 2016. "The Virtual Life Mafia III Is A Necessary Game." Game Informer. October 22, 2016. http://www.gameinformer.com/b/features/archive/2016/10/19/the-virtual-life-mafia-iii-is-a-necessary-game.aspx.
- Hamilton, Kirk. 2013. "Splinter Cell: Blacklist Won't Have Interactive Torture, But It'll Still Have 'Interrogations." Kotaku. January 30, 2013. https://kotaku.com/5980350/splinter-cell-blacklist-wont-have-interactive-torture-but-itll-still-have-interrogations.
- Hammar, Emil Lundedal. 2017. "Counter-Hegemonic Commemorative Play: Marginalized Pasts and the Politics of Memory in the Digital Game Assassin's Creed: Freedom Cry." *Rethinking History* 21 (3): 372–95. https://doi.org/10.1080/13642529.2016.1256622.
- ——. 2019. "Producing Play under Mnemonic Hegemony: The Political Economy of Memory Production in the Videogames Industry." Edited by Pablo Abend and Annika Richterich. *Digital Culture & Society* 5 (1): 61–83. https://doi.org/10.14361/dcs-2019-0105.
- Hammar, Emil Lundedal, and Jamie Woodcock. 2019. "The Political Economy of Wargames: The Production of History and Memory in Military Video Games." In *War Games Memory, Militarism and the Subject of Play*, edited by Holger Pötzsch and Phil Hammond, 72–99. Bloomsbury Academic.
- Hangar 13, and 2K Czech. 2016. Mafia III. PC. 2K Games.
- Harrell, D. Fox. 2013. *Phantasmal Media: An Approach to Imagination, Computation, and Expression*. MIT Press.
- Hartmann, Tilo. 2017. "The 'Moral Disengagement in Violent Videogames' Model." *Game Studies* 17 (2). http://gamestudies.org/1702/articles/hartmann.
- Hirsch, Marianne. 2012. *The Generation of Postmemory: Writing and Visual Culture after the Holocaust*. Columbia University Press.
- hooks, bell. 1992. Black Looks: Race and Representation. Boston: South End Press.
- Hunter, Margaret. 2007. "The Persistent Problem of Colorism: Skin Tone, Status, and Inequality." *Sociology Compass* 1 (1): 237–254.
- Kastrenakes, Jacob. 2017. "A Cartoon Mark Zuckerberg Toured Hurricane-Struck Puerto Rico in Virtual Reality." The Verge. October 9, 2017.

- https://www.theverge.com/2017/10/9/16450346/zuckerberg-facebook-spaces-puerto-rico-virtual-reality-hurricane.
- Kerr, Aphra. 2017. *Global Games: Production, Circulation and Policy in the Networked Era*. New York / London: Routledge.
- Koss, Juliet. 2006. "On the Limits of Empathy." The Art Bulletin 88 (1): 139–157.
- Landsberg, Alison. 2004. Prosthetic Memory: The Transformation of American Remembrance in the Age of Mass Culture. New York: Columbia University Press.
- ——. 2007. "Response." *Rethinking History* 11 (4): 627–29. https://doi.org/10.1080/13642520701652194.
- ———. 2015. Engaging the Past: Mass Culture and the Production of Historical Knowledge. New York: Columbia University Press.
- Leonard, David. 2004. "High Tech Blackface: Race, Sports, Video Games and Becoming the Other." Intelligent Agent 4 (4.2).
 - http://www.intelligentagent.com/archive/Vol4_No4_gaming_leonard.htm.
- ———. 2016. "Grand Theft Auto V: Post-Racial Fantasies and Ferguson Realities." In *The Intersectional Internet Race, Sex, Class, and Culture Online*, edited by Safiya Umoja Noble and Brendesha M. Tynes, 128–39. Digital Formations. New York: Peter Lang Publishing.
- ——. 2020. "Virtual Anti-Racism: Pleasure, Catharsis, and Hope in Mafia III and Watch Dogs 2." Humanity & Society 44 (1): 111–30. https://doi.org/10.1177/0160597619835863.
- Martin, Gareth. 2016. "The Purity of Revenge: Mafia III's Writer on Racism, History and Vengeance." Pastemagazine.Com. December 12, 2016. https://www.pastemagazine.com/articles/2016/12/mafia-iii-william-harms.html.
- Maxwell, Richard, Jon Raundalen, and Nina Lager Vestberg. 2014. *Media and the Ecological Crisis*. New York / London: Routledge.
- Mir, Rebecca, and Trevor Owens. 2013. "Modeling Indigenous Peoples: Unpacking Ideology in Sid Meier's Colonization." In *Playing with the Past: Digital Games and the Simulation of History*, edited by Matthew Kapell and Andrew B. R. Elliott, 91–106. New York / London: Bloomsbury Publishing USA.
- Moosa, Tauriq. 2016. "Mafia III Is Just a Game, but It Shines a Spotlight on the Reality of Racism." *The Guardian*, October 20, 2016, sec. Opinion. http://www.theguardian.com/commentisfree/2016/oct/20/mafia-iii-videogame-racism.
- Mosco, Vincent. 2009. *The Political Economy of Communication*. Second edition. London: Sage.
- Mukherjee, Souvik. 2017. Videogames and Postcolonialism: Empire Plays Back. London: Palgrave Macmillan.
- ———. 2018. "Playing Subaltern: Video Games and Postcolonialism." *Games and Culture* 13 (5): 504–20. https://doi.org/10.1177/1555412015627258.
- Murray, Soraya. 2017. "The Poetics of Form and the Politics of Identity in Assassin's Creed III: Liberation." Edited by Gabrielle Trépanier-Jobin. *Kinephanos Journal of Media Studies and Popular Culture*, Gender Issues in Video Games / Problématiques de genre dans les jeux vidéo, , no. Special Issue: 77–102.
- Nakamura, Lisa. 1995. "Race in/for Cyberspace: Identity Tourism and Racial Passing on the Internet." *Works and Days* 25 (26): 13.
- ———. 2017. "Afterword: Racism, Sexism, and Gaming's Cruel Optimism." In *Gaming Representation: Race, Gender, and Sexuality in Video Games*, edited by Jennifer Malkowski and TreaAndrea M. Russworm. Indiana University Press.
- Nieborg, David. 2011. "Triple-A: The Political Economy of the Blockbuster Video Game." PhD Thesis, University of Amsterdam. http://dare.uva.nl/search?arno.record.id=383251.
- Parkin, Simon. 2015. "Tomb Raider and the Clash between Story and Violence in Games." November 19, 2015.
 - $https://www.gamasutra.com/view/news/259613/Tomb_Raider_and_the_clash_between_story_and_violence_in_games.php.$
- Penabella, Miguel. 2016. "On the Margins of History." *Haywire Magazine*, November 27, 2016. http://www.haywiremag.com/columns/opened-world-on-the-margins-of-history/.
- Pötzsch, Holger. 2013. "Ubiquitous Absence." Nordicom Review 34 (1): 125–144.

- ———. 2017. "Selective Realism: Filtering Experiences of War and Violence in First- and Third-Person Shooters." *Games and Culture* 12 (2): 156–78. https://doi.org/10.1177/1555412015587802.
- Pötzsch, Holger, and Phil Hammond, eds. 2019. War Games Memory, Militarism and the Subject of Play. Bloomsbury Academic.
- Pötzsch, Holger, and Vít Šisler. 2019. "Playing Cultural Memory: Framing History in Call of Duty: Black Ops and Czechoslovakia 38-89: Assassination." *Games and Culture* 14 (1): 3–25. https://doi.org/10.1177/1555412016638603.
- Qiu, Jack Linchuan. 2017. *Goodbye ISlave: A Manifesto for Digital Abolition*. Champaigne, IL: University of Illinois Press.
- Reading, Anna. 2014. "Seeing Red: A Political Economy of Digital Memory." *Media, Culture & Society* 36 (6): 748–60. https://doi.org/10.1177/0163443714532980.
- ——. 2016. *Gender and Memory in the Globital Age*. Reprint edition. London: Palgrave Macmillan.
- Rigney, Ann. 2016. "Cultural Memory Studies Mediation, Narrative, and the Aesthetic." In *Routledge International Handbook of Memory Studies*, edited by Anna Lisa Tota and Trever Hagen, 65–76. New York: Routledge.
- Robertson, Adi. 2013. "Death Is Dead: How Modern Video Game Designers Killed Danger." The Verge. March 28, 2013. https://www.theverge.com/2013/3/28/4157502/death-is-dead-how-modern-video-game-designers-killed-danger.
- Rockstar North. 1997. ${\it Grand\ Theft\ Auto\ Series}.$ PC. Take Two Interactive.
- ——. 2013. *Grand Theft Auto V*.
- *Roots.* 1977. Biography, Drama, History, War. David L. Wolper Productions, Warner Bros. Television.
- Russworm, TreaAndrea M. 2016. *Blackness Is Burning: Civil Rights, Popular Culture, and the Problem of Recognition.* Wayne State University Press.
- ———. 2017. "Dystopian Blackness and the Limits of Racial Empathy in The Walking Dead and The Last of Us." In *Gaming Representation: Race, Gender, and Sexuality in Video Games*, edited by Jennifer Malkowski and TreaAndrea M. Russworm, 109–28. Indiana University Press.
- Salazar-Moreno, Quibian. 2016. "You Can Shoot up a Ku Klux Klan Rally in Mafia III." September 29, 2016. https://www.gamecrate.com/you-can-shoot-ku-klux-klan-rally-mafia-iii/14664.
- Shareef Jackson. 2016. #GLG25: Diversity in #Mafia3 Pt1: Prologue #GamingLooksGood. https://www.youtube.com/watch?v=DjYy2KarlrA.
- Shaw, Adrienne. 2015a. *Gaming at the Edge: Sexuality and Gender at the Margins of Gamer Culture*. Minneapolis: University of Minnesota Press.
- ———. 2015b. "The Tyranny of Realism: Historical Accuracy and Politics of Representation in Assassin's Creed III." *Loading...* 9 (14). http://journals.sfu.ca/loading/index.php/loading/article/view/157.
- Singleton, John. 1997. *Rosewood*. Action, Drama, History. Warner Bros., Peters Entertainment, New Deal Productions.
- Smale, Stephanie de. 2019. "Ludic Memory Networks: Following Translations and Circulations of War Memory in Digital Popular Culture." PhD Thesis, University Utrecht.
- Smethurst, Toby, and Stef Craps. 2014. "Playing with Trauma Interreactivity, Empathy, and Complicity in The Walking Dead Video Game." *Games and Culture*, 1555412014559306.
- Sobchack, Vivian. 1992. *The Address of the Eye: A Phenomenology of Film Experience*. Princeton University Press.
- Sontag, Susan. 2004. *Regarding the Pain of Others*. New Ed edition. London New York Victoria: Penguin.
- SpawnOnMe. 2016. "Spawn On Me MAFIA 3 Special, Part 1: The Panel of All Panels." http://spawnon.me/spawn-mafia-3-special-part-1-panel-panels/ or http://esn.fm/spawnonme/s2.
- Srauy, Sam. 2019. "Professional Norms and Race in the North American Video Game Industry." *Games and Culture* 14 (5): 478–97. https://doi.org/10.1177/1555412017708936.

- Sterczewski, Piotr. 2016. "This Uprising of Mine: Game Conventions, Cultural Memory and Civilian Experience of War in Polish Games." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/sterczewski.
- Tsukayama, Hayley. 2016. "'Mafia III' Took a Risk by Choosing a Black Protagonist, and It Has Really Paid Off." *Washington Post*, November 2, 2016, sec. The Switch. https://www.washingtonpost.com/news/the-switch/wp/2016/11/02/mafia-iii-took-a-risk-by-choosing-a-black-protagonist-but-its-really-paid-off/.
- Tybjerg, Casper. 2016. "Refusing the Reality Pill: A Film Studies Perspective on Prosthetic Memory." *Kosmorama*, no. 262. https://www.kosmorama.org/en/kosmorama/artikler/refusing-reality-pill-film-studies-perspective-prosthetic-memory.
- Ubisoft Québec. 2013. Assassin's Creed: Freedom Cry. PC. Ubisoft, Inc.
- Ubisoft Sofia. 2014. Assassin's Creed: Liberation (version HD). PC. Ubisoft, Inc.
- Uricchio, William. 2005. "Simulation, History, and Computer Games." In *Handbook of Computer Game Studies*, edited by Joost Raessens and Jeffrey Goldstein, 327–338. Cambridge, Mass.; London: MIT Press.
- Wawro, Alex. 2017. "Writing Mafia 3: "We Had a Lot of Very Uncomfortable Conversations." February 28, 2017. https://www.gamasutra.com/view/news/292663/Writing_Mafia_3_We_had_a_lot_of_very_un comfortable_conversations.php.
- Wiggins, Terrence. 2016. "Mafia III: Catharsis Through Extreme Violence." *Paste Magazine*, October 17, 2016. https://www.pastemagazine.com/articles/2016/10/mafia-iii-catharsis-through-extreme-violence.html.
- Wilde, Poppy, and Adrienne Evans. 2019. "Empathy at Play: Embodying Posthuman Subjectivities in Gaming." *Convergence* 25 (5–6): 791–806. https://doi.org/10.1177/1354856517709987.
- Wildt, Lars de, Thomas H. Apperley, Justin Clemens, Robbie Fordyce, and Souvik Mukherjee. 2019. "(Re-)Orienting the Video Game Avatar." *Games and Culture*, July, 1555412019858890. https://doi.org/10.1177/1555412019858890.
- Wildt, Lars de, and Stef Aupers. 2019. "Playing the Other: Role-Playing Religion in Videogames." *European Journal of Cultural Studies* 22 (5–6): 867–84. https://doi.org/10.1177/1367549418790454.
- Williams, Dmitri, Nicole Martins, Mia Consalvo, and James D. Ivory. 2009. "The Virtual Census: Representations of Gender, Race and Age in Video Games." *New Media & Society* 11 (5): 815–34. https://doi.org/10.1177/1461444809105354.
- Wright, Esther. 2018. "On the Promotional Context of Historical Video Games." *Rethinking History* 22 (4): 598–608. https://doi.org/10.1080/13642529.2018.1507910.
- Yang, Robert. 2017. "'If You Walk in Someone Else's Shoes, Then You've Taken Their Shoes': Empathy Machines as Appropriation Machines." June 23, 2017. https://www.blog.radiator.debacle.us/2017/04/if-you-walk-in-someone-elses-shoes-then.html.

Article 3: Producing Play under Mnemonic Hegemony: The Political Economy of Memory Production in the Games Industry

Hammar, Emil Lundedal. 2019. "Producing Play under Mnemonic Hegemony: The Political Economy of Memory Production in the Videogames Industry." Edited by Pablo Abend and Annika Richterich. *Digital Culture & Society*, 5(1), pp. 61-83.

Abstract

Following the materialist approaches to contemporary digital memory-making, this article explores how unequal access to memory production in digital games is determined along economic and cultural lines. Based on semi-structured qualitative interviews with different European, Asian and North American historical game developers, I make the case for how materialist and cultural aspects of digital game development reinforce existing mnemonic hegemony and in turn how this mnemonic hegemony determines access to the production of memory-making potentials that players of digital games activate and negotiate. My interview findings illustrate how individual workers do not necessarily intend to reproduce received systems of power and hegemony, and instead how certain cultural and material relations tacitly motivate and/or marginalise workers in the digital game industries to reproduce hegemonic power relations in cultural memory across race, class and gender. Finally, I develop the argument that access to cultural production networks such as the games industry constitutes important factors that need to be taken seriously in research on cultural memory and game studies. Thus, my article investigates global power relationships, political economy, colonial legacies and cultural hegemony within the digital game industry, and how these are instantiated in individual instances of game developers.

Introduction

_

The production of modern historical digital games requires tens if not hundreds millions of dollars in investment that in turn motivate digital game producers to resort to dominant visions of the past (Hammar 2017b). With the more unique example of *Battlefield V* (DICE 2018), a historical digital game set during World War II, the Swedish developer DICE and their multinational publisher EA chose to feature what they marketed as "The Untold Tales of WWII," where players fight, for example, as a North-Norwegian resistance female soldier and the French-colonised Senegalese Tirailleur. Somehow, these "untold tales" prompted a sizeable contingent of digital game consumers to react with disdain and venom (Farokhmanesh 2018), in this case towards the audiovisual presence of a female soldier that the collective remembering of WWII does not usually feature. In return, the developers of *Battlefield V* had to publically address this organised opposition in order to quell this conflict over cultural memory. This example and comparable cases⁴⁴ indicate how different stakeholders produce and contest the remembrance of the past in popular culture across the divide between production, distribution and consumption. In turn, the producers of culture, such as digital

⁴⁴ We find similar controversies surrounding remembrances of the past in popular culture such as film – from the commodification of the Holocaust in *Schindler's List* to the glorification of the US army in *Saving Private Ryan* to the white-saviour-complex in the Danish colonial film *Guldkysten* to the Norwegian trauma in the film adaptation of *July 22*. The contestations over what appears to be naturalised mythologies of collective memory are clearly important and evident.

game developers, partly decide how the past should be represented in their cultural product depending on a number of structural factors, such as working conditions, financial risk, player feedback and internal power hierarchies. As such, I very much follow Anna Reading's observation that "a political economy of memory and digital memory" (2014: 750) is needed. Here, the field of cultural memory studies has considered how media as texts carry certain memory-making potentials that individuals and collectives activate and negotiate (Erll 2011: 9; Rigney 2016: 69). Among these artefacts of remembering, historical digital games have gained cultural and commercial prominence, enabling consumers of differing ages to play with the past (Kapell & Elliott 2013; Chapman 2016: 49). These games allow those consumers who have access to digital technologies such as mobile phones, personal computers or dedicated game consoles to execute software that enables them to play with audiovisual representations of the past, which are structured by the game's mechanical system on the level of code (Bogost 2007; Aarseth & Calleja 2015)⁴⁵. This process of playing with the past is therefore possible due to what Chapman (2012) refers to as "the particular audio-visual-ludic structures of the game" that "produce meaning and allow the player to playfully explore/configure discourses about the past" (42). These historical games are naturally wedded to the activity of play, which allows people to participate in and create culture (Henricks 2006), and thereby enable a negotiation and contestation in collective memory discourses as the example of *Battlefield V* above highlights. In that sense, historical games not only allow people to play with the past, but also inform broader collective memory discourses in which players affirm or contest the ways they remember the past. It is thus of crucial importance to understand how these games come about and are circulated in a global consumer industry, since, as Aphra Kerr (2017) writes,

The commodification of games and play is an example of how capitalism expands into all areas of everyday life and changes things that we do and use into things which we exchange for money. Since the early 1970s the digital games industry has explored ways to commodify children's game and play time, and is increasingly a part of adult leisure too. It has developed links with existing cultural industries and practices as well as developing new ones. (29)

Digital games are designed objects that encourage play (Sicart 2014), and they are by and large commodified and encoded by the cultural producers in the games industry, where large networks of production with different actors situated in their own material and ideological context determine how sign and system are meant to be played with. Inspired by Stuart Hall's Encoding/Decoding (1973) model, I conducted semi-structured qualitative interviews with historical digital game in order to ascertain how these cultural mnemonic objects are encoded with meaning potentials, i.e. created using the technology available, the discourses that inform the game and the relations of production and consumption. In turn, players decode, i.e. interpret, within the context of discourses, technologies and

=

⁴⁵ On a semiotic level, meaning-making potentials via games thereby operate on two levels – the signifying level of audiovisual representation and the system level of mechanics and rules executed by the procedural nature of digital games as software (Shaw, 2017). By combining audiovisual representation with ludic elements, they enable players to activate their agency in the context of past settings (Uricchio, 2005; Pötzsch and Šisler, 2016). For example, the digital game *Assassin's Creed: Freedom Cry* (Ubisoft Québec 2013) situates players in eighteenth-century Caribbean to fight French colonial power as the black ex-slave Adewalè (Hammar 2017a); and the famous *Civilization* (MPS Labs, 1991–) series (Uricchio 2005: 328; Galloway 2006; Carr 2007; Ford 2016) enables players to play with a "conceptual simulation" of history (Chapman 2016: 69f).

relations of production and consumption. As such, this article focuses on the hegemonic memory-making in historical digital games by investigating multiple levels in the form of production, distribution and consumption. I pay special attention to digital game-related problems of memory-making against these levels in relation to the divide between production and reception. I then provide interview data as additional supporting material in the discussion and an indication for further interview-based work. First, I first look to the knowledge established in the political economy of communication to qualify the approach of my qualitative study of historical game developers.

The Political Economy of Digital games

Vincent Mosco (2009) defines the political economy of communication as "the study of the social relations, particularly the power relations, that mutually constitute the production, distribution, and consumption of resources, including communication resources" (2). Such an approach helps uncover the power hierarchies in the production of media, including digital games, which in turn partly determine the meaning potentials that audiences or players activate and negotiate. This focus on power hierarches of media was addressed by Horkheimer and Adorno (2002: 94f) as the so-called "culture industry," where mass culture's domination and "sameness" derives from its economic production logic – i.e. that mass culture is homogenised by factory-like commodification and its purpose of generating profits. Hall (1986) similarly wrote that ownership and control of media is sufficiently important that it "gives the whole machinery of representation its fundamental orientation in the valuesystem of property and profit" (11). As such, if games and play are subservient to contemporary power hierarchies as indicated in Kerr's quote above, it is pertinent to pinpoint how they motivate producers towards the encoding of particular meaning potentials. This serves as my primary motivation for conducting interviews with producers of historical games as to how they navigate and reflect on their encoding of cultural memory within said games. The upshot of these observations is in my view not to posit an entirely deterministic relationship between production and meaning, but "to map the limits within which the production of mediated culture can operate" (Golding & Murdock 1979: 226–227). It is for these reasons that I find it important to explore the explicit and implicit reasons for why historical game development "factories" (as one informant put it) end up reproducing the ongoing rearticulation of hegemonic visions of the past. Questions such as why does the historical setting have to be in Europe or the United States? Why does the protagonist have to be white, male and Anglophone? Why is the primary engagement with the gameworld through violence and domination of others? And why does such a hegemony of perspectives manifest itself repeatedly? Or in the words of Hall (1992): "the problem about the mass media is that old movies keep being made" (10).

These initial questions underscore the importance of exploring digital game production and its resulting reproduction of mnemonic hegemony. Molden defines this as "access to and control over the means of communication and diffusion of historical narratives are of utmost importance for the establishment and maintenance of mnemonic hegemony" (2016: 134). I argue that the political economy of digital games potentially leads to unequal forms of memory-making that, in this case, players negotiate and activate differently (Apperley 2010). Joanne Garde-Hansen (2011) states that:

powerful media and cultural institutions whose business it is to record, archive and make accessible the everyday life, major events and social and cultural heritage of nations and communities, invariably write those narratives in ways that glorify not only themselves but the cultural hegemony of the societies they serve. (50)

As such, I mainly stress the importance of a political economy of historical digital game production, and, in turn, I highlight a potential research area of interest to media scholars alike to "situate these readings within the specific power geometry or map of power identified by the coordinates of commodification, spatialization, and structuration" (Mosco 2009: 225).

Player Negotiations

However, I do feel the need to address the often-mentioned objection against the top-down approach of political economy also seen in my choice to only interview digital game producers. This relates to player negotiations, "consumption" or the aforementioned "decoding" (Hall 1973). Chapman writes that "the player is both narrator and audience. In historical games, *doing* also means writing. [...] Players [...] configure the story space and produce particular narratives" (2016: 34, his emphasis). Mukherjee (2017) takes this point of player negotiations further by arguing that previous research on historical digital games fail

[...] to consider the millions of players from the Indian subcontinent, Africa, and the Middle East for whom these empire-building games actually provide a more direct experience of engaging with their colonial history. These games' portrayal of the colonies is often simplistic and contains inaccuracies that are immediately obvious to players from these regions. (5)

As such, the point of who is activating and negotiating the encoded memory-making potentials of historical digital games is a crucial one if we are to identify the limits of production on the level of meaning. Mukherjee's point serves well to illustrate how meaning depends on the positionality of audiences. Stephanie Boluk's and Patrick LeMieux's work on "Metagaming" (2017) provides insight into the many ways that "diverse practices and material discontinuities that emerge between the human experience of playing digital games and their nonhuman operations" (4) independent from the game developer's intention. Kristine Jørgensen (2012) has similarly proposed the importance of player studies that help capture the full range of meaning potentials of games that other previous approaches (Aarseth 2014) arguably fall short of. These questions are not necessarily new, where for example literary studies have extensively debated and covered the question of author intentionality contrasted with reader responses (cf. Mitchell 2008).

In turn, this emphasis on reception does not mean an infinite multiplicity of interpretations exist, which would negate the limited meaning potentials of historical digital games. As Mosco argues, a political economy of communication on one hand does concern itself or at the very least acknowledge the multiplicity of interpretations by audiences. He writes, "As Murray (2004) has demonstrated in her research on fan cultures, audience resistance is inscribed within limits established by the media industries" (2009: 224). Elsewhere, Kevin Schut (2007) uses the metaphor of a steep slope to illustrate how players often follow the bias in media: "many, if not most, will take the path of least resistance and go with the slope—and even if they do not, it will take extra effort to climb. [...] Media [...] have biases that encourage certain kinds of uses or certain kinds of interpretations" (218). It is thus wise to consider to what extent players of historical games regardless of their positionality are similarly

confined within the encoded frames (Shaw 2017)⁴⁶. It is precisely also through the nature of digital games as software code that questions of algorithms, structure and platforms intrude themselves on matters of agency and active users (Nieborg & Poell 2018) – and vice versa (cf. Apperley 2010: 132). As Mosco (2009) goes on to state regarding the relation between production and form in the political economy of communication:

Media power, which gives those with control over markets the ability to fill screens with material embodying their interests, tends to structure the substance and form of polysemy, thereby limiting the diversity of interpretations to certain repeated central tendencies that stand out among the range of possibilities, including those marginalized few that diverge substantially from the norm. (224)

Bridging Production and Reception as "Memory-Making Potentials"

In order to bridge the questions posed by both political economy and reception studies and thereby qualify the importance of my interviews, I propose the following: text (in all its forms) constrains audiences and is itself constrained by relations of production and cultural hegemony. These textual frames invite meaning potentials that are then actively negotiated – if not subverted⁴⁷ – by situated audiences. These meaning potentials in digital games can, I argue, to many extents be traced back to the context in which they are produced. Thus, my primary motivation in this article revolves around the significance of these contexts of memory production and their materialist underpinnings in order to predispose what memory-making potentials are offered to players to activate and negotiate. Below, I briefly review the political-economic conditions that structure contemporary digital game production as a backdrop to my interview findings.

How Political Economy Predispose Games' Memory-Making Potentials

Digital games as a mass cultural form are structured by the unequal power hierarchies of the societies they are produced in. From the slave labour of mining minerals in the Democratic Republic of Congo (Sinclair 2015, 2016, 2017; Valentine 2018), to the exploited wage slaves in Chinese tech-factories assembling the media devices (Fuchs 2017; Qiu 2017), to the precarious working conditions of software developers in North America and Europe (Consalvo 2008; Williams 2013; O'Donnell 2014; Woodcock 2016) and cheaply outsourced countries like Malaysia and Vietnam (Thomsen 2018), to the e-waste dumps in Nigeria and China (Maxwell, Raundalen, & Vestberg 2014; Nguyen 2017), the materialist aspects of game production follows contemporary global capitalist production networks that exploit the environments and workers in the periphery, while circulating capital toward the economic centre. It is from here, the centre of power located within this global network, that "a one-way flow of culture and information from centre to periphery" (Mosco 2009: 73) is enacted. Thus, in exercising power over cultural memory, the decision-makers are primarily white, male, heterosexual in their 20s to 30s (Edwards, Weststar, & Meloni 2014; Weststar & Legault 2015), with most major companies operating from United States, Canada and Western Europe (Kerr 2017). Across a general overview of the game industry, developer statements indicate that they rely on hegemonic articulations

⁴⁶ Chapman offers the term "(hi)story-play-spaces" to account for this tension between both the producer and the player in the formulation of historical narratives via digital games (2016: 34).

⁴⁷Tom Apperley defines this relation between production and play as *resonance* (Apperley 2010: 134) where the *global* game with its mass-produced meaning potentials is adopted in the *local*, i.e. the cultural, social and geographical context in which players play.

of race (Young 2016; Srauy 2017), gender (Johnson 2013) and a "one-dimensionality of creativity" due to profit maximisation (Bulut 2018). Not only does the game industry cultivate a mutually beneficial relationship to the US military industrial complex (Dyer-Witheford & De Peuter 2009; Allen 2017) and gun manufacturers (Parkin 2013), but it also has adopted the "platformisation of culture" (Nieborg & Poell 2018) to capture and increase power over the cultural landscape that players as consumers operate in (Joseph 2017, 2018).

When access to game development largely follows what Patricia Hill Collins terms as the matrix of domination (2002: 221–238), and if the economic structures of game development cultivate certain playful visions of the past, then it is pertinent to ask what possible mnemonic objects of play are made available to those who appropriate them. I claim that this context of production surfaces in the meaning potentials of historical games as well as evidenced in my interviews. Although no quantitative study has to my knowledge been published on the dominant forms of memory-making in games, this genre of digital games relies on colonial logics with Eurocentric visions in both their narratives, gameworlds and mechanical systems (Mukherjee & Hammar 2018). Historical digital games, according to Sybille Lammes, "all share a strong fascination with colonial history, including its militaristic, economic and technoscientific dimensions. Through employing colonial techniques of domination like exploring, trading, map-making and military manoeuvring, players create their personal colonial pasts and futures" (2010: 2). For example, in reiterating Michel Foucault's power analysis of the archive, Adrienne Shaw (2015) argues that historical games similarly rely on conventional understandings of history, especially with an emphasis on the so-called authenticity of the material cultures of history (Köstlbauer 2013; Salvati & Bullinger 2013), which in turn is mostly predicated on what sells (Copplestone 2017). Indeed, Adam Chapman, Foka, & Westin (2018) write that:

As have been shown on numerous occasions [...], the representations we are creating of the past often follows [sic] well established conventions that are outdated, homogenous, and highly problematic, and may feed into contemporary political conflict. (283)

Previous contestations over hegemony in game culture bring to the surface the overriding logic that predisposes the meaning potentials of a game and its surrounding discourse. The representation of women in games is perhaps the most common phenomenon, where player-grassroots and feminist organisations push for more and better representation of women, yet are met with dismissals by the industry and harassment by reactionary male consumers. Whether it is the exploitative or erasing marketing of marginalised groups in games (Smith et al. 2005; Dietrich 2013; Kirkpatrick 2017), or the unwillingness to fund projects featuring these groups as protagonists (Kuchera 2012), or the industry's silence and implicit support of reactionary hate movements (Massanari 2017; Salter 2017; Keogh 2018), most rationalisations in the industry seem to derive from heteropatriarchal, white supremacist, colonialist and capitalist logics. As a consequence, on the level of text, female characters are erased from the marketing; protagonists of colour will not get funding by game publishers; women protagonists are changed into male protagonists at the request of game publishers; historical narratives featuring under-represented groups are met with organised consumer backlash as being "historically inaccurate" (Farokhmanesh 2018) and studies show that male-identifying players do not care about women protagonists in games (Yee 2017). In sum, there are plenty of examples of cultural struggles and contestations within current hegemony, which provide insight into an otherwise hermetically sealed industry. Here, matters of race, ethnicity, gender, sexuality, language and class intersect in the

maintenance and reproduction of a cultural and economic domination by those in power positions of the game industry (Fron, Fullerton, Morie & Pearce, 2007). Given this political economy of digital games and the qualified relation between production and form, I now move to outlining my interviews and the data gathered from them.

Methodology

In the period between May 2015 and June 2017, I conducted a series of semi-structured qualitative interviews (May 2011: 123; Brinkmann 2014) with nine game industry professionals out of 35 requests for interviews. The two women and seven men hailed from Norway, Denmark, Portugal, Scotland, Canada, USA and Taiwan and were between 21 and 48 years of age. The selection process was incredibly broad where anyone affiliated with the development of a historical digital game was considered acceptable for interview. The majority of my informants worked in mid-sized companies and ranged from student to lead game designer, to lead writer, to project lead, to CEO of the entire company in question. Interviews were conducted and recorded via Microsoft's Skype with the consent of the informants. The data were stored locally, with only myself treating and analyzing the data in compliance with the Norwegian Center for Data Research's (NSD) formal approval. After data collection, I transcribed and anonymized the interviews and coded the data into key statements. This relatively low number of informants, coupled with the broad range of age, job position, gender distribution and geographical bias, make the dataset less reliable and generalizable. Instead, the dataset allows for a preliminary direction of analysis, which is reflected through what I map out as four identified "themes." (May 2011: 150). These themes are self-reflections that motivated my respondents to reflect on their own position in society and history when producing cultural memory via digital games; mnemonic reinforcements and contestations, a theme that draw out the ways that my respondents engaged with the memory politics of their cultural expressions; techno-ludic constraints, which shows the material and cultural perception of digital games and how this limits cultural memory and finally economic axioms, which highlights the materialist conditions of game production. These themes help structure my data analysis to draw out overarching tendencies in the responses and how they relate to the memory-making potentials that my respondents encode into their products.

My data gathering has a series of weaknesses: low response rates, an emphasis on European and North American respondents and most of all the non-disclosure agreements that encouraged potential informants to decline being interviewed. The latter refers to the contracts that workers in the game industry often sign when hired, which serve as a legal gag-mouth to prevent internal knowledge, capital and controversy to leak out to the public. This results in an opaque, impenetrable wall of higher-budget studios, which is an often encountered and researched phenomenon for previous researchers (O'Donnell 2014; Woodcock 2016; Srauy 2017). For the consented informants, I also inquired about other people who might be relevant for my research, but most people did not send me further connections, possibly due to fear of getting identified or simply because time is precious for those precariously developing commercial games.

My own position as both a critical enthusiast of digital games and as a white, male academic meant that the white male informants I met possibly felt more comfortable with me by virtue of my identity, thereby revealing more uncomfortable statements to me. However, my previous critical work on the production of racial, gendered and economic power in digital games did not prove to be a hindrance, as far as I have gathered, since all of them were self-admittedly unfamiliar with my research project

and my background before the interviews. I now proceed to outline the findings according to each theme.

Findings

Theme 1 - Self-Reflections

At the end of each interview, I explicitly asked the informants to reflect on their own position in society as cultural producers. I wanted them to tease out their thoughts on the status of their own games on memory and society, with an emphasis on the political and ethical nature of memory, games and play. Only Tumelo gave the motivation reason for making their particular game set in Taiwan: "Why can't I find any game out there that could represent our culture and share with the world the place I grow up in?" Moreover, for their non-English game, Tumelo stressed that "localization is essential.", because they did not just want to make a game for themselves and the people in their country, but "in order to let the world know about our culture, we have to publish our game worldwide. […] To break the barrier, we tried to seek for a message that's universal for everyone."

Most other informants unfortunately had not given much thought to it. Farai simply stated that "it's really rewarding to be able to develop something and then see others have fun playing it." Keaton found that "political correctness" and "self-censorship" had run amok when political topics are treated in games, so they found it difficult to include sensitive historical traumas in their productions. Alternatively, Doron happily welcomed whatever controversy if it would lead to more sales of their historical game. In that sense, they did not appear to be actively conscious about their situatedness within the already hegemonic mass culture. If they received criticisms stemming from how their games were distributed and consumed in society, they mostly were hesitant or nervous. However, this lack of awareness was nuanced by their statements on how they viewed history and memory as seen in the subsequent theme.

Theme 2 – Mnemonic Reinforcements and Contestations

The theme of reinforcement and contestations over memory illustrate on one hand the sources the informants relied on and how they encoded their understandings of history to a digital game, while on the other, it also shows how each informant positioned themselves in relation to contemporary mnemonic hegemony. Most sources did not approach sources in a critical way; they simply consulted online articles on Wikipedia or at their local libraries, save for those few who were critical of typical historical sources. Informant Doron revealed that they used the Hollywood film *Apocalypto* as a "good source of inspiration for that period and that setting, in order to get the South American culture right." Gili stated that their experience working in big-budget productions meant that people "will have seen a lot of science fiction and action movies, so [their] references [...] are very pertinent and always on the forefront, [...] anything you want to do has to be able to work with those people who only have those references to make them see beyond [...]an action movie.." This reliance on broader cultural memories within game production teams indicates the influence of even fictional historical narratives. Taking a different stance to historical sources, Tumelo stated that since they "are not scholars nor historians, we simply felt that it wouldn't be right to discuss the history and facts from our own narrow perspective." In their specific production, Tumelo said that the team members had "many personal stories about [the historical trauma] from our grandparents. We knew that the trauma was real," thereby echoing the mnemonic trauma between generations according to Marianne Hirsch's concept of postmemory (2012), but they still relied on "old footage, newspaper, articles" as well as folklore, fiction literature and film as inspiration for the historical setting.

Here, Gili also took an active stand about listening to those in the margins rather than "stuffy historical sources" as they put it. They saw their "role within the team to find what's uncomfortable in history and raise the question and push for its representation [...] and decolonization." Keaton revealed that the often-mentioned refrain of using "historians" for a game project was mostly about consultancy in reference to dates, while Gili claimed that historians were mostly used as a point to market their multimillion product. Just as well, creative licenses seemed to be the modus operandi when it came to depicting history – each informant revealed that the importance was engagement and creativity to entice players rather than so-called "historical authenticity" – in the end, as Keaton put it, "it is us who decide [on what is important to depict], but not usually the historians.". This is in line with Copplestone's (2017: 430) research that corroborates developer's prioritisation of "fun" and "sales" over cultural heritage.

Two of the student informants stated that they approached history as a means to counter mnemonic hegemony – i.e. going against a dominant historical narrative of a former slave nation where the informants revealed that they never learned about colonial history in school so their games were challenges to such collective memory writing. Two of the small-scale informants stated that they also saw their memory products as a way for people to reflect on their own position today via a historical narrative. As Farai said, "So I really wanted to kind of get onto the project more and more about it and hopefully deliver something that would educate other people about the sugar trade in Scotland," a history that they did not recall being taught about in school or via popular culture. Chi made similar remarks about their upbringing, where "I was not told that Portugal was the country that pioneered the transatlantic slave trade [...] We do not talk about the crimes in our collective past; what is taught is how Portugal was great, a glorious country, because it 'found' this or that country before all other Europeans, and because it held the first overseas empire in history." In contrast to Farai's and Chi's active stance towards collective memory discourses, Merrik revealed that their team remained "relatively as neutral as possible regarding the reason for [the U.S. civil war]. Our goal is to depict how it is to be a soldier in the 1860s and not politics."

Meanwhile, the rest of the informants simply used history as a way to stand out in the marketplace or where dominant tales of colonialism is seen as "the potential for exploration and discovery." as Doron put it. They further stated that "the whole European discovery of America is one of the most central journeys of discovery ever [...]. Those are some of the first things you think about when you're talking about history and tales of exploration." Doron saw this rarely seen historical setting as "something that stood out in the market/industry, something that could have an identity that clearly separated itself from other games." Here, Doron views colonial history both as a white-washed tale of exploration and discovery and as a way to stand out in the marketplace. Conversely, Chi stated that "[...] part of the reason was I just wanted to make something different.[...] I mean digital game landscape in terms of representation is very uniform. It's always about like an angry Anglo-Saxon dudes." As such, there appears to be differing motivations for producing counter-hegemonic memory.

Theme 3 - Technoludic Constraints

The respondents also revealed some of the particularities with developing games. For instance, Farah stated that the development method of white-boxing meant that signifying elements such as narrative, characters, objects, etc. were secondary to the actual playtesting of the game design that they had in mind for their historical game project.

This crude way of testing out game design also speaks to the incredibly complicated nature of game development that require lots of highly skilled labour in order to produce polished play experiences. Chi stated that "the very nature of the kind makes it difficult to do something highly polished and commercially viable." Developing digital games is an incredibly complex process with multiple pressures on what priorities to make, that most of the informants found it very difficult to make something up to expected standards – as Keaton put it, "it is highly limited what historical points we want to convey" given "the bandwidth and complexity" at their studio. From animating objects and characters, to creating art assets, to establishing the game design, to programming, to placing sound triggers in the environment, to creating the actual sounds, and to make it all come together for players to find it an engaging experience that they want to play with. As such, the amount of work required to make games and the required economics speak to how the informants found making games challenging, complex and costly. To make their historical games believable for their audiences, Merrick stated that it "requires many, many resources and time in order to get right." Doron added that access to hardware and software makes the work they have put into the game difficult or inaccessible to be widely played among consumers. Thus, there is a double bind of having complex software being constructed via highly skilled labor contrasted with the relative privilege or inaccessibility of this software via the hardware platforms that only a select few have access to.

In the same sense regarding the nature of game development, many informants revealed their own inclinations to why they thought games were important for history and memory. Several of the informants reiterated the notion that "games are unique" and their "interactivity" allows players to experience history differently and "better" with "reactive stories." Just as well, the common refrain of historical games as gateways for an interest into learning more about "history" ("if you wanted to you could really go and learn a lot more about the subject" as Farai stated). Tumelo mentioned that

since [historical period] is seldom mentioned in the history textbook nor emphasized in the educational system, young generation nowadays isn't quite familiar with this part of history. After the game came out, [it] somehow provided them a channel to learn more about the past incident they were unaware of before. Some players even became intrigued and did their own research about [it]

While the uniqueness of digital games has been criticised by several scholars, the informants' perspectives nevertheless reveal their own justifications and value-systems of making games and what their products are able to do for the people who play them. This echoes Ian Bogost's (2007) concept of procedural rhetoric, where digital games form certain messages on the level of mechanical system and sign to e.g. produce "serious games." The mechanical nature of games was also highlighted in the way that one of the developers emphasised that visual marketing had to signify what players are able to do in the game – so that for example Doron wanted tools and weapons to be prominent in the marketing of their game about construction and combat. In this sense, it appears significant that paratextual elements also have to clarify or denote not only what the game is about, but also what players *are able to do* in the game.

Finally, the cultural perception of "games being unique" also had drawbacks for whenever some of my informants engaged with people who considered games to be frivolous and incapable of tackling "serious" topics. For instance, Chi was met with dismissals when they pitched their game idea about slavery, because "due to the stigma attached to the interactive medium, and a lingering notion that digital games cannot discuss serious subject matter." . They were "often immediately asked why I am

telling this story, and approaching this topic, through a digital game, instead of using literature or film." This speaks to what Chapman & Linderoth (2015: 137) argues with the "limits of play" where the perception of ludic aspects clash with more serious historical topics. As such, the informants also faced challenges by the so-called "uniqueness of games."

Theme 4 - Economic Axiom

Finally, and perhaps most importantly, the informants were all very much occupied with the question of economic and funding – i.e. almost everyone stated that they need to earn money to keep the lights on in their offices and put food on the table. For example, Tumelo stated that in order for their smaller company to survive, "there were times we had to take outsourcing cases to keep the studio running" and towards the end "we encountered financial difficulty" that only was overcome, thanks to a public funding pool. As a consequence, this concern continuously impacted their creative decisions on what type of game to produce. This was a recurring phenomenon across the different scales of productions, where small-scale developers to those working within multimillion projects were first and foremost concerned with how much their product would sell. As Doron put it, "[our creative planning] would exclusively be about what can we get funding for. [...] the only thing that matters is if you can prove there's a market for it," while Erin felt that game developers "should be a lot more cynical [...] and think about how can I make the most profit of the games that we're making." Thus, when asked about their creative choices for which pasts to include, the overriding concern was always that it had to earn money. Chi revealed that any funding from publishers require evidence of a secure return of investment, and therefore Chi had to prove what had sold before, thus ensuring that only sequels of what had already proved profitable is produced – i.e. the production of cultural memory is backwards looking and self-referential. What was successful before will be successful again seems to be the operating principle. This meant that hegemonic narratives of history were easier to get funding for, so already well-known historical periods and perspectives were more likely to sell – e.g. one informant stated that they chose to depict the Viking era instead of a Chinese explorer in the 11th century simply due to using "safer historical settings until we have established a customerbase." Informant Chi revealed that sensitive or seemingly controversial topics such as slavery are denied funding by those in power, while the same informant revealed that people in economic power positions and funding were "Anglo-Saxon Nordic [...] So like what you see outputted to the big markets are things that are products that reflect that culture." Here, Chi is pinpointing who is giving money to these games, who is making them and how this influences the production of memory in digital games. The economic precarity caused by including sensitive or controversial historical topics also made it difficult to balance pragmatism versus idealism – in Tumelo's case, their team ended up siding with the latter:

Since our game dealt with a serious topic, we were once afraid of the players' reception. Yet on a second thought, even if the sales didn't turn out to be good, we would still be content, for at least we were able to share our perspectives to the world in the form of game.

Informant Gili revealed that working on larger big-budget projects also meant that it was harder to push back against preconceived hegemonic notions of history and representation, simply because the amount was that much bigger. As they put it,

[the larger the team,] the more likely you are to find people who just not have preexisting ideas about how things, its about a nest of pre-existing ideas, how things are in history, how things have to be in games, what is going to sell, and there's a cautiousness with having to protect a large budget that makes it harder for people to embrace larger ideas

This meant that not only does return of investment impact the production of cultural memory in historical games, but the scale of production and the amount of workers also increases the likelihood of mnemonic hegemony.

Several informants revealed that they knew what audiences to target and their preferences, and therefore they were motivated or forced to produce what such audiences found appealing. As Chi put it "They are more likely to give money to something that they know will work or that they can estimate better that it will work to something that they've never seen before." Doron revealed that they wanted to target 20- to 35-year American men if they wanted to sell, since "I want to live or survive making games that I'm talking about the market," as they argued.

The informants who revealed their audience conceptualisations did not provide evidence or explanation of where or how they constructed them. The informant Gili said that they were not privy to how the multibillion publisher gathered data about audience preferences. Gaining insight into the epistemology of such capitalist logics would otherwise prove useful in understanding the continuous reproduction of mnemonic hegemony in games.

Challenges and Limitations

In addition to the weaknesses mentioned earlier, there are other limitations to my study. As Rigney (2016: 3) writes, memory is more akin to process than a product. What gets encoded by developers and how they think about memory based on their own convictions and economical context, the formation of memory is still reliant on the constant, iterative process of individuals and collectives.

Similarly, my limited qualitative interview dataset does not address the day-to-day practices in each studio that would otherwise reveal more about the implicit assemblages of actors within the studio itself. Just as well, I do not conduct an institutional or structural analysis that would further reveal how memory production organisations and networks form memory-making potentials in their games — especially on a macro-level. Neither does my method account for the responses that my informants would not admit or did not consider important for the interview. This drawback is made more apparent when one considers the fact that my informants were mostly people who are the face and leaders of their studios, and so my interviews did not give voice to other workers who may or may not contest the statements by those in charge.

My research also forgoes the other, usually silenced or hidden workers of the games industry, namely the hardware assemblers and outsourcing studios that do much of the legwork for contemporary digital game production. Additionally, I did not ask my informants how they utilised the labour of players to increase the value of their product, since that is one way of capturing and commodifying play as seen in the example of hidden data-harvesting and general "playbour" that exploits players to increase profits of the studios or publishers who make these games.

Discussion

Linking back to the initial discussion on the political economy of digital games, the production, distribution and consumption of historical digital games are highly conditioned by the social and economic power hierarchies in which producers operate. As my informants revealed, their working

conditions, their positioning and negotiation of collective memory discourses and their privileged access to games production result in an unequal distribution of communication resources across the divide between production and consumption. The four themes each reveal the underlying conditions of producing cultural memory in historical games. Primarily, their continued refrain of concerning themselves with the economic conditions they work under means that their precarious situation results in reproducing tried-and-true formula. Although few explicitly reflected on their position as producers of cultural memory, their positioning towards reinforcing or contesting mnemonic hegemony revealed each informants' implicit negotiations of cultural memory. Yet whether it was student informants or the CEO of a mid-sized company, the overriding logic was always economic.

However, at the same time, I would also state that there is something more going on than simply an overriding economic logic that drives their "one-dimensionality of creativity" (Bulut 2018). Some of the informants relied on assumptions about their target audiences, their preferences and what is appealing at the level of consumption. Yet they did not suggest or explain how they knew these preferences. As such, I propose that their assumptions rest on implicit notions about identity cultivated by the hegemonic values of the society they live in. This means that my informants reproduced their own biases about gender, race, sexuality, ethnicity, age and social class, and how these categories influenced who would be "the target market," i.e. those with purchasing power. In that sense, the economic axiom is inadequate in accounting for the other ways that mnemonic hegemony is maintained and reinforced.

Overall, the data indicate the conditions in which the production of historical games as part of a global production network motivate the commodification of play and games. Echoing the existing work on the political economy of the digital game industry, historical digital games are structured by the hegemonic mass culture in which they are produced.

Conclusion

This article has established the significance of the relation between production and form in cultural memory. My qualitative interviews form one part of mapping and illuminating how game developers encode memory-making potentials into historical digital games and in turn, what explicit conditions they operate under. Specifically, the themes that I established drew out the economic axiom of memory production, the individual contestations over memory, the technoludic constraints of game development and finally their own mnemonic role in society. As I argue, these results highlight on one hand the system in which these individuals are embedded that motivate them to churn out specific hegemonic memory-making potentials in their games, and at the same time rely on assumptions and notions that go beyond the economic axiom. Historical game developers are, like the rest of the games industry, enveloped in deep economic precarity with engrained notions about what games can be and who buys them. This holds true across the economic spectrum where both student developers as well as workers within medium- to big-budget productions both operate under similar working conditions. Regardless of whether it is a commercial or a subversive avant-garde production, the capitalist, heteropatriarchal, racialised, Western-centric nature of the digital game industry motivates the reproduction of mnemonic hegemony. As such, my limited data indicates how cultural memory is very much predisposed by the material as well as the hegemonic conditions that structure individuals into reinforcing mnemonic hegemony via their encoding practices. Future research that analyses the institutional, structural and geographical relationships between producers, distributors and consumers is needed. Additionally, a full-scale analysis of the unequal distribution of global communication

resources in digital games with special attention to the so-called Global South and the hoarding of wealth by multinational companies would prove especially insightful in determining how contemporary mass media such as digital games reproduce mnemonic hegemony.

References

Aarseth, E. (2014) "I Fought the Law: Transgressive Play and the Implied Player". In: Segal N and Koleva D (eds) From Literature to Cultural Literacy. London: Palgrave Macmillan UK, pp. 180–188. DOI: 10.1057/9781137429704_13.

Aarseth, E./Calleja, G. (2015): "The Word Game: The Ontology of an Undefinable Object." In Proceedings of the 10th International Conference on the Foundations of Digital Games (FDG 2015)Pacific Grove, CA, USA, 25 06 2015, pp. 1–8. Available at: http://www.fdg2015.org/papers/fdg2015_paper_51.pdf (accessed 11 August 2017).

Allen, R. (2017): America's Digital Army: Games at Work and War. Lincoln and London: University of Nebraska Press.

Apperley, T. (2010): Gaming Rhythms: Play and Counterplay from the Situated to the Global. Theory on Demand 6. Amsterdam: Institute of Network Cultures.

Bogost, I. (2007): Persuasive Games: The Expressive Power of Digital games. Cambridge, MA; London, England: The MIT Press.

Boluk, S./LeMieux, P. (2017): Metagaming: Playing, Competing, Spectating, Cheating, Trading, Making, and Breaking Digital games. Minneapolis: University of Minnesota Press.

Brinkmann, S. (2014): "Unstructured and Semi-Structured Interviewing." The Oxford Handbook of Qualitative Research. DOI: 10.1093/oxfordhb/9780199811755.013.030.

Bulut, E. (2018): "One-Dimensional Creativity: A Marcusean Critique of Work and Play in the Digital Game Industry." tripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society 16(2), pp. 757–771. DOI: 10.31269/triplec.v16i2.930.

Carr, D. (2007): "The Trouble with Civilization." In: B. Atkins/T. Krzywinska (eds.), Digital game, Player, Text. Manchester: Manchester University Press, pp. 1–2. Available at: http://discovery.ucl.ac.uk/10000675/ (accessed 22 October 2018).

Chapman, A. (2012) "Privileging Form Over Content: Analysing Historical Digital games". Cohen, D., Troyano JF, Hoffman S, et al. (eds) Journal of Digital Humanities 1(2): 42–46.

Digital gameChapman, A. (2016): Digital Games as History: How Digital games Represent the Past and Offer Access to Historical Practice. New York, NY: Routledge.

Chapman, A./ Linderoth, J. (2015): "Exploring the Limits of Play." In: T. Mortensen/J. Linderoth/ A.M. Brown (eds.), The Dark Side of Game Play: Controversial Issues in Playful Environments. London: Routledge, pp. 137–153.

Chapman, A./Foka, A./ Westin, J. (2018): "Humanising Places: Exposing Histories of the Disenfranchised Through Augmented Reality." International Journal of Heritage Studies 24(3), pp. 283–286. DOI: 10.1080/13527258.2017.1378912.

Collins, P.H. (2002): Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment. London/New York: Routledge.

Consalvo, M. (2008): "Crunched by Passion: Women Game Developers and Workplace Challenges." In: Beyond Barbie and Mortal Kombat: New Perspectives on Gender and Gaming. Cambridge, MA: MIT Press, pp. 177–191.

Copplestone, T.J. (2017): "But That's Not Accurate: The Differing Perceptions of Accuracy in Cultural-Heritage Digital games Between Creators, Consumers and Critics." Rethinking History 21(3), pp. 415–438. DOI: 10.1080/13642529.2017.1256615.

DICE (2018): Battlefield V. Electronic Arts.

Dietrich, D.R. (2013): "Avatars of Whiteness: Racial Expression in Digital Game Characters." Sociological Inquiry 83(1), pp. 82–105.

Dyer-Witheford, N. and De Peuter, G. (2009): Games of Empire: Global Capitalism and Digital Games. Minnesota/London: Minnesota Press.

Edwards, K./Weststar, J./Meloni, W. et al. (2014): IGDA Developer Satisfaction Survey 2014 – Summary Report. igda.org: IGDA. Available at:

http://c.ymcdn.com/sites/www.igda.org/resource/collection/9215B88F-2AA3-4471-B44D-B5D58FF25DC7/IGDA_DSS_2014-Summary_Report.pdf (accessed 22 January 2015).

Erll, A. (2011): Memory in Culture. Hampshire: Palgrave Macmillan UK.

Farokhmanesh, M. (2018): Battlefield V fans who failed history are mad that the game has women in it. Available at: https://www.theverge.com/2018/5/24/17388414/battlefield-v-fans-game-women-world-war-2-history (accessed 1 October 2018).

Ford, D. (2016): "'eXplore, eXpand, eXploit, eXterminate': Affective Writing of Postcolonial History and Education in Civilization V." Game Studies 16(2). Available at: http://gamestudies.org/1602/articles/ford (accessed 19 January 2017).

Fron, J./Fullerton, T./Morie, J.F. et al. (2007): The Hegemony of Play. In Proceedings of the 3rd Digital Games Research Association (DiGRA) international conference Situated Play. Tokyo, 24 September 2007. Available at: http://ict.usc.edu/pubs/The%20Hegemony%20of%20Play.pdf (accessed 21 February 2014).

Fuchs, C. (2017): "Capitalism, Patriarchy, Slavery, and Racism in the Age of Digital Capitalism and Digital Labour." Critical Sociology 0896920517691108. DOI: 10.1177/0896920517691108.

Galloway, A.R. (2006): Gaming: Essays on Algorithmic Culture. Electronic Mediations. Minnesota/London: University of Minnesota Press.

Garde-Hansen, J. (2011): Media and Memory. Edinburgh: Edinburgh University Press.

Golding, P./ Murdock, G. (1979): "Ideology and the Mass Media: The Question of Determination." In: M. Barrett/A. Kuhn/J. Wolff (eds.), Ideology and Cultural Production. New York: St. Martin's Press, p. 198.

Hall, S. (1973): "Encoding, Decoding." In: S. During (ed.), The Cultural Studies Reader. London: Routledge, pp. 90–103.

Hall, S. (1986): Media Power and Class Power. In: J. Curran/J. Ecclestone/G. Oakley et al. (eds.), Bending Reality: The State of the Media. London: Pluto, pp. 5–14.

Hall, S. (1992): "Race, Culture, and Communications: Looking Backward and Forward at Cultural Studies." Rethinking Marxism 5(1), pp. 10–18. DOI: 10.1080/08935699208657998.

Hammar, E.L. (2017a): "Counter-Hegemonic Commemorative Play: Marginalized Pasts and the Politics of Memory in the Digital Game Assassin's Creed: Freedom Cry." Rethinking History 21(3): 372–395. DOI: 10.1080/13642529.2016.1256622.

Hammar, E.L. (2017b): "The Political Economy of Historical Digital Games." In: P. Lee (ed.), Media Development LXIV(4), pp. 25–29.

Henricks, T.S. (2006): Play Reconsidered: Sociological Perspectives on Human Expression. Urbana and Chicago: University of Illinois Press.

Hirsch, M. (2012): The Generation of Postmemory: Writing and Visual Culture After the Holocaust. New York: Columbia University Press.

Horkheimer, M./Adorno, T.W. (2002): Dialectic of Enlightenment – Philosophical Fragments. G. Noeri (ed.). Stanford, CA: Stanford University Press.

Johnson, R.S. (2013): "Toward Greater Production Diversity Examining Social Boundaries at a Digital Game Studio." Games and Culture 8(3), pp. 136–160.

Jørgensen, K. (2012): "Players as Coresearchers: Expert Player Perspective as an Aid to Understanding Games." Simulation & Gaming 43(3), pp. 374–390. doi: 10.1177/1046878111422739.

Joseph, D. (2017): Distributing Productive Play: A Materialist Analysis of Steam. Toronto: Ryerson University.

Joseph, D. (2018): "The Discourse of Digital Dispossession: Paid Modifications and Community Crisis on Steam." Games and Culture: 1555412018756488. DOI: 10.1177/1555412018756488.

Kapell, M.W./Elliott, A.B.R. (2013): Playing with the Past: Digital Games and the Simulation of History. New York/London: Bloomsbury Publishing, USA.

Keogh, B. (2018): Gamers and managers vs workers: the impossible (and gendered) standards imposed on game developers. In: Overland Literary Journal. Available at:

https://overland.org.au/2018/07/gamers-and-managers-vs-workers-the-impossible-and-gendered-standards-imposed-on-game-developers/ (accessed 10 July 2018).

Kerr, A. (2017): Global Games: Production, Circulation and Policy in the Networked Era. New York/London: Routledge.

Kirkpatrick, G. (2017): "How Gaming Became Sexist: A Study of UK Gaming Magazines 1981–1995." Media, Culture & Society 39(4), pp. 453–468.

Köstlbauer, J. (2013): "The Strange Attraction of Simulation: Realism, Authenticity, Virtuality." In: A.B.R. Elliott/M. Kapell (eds.), Playing with the Past: Digital Games and the Simulation of History. New York/London: Bloomsbury Publishing, USA, pp. 169–183.

Kuchera, B. (2012): "The PA Report – Games with Exclusively Female Heroes Don't Sell (Because Publishers Don't Support Them)." In: Penny Arcade Report. Available at: http://penny-arcade.com/report/editorial-article/games-with-female-heroes-dont-sell-because-publishers-dont-support-them (accessed 23 November 2012).

Lammes, S. (2010): "Postcolonial Playgrounds: Games and Postcolonial Culture." Eludamos. Journal for Computer Game Culture 4(1), pp. 1–6.

Massanari, A. (2017): "#Gamergate and The Fappening: How Reddit's Algorithm, Governance, and Culture Support Toxic Technocultures." New Media & Society 19(3), pp. 329–346. doi: 10.1177/1461444815608807.

Maxwell, R./Raundalen, J./ Vestberg, N.L. (2014): Media and the Ecological Crisis. New York/London: Routledge.

May, T. (2011): Social Research: Issues, Methods and Research. 4th ed. Berkshire, England: Open University Press.

Mitchell, K. (2008): Intention and Text: Towards an Intentionality of Literary Form. London: New York: Continuum.

Molden, B. (2016): "Resistant Pasts Versus Mnemonic Hegemony: On the Power Relations of Collective Memory. Memory Studies 9(2), pp. 125–142. DOI: 10.1177/1750698015596014.

Mosco, V. (2009): The Political Economy of Communication. 2 ed. Los Angeles, CA: SAGE Publications Ltd.

MPS Labs (1991): Civilization. Microprose.

Mukherjee, S. (2017): Digital games and Postcolonialism: Empire Plays Back. London: Palgrave Macmillan.

Mukherjee, S./Hammar, E.L. (2018): Introduction to the Special Issue on Postcolonial Perspectives in Game Studies. Open Library of Humanities. Postcolonial Perspectives in Game Studies.

Nguyen, J. (2017): "Digital Games About the Materiality of Digital Games." Ecozon@: European Journal of Literature, Culture and Environment 8(2), pp. 18–38.

Nieborg, D.B./Poell, T. (2018): "The Platformization of Cultural Production: Theorizing the Contingent Cultural Commodity." New Media & Society: 1461444818769694. doi: 10.1177/1461444818769694.

O'Donnell, C. (2014): Developer's Dilemma: The Secret World of Digital game Creators. Cambridge, MA; London: MIT Press.

Parkin, S. (2013): "Shooters: How Digital Games Fund Arms Manufacturers." In: Eurogamer. Available at: https://www.eurogamer.net/articles/2013-02-01-shooters-how-digital-games-fund-arms-manufacturers (accessed 2 February 2013).

Pötzsch, H./Šisler, V. (2016): "Playing Cultural Memory Framing History in Call of Duty: Black Ops and Czechoslovakia 38–89: Assassination." Games and Culture pp. 1–23. doi: 10.1177/1555412016638603.

Qiu, J.L. (2017): Goodbye ISlave: A Manifesto for Digital Abolition. Champaigne, IL: University of Illinois Press.

Reading, A. (2014): "Seeing Red: A Political Economy of Digital Memory." Media, Culture & Society 36(6), pp. 748–760. DOI: 10.1177/0163443714532980.

Rigney, A, (2016): "Cultural Memory Studies – Mediation, Narrative, and the Aesthetic." In: A.L. Tota/T. Hagen (eds.), Routledge International Handbook of Memory Studies. New York: Routledge, pp. 65–76.

Salter, M. (2017): "From Geek Masculinity to Gamergate: The Technological Rationality of Online Abuse." Crime, Media, Culture: 1741659017690893. DOI: 10.1177/1741659017690893.

Salvati, A.J./ Bullinger, J.M. (2013): "Selective Authenticity and the Playable Past." In: M. Kapell/A.B.R. Elliott (eds.), Playing with the Past: Digital Games and the Simulation of History. New York/London: Bloomsbury Publishing USA, pp. 153–168.

Schut, K. (2007): "Strategic Simulations and Our Past The Bias of Computer Games in the Presentation of History." Games and Culture 2(3), pp. 213–235.

Shaw, A. (2015): Gaming at the Edge: Sexuality and Gender at the Margins of Gamer Culture. Minneapolis: University of Minnesota Press.

Shaw, A. (2017): "Encoding and Decoding Affordances: Stuart Hall and Interactive Media Technologies." Media, Culture & Society 39(4), pp. 592–602. doi: 10.1177/0163443717692741.

Sicart, M. (2014): Play Matters. Cambridge, MA; London: MIT Press.

Sinclair, B. (2015): "Conflict Minerals the Real Link Between Games and Violence." Available at: http://www.gamesindustry.biz/articles/2015-06-03-conflict-minerals-the-real-link-between-games-and-violence (accessed 4 September 2017).

Sinclair, B. (2016): "Conflict Mineral Sourcing Still Hazy for Games Industry." Available at: http://www.gamesindustry.biz/articles/2016-06-07-conflict-mineral-sourcing-still-hazy-for-gamesindustry (accessed 4 September 2017).

Sinclair, B. (2017): "Conflict Minerals Progress in Jeopardy." Available at: http://www.gamesindustry.biz/articles/2017-06-05-conflict-minerals-progress-in-jeopardy (accessed 4 September 2017).

Smith, SL./ Moyer-Guse, E. (2006) "Voluptuous Vixens and Macho Males: A Look at the Portrayal of Gender and Sexuality in Digital Games". In: Reichert, T./ Lambiase, J. (eds) Sex in Consumer Culture: The Erotic Content of Media and Marketing. New York: Routledge, pp. 51–65. Srauy, S. (2017): "Professional Norms and Race in the North American Digital Game Industry." Games and Culture: 1555412017708936. doi: 10.1177/1555412017708936.

Thomsen, M. (2018): "Made in China: Every New Digital Game You Love." The Outline, 2 June. Available at: https://theoutline.com/post/3087/outsourcing-blockbuster-digital-games-made-in-china-horizon-zero-dawn (accessed 7 July 2018).

Ubisoft Québec (2013): Assassin's Creed: Freedom Cry. Ubisoft, Inc.

Uricchio W, (2005): "Simulation, History, and Computer Games. In: J. Raessens/J Goldstein (eds.), Handbook of Computer Game Studies. Cambridge, MA; London: MIT Press, pp. 327–338.

Valentine, R. (2018): "Which Game Companies Could be Using Slave Labor? Available at: https://www.gamesindustry.biz/articles/2018-06-19-apple-worlds-company-conflict-minerals (accessed 5 August 2018).

Weststar, J./ Legault, M.-J. (2015): IGDA Developer Satisfaction Survey 2015 – Summary Report. 9 February. igda.org: IGDA. Available at:

https://c.ymcdn.com/sites/www.igda.org/resource/collection/CB31CE86-F8EE-4AE3-B46A-148490336605/IGDA%20DSS%202015-SummaryReport_Final_Sept15.pdf (accessed 6 June 2016).

Williams, I. (2013): "You Can Sleep Here All Night': Digital Games and Labor." Available at: http://jacobinmag.com/2013/11/digital-game-industry/ (accessed 5 September 2017).

Woodcock, J. (2016): "The Work of Play: Marx and the Digital Games Industry in the United Kingdom." Journal of Gaming & Virtual Worlds 8(2), pp. 131–143. DOI: 10.1386/jgvw.8.2.131_1.

Yee, N. (2017): "Just How Important Are Female Protagonists?" In: Quantic Foundry. Available at: http://quanticfoundry.com/2017/08/29/just-important-female-protagonists/ (accessed 4 September 2017).

Young, H. (2016): "Racial Logics, Franchising, and Digital Game Genres The Lord of the Rings." Games and Culture 11(4), pp. 343–364. doi: 10.1177/1555412014568448.

Article 4: Mapping experiential memory-making through play: How digital games frame cultural memory

Submitted to Memory Studies November 2019. Awaiting editorial approval.

Abstract

This article brings together cultural memory and game studies by relating practices of play with memory-making. I posit that play is an essential part of culture, and therefore I argue that we need to investigate the role of play in remembering the past. Although previous research within cultural memory studies has mentioned play as part of memory-making, they have only done so adjacently without incorporating established theories of play central to game studies. I propose such an analytical bridge by outlining Gordon Calleja's player involvement model to the popular phenomenon of historical digital games. This model illustrate six different experiential ways that players become 'involved' in playing the past. The article thereby shows how to better pinpoint the memory-making processes potentially involved when people participate in the cultural practices of play in, for example, historical digital games. As such, this article contributes to an under-investigated area within memory studies and provides an illustration of how practices of play and their relation to cultural memory can be analyzed.

Introduction

While 'cultural memory' has been researched extensively since the formal establishment of 'memory studies' (Erll, Nünning, and Young 2010; Dutceac Segesten and Wüstenberg 2016), comparably little attention has been paid to the relation between play and remembering. This is remarkable as such a relation can be seen in the cultural domains of sports, folk dancing, re-enactments, board games, carnivals, or historical digital games (Carlisle 2009), where distinct forms of cultural memory are generated through activities of play (Pötzsch and Šisler 2019; Sterczewski 2016). Indeed, Joost Raessens state that digital games "have become a phenomenon of great cultural importance" (2006, 52), while Eric Zimmermann optimistically have labels the 21st century as the 'ludic century' (Zimmerman and Chaplin 2013). Yet digital games have rarely been taken up in the established discipline of memory studies (de Smale 2019a, 20). It is for this reason that this article draws attention to play as an essential part of culture, and show how a distinct form of remembering through play can be analyzed in the medial form of historical digital games⁴⁸. For this, I employ Gordon Calleja's (2011) 'player involvement model', in order to map the six different ways that players are engaged in memory-making practices when playing contemporary historical digital games.

Erll states that "whenever the past is represented, the choice of media and forms has an effect on the kind of memory that is created" (Erll, Nünning, and Young 2010, 390). As she writes, there is an "inherent mediality of memory" (Erll 2011 114) and "memory on the collective level [...] is only possible with the aid of media" (ibid. 113). She sums up that

media do not simply reflect reality, but instead offer constructions of the past. Media are not simply neutral carriers of information about the past. What they appear to encode -

_

⁴⁸ Chapman (2016, 6) defines historical games as "those games that in some way represent the past or relate to discourses about it"

versions of past events and persons, cultural values and normas, concepts of collective identity - they are in fact first creating (ibid. 114)

Therefore, we need to pay attention to the medial form through which memory is created, as well as the concrete situations in which memory is created. As plenty of research has been applied to conventional cultural forms, such as literature, theatre, and film, so too do we need to investigate other cultural forms. Historical digital games is one such example, through which people activate and negotiate virtual constructions of the past (Chapman 2012). These historical digital games engage players through both as narrative and representational form, but also as a procedural and performative level (Uricchio 2005; Bogost 2007; Galloway 2006). It is precisely the latter that renders this popular medial form as a *configurable* experience of the past, because people are *playing* with the past (M. W. Kapell and Elliott 2013). As I show in detail later, this procedural level is dependent on what the game enables people to do within the game itself, so that the player performances are a product of the dialectic relation between player and game. For example, in *Battlefield 1* (DICE 2017) players adopt the role of soldiers in WWI and the game's procedural level allows players to move across a constrained virtual landscape while shooting other soldiers from the opposing army in either multi- or singleplayer battles, which in turn leads players to perform and produce certain historical representations. As Pötzsch and Sïsler (2019, 7) summarize with regard to historical digital games,

[...] game mechanics, procedures, and narrative devices predispose the paradigm of possible representations that reappropriative practices of play can give rise to. As such, games' potential effects on historical discourse and memory politics are contingent upon both the subjective selection of certain variables by designers and developers (aesthetic form) and the active engagement of these textual frames by players (reappropriative practices of play). Together, these give rise to series of more or less conditioned historical representations

This links well with the observation that collective remembering is an active and participatorial discursive activity, that it is something we do rather than something we have (Wertsch 2002, 17). This point maps very neatly with the interactive nature of games, which are also obviously necessarily participatory activities. Specifically, by accounting for mnemonic practices of play through the interpretation and configuration of historical digital games, we can better account for such distinct forms of cultural memory-making beyond already researched conventional cases in literature, film, and so forth. Therefore, this article considers how certain mnemonic practices of play emanate from the medial form of historical digital games. This focus on player performances contrasted with the encoded form of historical digital games links well with cultural memory's emphasis on malleable networks of interests and stakeholders that negotiate and activate memory-making potentials of cultural artefacts (Garde-Hansen 2011; Rigney 2016; Erll and Rigney 2009). This approach to how we generate beliefs about the past aims to help detangle the myriad of tensions between game developers encoding meaning into historical digital games, and players as active participants in interpreting and configuring the game, and both doing so in relation to both shared and local discourses of collective memory. As such, the media approaches to history and remembering in cultural memory studies fit well with analyzing the form of historical digital games and how they frame memory practices through play. In this article, I first qualify the importance of play for studying cultural memory by introducing the work on play and games by Johan Huizinga and Hans-Georg Gadamer. Following this qualification, I introduce Calleja's (2011) player involvement model in order to show how players

experience the past with specific examples of mnemonic practices of play in and outside of historical digital games. Calleja's involvement model accounts for six different experiential dimensions through which players become involved through digital games and I use it to illustrate one proposal for how to investigate the relation between play and memory-making.

The importance of play

Many attempts have been made to capture and define play (Burke 1988; Avedon 1971; Caillois 1961; Bateson 1955; Bartle 1996, 19; Hughes 1983). Brian Sutton-Smith's (1997, 297) observes that the different rhetorics surrounding our understanding of play gives it ambiguity that make difficult to capture its complexity. For the present study, however, I choose to focus on play as a constitutive component in the creation of culture. Here, I include the work of Johan Huizinga and Gadamer's hermeneutics on the dialectic process between player and game helps explain the movement between the two.

First, Huizinga (1971, 1) writes that

Play is older than culture, for culture, however inadequately defined, always presupposes human society, and animals have not waited for man to teach them their playing

Here, he alludes to the central argument in his theory on play and games that play is not unique to humans, as all animals play (Fagen 1981). In that sense, play precedes civilization and culture, and ultimately shapes the creation of them. Huizinga continues,

We have to conclude, therefore, that civilization is, in its earliest phases, played. It does not come from play like a baby detaching itself from the womb: it arises in and as play, and never leaves it (Huizinga 1971, 1, his emphasis)

It is this connection between play and culture that forms the premise of my article. Assuming that Huizinga is his assertion that play creates culture, then it is likewise beneficial to investigate the role play takes in forming cultural memory. According to Huizinga, "play is non-seriousness" (10) but "...seriousness seeks to exclude play, whereas play can very well include seriousness" (1955, 45). This means that when people engage in play, it does not necessarily follow that they are serious, but at the same time, play does allow for seriousness. As we see in ritual practices of cultural memory, such as re-enactments, they are frequently done with great earnestness. As Thomas Henricks write about play;

People not only reproduce but also produce social and cultural form through acts of play. (2015, 2)

To better understand this relationship between game and play, Gadamer conceptualizes his hermeneutics on aesthetics by using playing a game as an analogy for his aesthetic theory. Here, Gadamer posits that play as an activity is characterized as a constant to-and-fro movement between player and game (Gadamer 1993, 103). This to-and-fro movement between the two does not refer to either the playing subject or the object being played, but the movement in itself, and thus play cannot

be reduced to either the subject who is playing or the object that is being played⁴⁹. This maps well to theories of collective/cultural memory that emphasize that collective memory is not a 'thing' but the relationship between 'remembering minds and reminding objects' (Assmann 2011, 110). Adam Chapman illustrates this irreducibility of play when he writes that

any investigation of games is also an investigation of play—and play (so too collective memory) can never be contained in the objects it leaves behind, which serve only as structural nodes in complex networks of stakeholders and cultural practice (Chapman 2019)

Furthermore, during this dialectic process between player and game, it is impossible to refer to a player as a subject, because "play itself is a transformation of such a kind that the identity of the player does not continue to exist for anybody [...] The player (or playwright) no longer exists, only what they are playing" (Gadamer, 1993, 112). Accordingly, during this dialectic process, the player plays back to the game, thereby fulfilling the dialectic movement of play.

Linking back to earlier in the article, this surrendering underscores the importance of paying attention to the form of games through which people play. The rules of games provides the frame that people play through. This frame gives rise to procedural rhetoric (Bogost 2007), i.e. arguments based on rules and procedures (Sicart 2011) that players activate and negotiate. in the sense that "Games structure play, facilitate it by means of rules. This is not to say that rules determine play: they focus it, they frame it, but they are still subject to the very act of play." (Sicart 2011). For example, this is illustrated by Stephanie Boluk & Patrick LeMieux's research on Metagaming (2017) where players appropriate the games they play to form entirely new games and thereby resist the commodified, constrained hegemonic ways that capitalist companies attempt to force players to play in certain ways (ibid. 3-4). Tom Apperley (2010) makes a similar case on his research on "the material and situated practices of play" (ibid. 16) of Venezuelans playing digital games in Caracas. Here, Apperley's informants revealed that they negotiated and appropriated the games they played according to their own situation (ibid. 86). This resulted in Apperley formulating the thesis that the global game despite its commodified context of production, is adopted and negotiated in the local – with the gaming rhythms between the global and the local constituting so-called 'counterplay' (ibid. 102). Similar tensions between the global and the local appear in memory-making practices, where players interpret and configure a game in, and in relation to, their local context (de Smale 2019b; Hammar 2016).

As an example of this dialectic process between players and game, consider the historical realism clans that try to re-enact certain historical events. Chapman writes about how certain groups in such games also come up with their own stricter socially enforced rules in order to make sure the game reenacts the past as they understand it. A similar example can be found in Apperley's research on historical strategy players who establish their own stipulated goals in certain fan communities. Similar to Chapman's points, play breaks out of the confines of the game rules/objectives in order to connect with the past in new ways that are meaningful to players. In turn, this means that the re-enactment, i.e.

_

⁴⁹ "[T]he mode of being of play does not allow the player to behave toward play as if toward an object." (Gadamer, 1993, 112)

the emergent play between players and the game, only occur because of the way the original games structured play in service to historical representation. Chapman terms this tension 'historical resonance':

the player's specifically historical understanding, gleaned from their lived cultural experience, including their engagement with historiography in different forms [...] historical resonance, is the establishment of a link between a game's historical representation and the larger historical discourse, as the player understands it." (Chapman 2016, 36, his emphasis)

Therefore, given the ways that play is an amorphous activity that is best explained by the dialectic relationship of the global game adopted in the local by players that forms historical resonance, I suggest mapping the ways that players become involved via Calleja's involvement model below. In summary, Huizinga shows the ways that play is very much a part of culture, in fact it serves as a constitutive component to culture. Gadamer's hermeneutics help us pinpoint the dynamics with play as a movement between game and player. This allows us to better encapsulate the role of play in its relation to culture and how games structure practices of play and vice versa. It provides a clearer understanding of how play exists in the creation of culture and memory, where play generates new meaning about the past. In order to understand how this dialectic process between player and game materializes in concrete practices of play, I now turn to Calleja's involvement model.

The involvement model

I now move on to explain Calleja's (2011) model to provide a framework for a better understanding of the role of play in cultural memory. Then I briefly examine previous applications and criticisms of Calleja's work.

The player involvement model serves as a conceptual map that defines six distinct dimensions of player involvement in games. Calleja echoes the earlier established importance of games as form including performances, which in turn leads to his term of 'incorporation' (ibid. 45). Incorporation serves as Calleja's terminological replacement for what he sees as the muddled, but highly popular terms of 'immersion' and 'presence' that have been misused across media studies and psychology to connote when people are highly focused and attentive to a particular experience of a cultural form to the extent that they lose sense of being anywhere but in the experience. These terms, however, have been applied vaguely and contradictorily when trying to understand the experiential phenomenon when applied in the context of research on games. For example, Calleja argues, immersion has been used to describe the experience of painting, literature, and cinema, all of which necessitate a different experiential engagement than digital games. In other instances, immersion can operate as a form of experiential absorption, while other scholars use it as a metaphor for transportation, as if players are mentally transported to another place. Moreover, immersion can sometimes reproduce technological determinism that reduces agency of media users to be a question of the media technology in question. Presence, on the other hand, "is replete with definitional conflicts" (ibid. 19) and in some uses wrongly equated the experiential stimuli between physical and virtual environments. Calleja offers his own solution, namely involvement as the experiential engagement whereby players are interested in the game "ranging from general motivations and attractions to the detailed analysis of moment-tomoment involvement in gameplay" (ibid. 2). These experiential phenomena can intensify and be internalized culminating in what Calleja calls 'incorporation' as an answer to the immersion/presence quandary (ibid. 3). Calleja defines incorporation as

The absorption of a virtual environment into consciousness, yielding a sense of habitation, which is supported by the systematically upheld embodiment of the player in a single location, as represented by the avatar (ibid. 169)

For the purpose of this study, incorporation will not be treated as crucial to understanding the relation between play and memory, but it reveals the experiential phenomena that historical digital games might give rise to. What is important, however, is the different dimensions of involvement that Calleja outlines. These are the 1) kinesthetic, 2) spatial, 3) shared, 4) narrative, 5) affective, and 6) ludic dimensions of involvement. These are temporally instantiated in a macro- or a micro-phase. Macro-involvement refers to instances outside or beyond playing the game, i.e. me sitting in a classroom thinking of the best strategies to win a multiplayer match in the strategy game *Company of Heroes 2* (Relic Entertainment 2013) or when someone recalls the historical accounts of the German occupation of Czechoslovakia in *Attentat 1942* (Charles Games 2017). Micro-involvement, on the other hand, refers to the "moment-by-moment engagement of gameplay" (Calleja 2011, 40) within the actual game.

When perceived in the light of cultural memory, this temporal divide between macro- and micro-involvement accounts for both memory-making in- and outside of the game. I might have moment-to-moment remembering of 'Ancient Greece' when playing *Assassin's Creed Odyssey* (Ubisoft 2018), just as I may draw upon its residue of historical representation of Greek architecture while not playing the game. Alongside this macro- and micro-divide, I draw on the six different dimensions to illustrate the type of memory-making that historical digital games and the playing of them may contribute to. It is important to note that the six forms of involvement outlined by Calleja (2011) are not exclusive to games, but as Calleja shows, the model serves to pinpoint the experiential aspects when people play games. As Calleja writes, "applying the player involvement model to practical analysis does not require all the dimensions to be equally relevant to a specific game." (ibid. 44).

In the following I define each dimension and link them to their specific memory-making practices of play seen in historical digital games.

Kinesthetic involvement

The kinesthetic dimension refers to the player controls of "all modes of avatar or game pieces" (ibid. 43) in digital games. By avatar or game piece, Calleja is referring to an entity in the game environment that players control – these can include single (avatar) to multiple entities (game pieces or miniatures) at once. Drawing on the sociological work of Anthony Giddens (1984) in regards to agency, Calleja (2011, 57) argues that bodily agency should be understood as not just the intentions of players, but also the capabilities. In contrast to Gadamer's formulation, players "are active participants in the creation of their experience through interaction with the underlying code during gameplay." (ibid. 55). As such, we can refer to these capabilities as afforded by digital games' mechanical system, meaning "the machinic operations which structure the process, e.g., to switch from one state to another, or simply to change some informational condition, great or small" (Aarseth and Calleja 2015, 7). Espen Aarseth's (2004) statement that he does not see the body of protagonist Lara Croft when he plays *Tomb Raider* (Core Design 1996) "but see through it and past it" illustrates this form of

involvement well⁵⁰. On a micro-level, this refers to the concrete ways that players are able to control the avatar or miniature of the game within the game itself. For example, how players are able to rotate the falling blocks in *Tetris* (Pajitnov and Pokhilko 1984).

To illustrate kinesthetic involvement in historical digital games further, it is useful to look at so-called 'first-person shooters'. This genre encourages a kinesthetic involvement that highly emphasizes onedirectional movement with target and shoot forms of engagement. This is perhaps most clearly seen in the singleplayer campaigns of the *Battlefield* (DICE 2002) and *Call of Duty* (Infinity Ward 2004) series, where players have to primarily use their haptic controls such as game controller or keyboard and mouse to point their weapons at enemy soldiers and click a button to shoot them. When these major game series tackle historical periods, such as World War 1 in Battlefield 1 (DICE 2017) or the Cold War in Call of Duty: Black Ops (Treyarch 2010), their kinesthetic involvement emphasizes the power-fantastical elimination of antagonistic characters via smooth kinesthetic engagement. This means that the memory-making potentials of kinesthetic involvement in such games are ideologically restricted to a pre-scripted set of actions that confines players to go through an efficiently designed shooting gallery that reduce historical conflicts to a simple exchange of bullets. That is not to say that other forms of memory-making are not taking place as well, such as visually representing the material culture of these historical wars, not to mention that players negotiate and activate this restriction differently in their dialectic movement with the game object (Sicart 2011). To provide a counterexample to this form of kinesthetic involvement, This War of Mine (11bit Studios 2014) is a resourcemanagement simulator that emulates the survival of civilians during a civil war such as in 90's Bosnia (Smale, Kors, and Sandovar 2017). This game deliberately frustrates new players by leaving the controls and possibilities of the game unclear and unexplained. As a results, players became irritated with how to properly use the game's affordances (Pötzsch 2019a; 2019b). Yet its developers saw this as a deliberate attempt to convey the inability of civilians during wartime to properly manage and take care of themselves (Smale, Kors, and Sandovar 2017, 3). As such, This War of Mine illustrates how kinesthetic involvement can invite feelings of unpreparedness and unfamiliarity with overcoming challenges in remembering civil wars. The kinesthetic dimension enables a form of 'procedural estrangement' (Pötzsch 2019b, 243) that is useful to draw out how digital games motivate players to understand history differently via a game's affordances and how such affordances are used by game developers to frame certain experiences via a game's procedural rhetoric.

Spatial involvement

The spatial involvement dimension refers to how players experience the "the spatial qualities of a virtual environment" (Calleja 2011, 43) that provides players with a sense that "they are inhabiting a place rather than merely perceiving a representation of space." (ibid. 92). While kinesthetic involvement above refers to the control of the avatar or the game pieces, spatial involvement engages players by the game's virtual spaces that players "inhabit, interact with, and explore" (ibid. 74). On a macro-level, Calleja identifies spatial involvement as being engaged with exploration, where not only the beauty of the landscape but also the "element of pleasant surprise at making the discovery" (ibid. 74) are important to impart a sense of spatial involvement. This sense of spatial involvement may also entail an experience of progression and purpose for players, where they for example find pleasure in

•

⁵⁰ T.L. Taylor (2003) refers to this as 'instrumental play' and Anders Frank (2014)wrote a dissertation on the 'gamer mode'. For a critical interrogation of this attitude, cf. Sabine Harrer (2018)

uncovering the history and background lore for the gameworld as encoded by its game developers. As Calleja points out, it is not just the aesthetic experience of discovering virtual spaces in digital games, but "also the performed practice of exploring their technical and topographical boundaries." (ibid. 77). On a micro-level, the spatial involvement refers to the specific spatial actions that players are undertaking in virtual space afforded by the game's mechanical system.

In terms of historical digital games, spatial involvement is very much dependent on which genre we are looking at. In the genre of historical war games, both Medal of Honor: Allied Assault (2015, Inc. 2002) and Call of Duty 1 (Infinity Ward 2004) emulate Saving Private Ryan's (Spielberg 1998) famous Omaha-beach landing scene in the Allied invasion of Normandy in World War II. Here, players play as an American soldier who lands on a virtual beachhead to storm German bunkers. In both games, players progress through a linear space as a virtual character, where the structure of each game's spatial affordances, as well as the audiovisual indicators of mortar shells and machine-gun fire, direct players to continue their spatial movement in a linear direction towards the German beachhead bunkers. The games thus employ both structural and audiovisual means to signal to players that the space is one-directional. This means that space is not simply a question of procedural limitations, but also audiovisual means to encourage players into predetermined performances. This example in both games illustrates their reliance on the intermedial constellations of cultural memory (Erll 2012), where Saving Private Ryan's iconic opening scene is remediated into a digital game space. As such, the cross-reference to Spielberg's war drama is remediated and ultimately transmediated (Harvey 2015) into digital game form. Thus, the examples of Medal of Honor: Allied Assault and Call of Duty 1 within the genre of first-person shooters invite players into a commemorative virtual space that can, to an extent, be explored within the confines of the game's mechanical system, while concurrently relying on the intermedial memory constellations found in Hollywood cinema.

In the genre of strategy games, or what Chapman calls 'conceptual simulation style' (2016, 69), space is experienced via a birds-eye view of historical events on a two-dimensional map, while also being in charge of territory, expansion, and economy. Here, players are able to progress history such as in the *Civilization* series (MPS Labs 1991), where players build up societies, conquer territories, establish economies, and wage war against other factions(Lammes 2010; Ford 2016; Magnet 2006; Mir and Owens 2013). Here, space and history are more regarded as macro-processes that players are able to manipulate from a general overview in contrast to the more immediate experience in character-oriented games seen in the first-person shooters (Chapman 2016). Instead, spatial involvement in the conceptual simulation genre puts players in the position of a powerful master in an almost divine God's eye perspective, from which plannability and controllability of history is a matter of great men in charge of moving chess pieces around the world map as a simple game board.

Another example of memory-making via spatial involvement appears in what has been termed 'archeogaming'. Here players explore a virtual three-dimensional space to uncover the history of the virtual environment players are inhabiting (Reinhard 2018). Such digital games emphasize implicit information about the game environment, which in turn players are able to 'archeologically' unearth. Agency within the virtual environment allows players to form memories of how the gameworld came to be.

Calleja's spatial involvement dimensions helps pinpoint the potential for historical digital games to offer a sense of inhabiting a mnemonic space. By traversing a virtual spatial remediation of *Saving Private Ryan*'s Omaha beach, players may recall the storming of Omaha beach as visually intense and

immediate as their spatial experience in *Medal of Honor: Allied Assault* and *Call of Duty 1*. In conceptual simulation style strategy games, their spatial macro-simulation of the world map and 'grand history' provide the context through which players form beliefs about historical processes, the primacy of conquering territory, and the insignificance of single persons and characters. Simply put, virtual space in digital games allows for memory-making that in turn is configured, represented, and ultimately affected by its place in larger inter-medial constellations of cultural memory. These examples of spatial involvement in first-person and strategy genres illustrate how virtual space influences players' memory-making.

Shared involvement

Shared involvement refers to players' interactions with other virtual agents in digital games, whether they are controlled by other human players or computers (Calleja 2011, 94). If one thinks of the broad genre of multiplayer digital games, where other human players and agents compete against or cooperate with one another, the shared involvement dimension highlights how players are engaged in social practices of play. This involvement is facilitated in multiple social contexts, whether it is via online networks, local playing, or simply watching a player playing a game. Conversely in the broad genre of singleplayer digital games, the procedural execution of software and hardware operate as automated systems that pit computer-controlled agents against players.

On a macro-level, the shared involvement is configured by the off-game communication between players, where some stay in contact outside of the game to discuss personal and game-related subjects pertaining to the shared game experiences they have. Such macro-level shared involvement encourages the creation of communities surrounding the game in question, which in turn often enables communication with other players via chat, social media, and forum functions online (ibid. 96-97). Despite being entirely fictional, *This War of Mine* contributed to online conversations about the Bosnian civil war. Stephanie de Smale (2019) interviewed Serbian players, who recounted their memory of the Bosnian civil war while when watching, playing, or discussing *This War of Mine* with her. I.e., the Serbian informants revealed that they negotiated the game's fictional representation of a civil war in their own shared, social context. Another illustrative macro-example are so-called 'After Action Reports' (AAR) that a community of players of the *Total War* series produce after a session of playing (Apperley 2018). Here players recount their experiences playing a historical scenario in a game, often with modification to the game's rules and structures (Mukherjee 2015b), that other players within the community discuss and comment on.

Micro-level shared involvement refers to the actual game practices that Calleja categorizes as 'cohabitate', 'compete', or 'cooperate' with each other via the game's affordances (ibid. 100). Cohabitation refers to the presence of other virtual agents in virtual environments, where interactions happen socially and spatially. Competition is where players compete against other virtual agents to fulfill some ad-hoc or internal criterion for winning an objective of a game. Cooperation is when players are involved in the game when collaborating with other virtual agents to achieve a common goal. In sum, shared involvement refers to the many ways that players engage with games, both in and outside of it, in a shared, social context, whether it is by interacting with humans or computer-controlled agents.

On a micro-level, shared involvement can also refer to the virtual agents that are not necessarily human. Here we can think of the characters in different historical digital games, such as those players fight against in the *Call of Duty* series and similar war games. On the shared dimension, players

become involved by fighting against antagonists who oppose or threaten them, e.g. Arab-speaking soldiers in a virtual, Orientalist Middle-East (Šisler 2008). Memory-making in such games relies on the antagonization of certain groups that renders them easily digestible cannon fodder for player actions, while player-characters and those in allied supporting roles usually receive a compassionate humanization (Höglund 2008). Moreover, often interaction with virtual agents in war games does not include civilians, thus the involvement level will rarely consider their precarious role in times of war – as Holger Pötzsch explains in regards to the 'selective character filter' that excludes unpleasant imagery and depiction of civilians that would obstruct the enjoyment of war games as entertainment power fantasies (Pötzsch 2017).

On the other end, *This War of Mine* is a recalibration of this filtering of civilians, where they instead are put front and center as the playable victims of war, thereby moving the conventional focus of shared involvement in war games to those usually left out of such a genre. This means that shared involvement with virtual agents are configured along the lines of which groups or identities are made relatable and friendly, or hostile and antagonistic⁵¹. As such, it is important that analysis of play and memory take into account how people, virtual or human, share experiences with each other inside and outside of historical digital games, and how such experiences are configured along contemporary power hierarchies.

This means that games, by nature of being social activities (Stenros and Waern 2011), are often discussed and propagated among others, and negotiated differently, echoing the aforementioned research by Apperley and Chapman on counterplay and historical resonance. As such, memory-making processes in terms of shared involvement points to the communal aspects of playing and forming memory. Playing a historical game (at least as a mnemonic activity) always involves a sense of shared involvement, whether it is with human or non-human agents. We may play *Call of Duty 1* alone but it is its relation to the shared collective memory of D-Day and WWII that gives our play meaning. Thus historical games use a sense of shared involvement with other players and characters to cue players into a further level of shared involvement partly external to the game, namely collective memory. This means that the shared involvement dimension of the micro-phase relates to the larger macro-shared involvement of cultural memory discourses that would be important to explore further.

Narrative involvement

Narrative involvement refers to both the 'scripted events in digital games, as well as the 'unscripted events' enacted by players (Calleja 2011, 113)⁵². The former, namely the narrative scripted into the game, is the pre-scripted story created by game developers. This form of narrative is most obvious in games where players experience the game's plot via text, dialogue, 'cutscenes', or the game environment and its characters, where scripted events and information are imparted to players. Whereas the unscripted event are the ongoing 'experiential narrative' created by players and is "grounded in the game's environment reacting to our specific actions and the actions that the system affords and encourages" (ibid. 119). Calleja calls this experiential narrative involvement 'alterbiography' (ibid. 115), namely the ongoing narrative generated by players' interaction with the

⁵¹ For an analysis on the political-economic reasons for this, cf. (Srauy 2019b; 2019a)

⁵² This dimension largely depends on the type of game and the interest of players, as for example playing solitaire does not necessarily involve a plot or certain characters, nor does all players care about the narrative of digital games with narratives when they are doing 'instrumental play' (Taylor 2003).

game environment. These two categories of pre-scripted narrative and alterbiography are not mutually exclusive and are able to complement each other.

On a micro-level, involvement via prescripted narratives is seen in traditional singleplayer historical digital games such as Battlefield V or the aforementioned Call of Duty WWII. Here, players progress through a linear sequence of events that contextualize player performances with plot exposition via cutscenes and character dialogue. The narrative is already set in stone in advance and thus player actions have little effect on the overall plot or how characters react and respond – i.e. the framing narrative element of the game system is rigid and largely predetermined. In a sense, the procedural and narrative aspects of such historical games convey an already pre-defined narrative with specific themes that rigidly frame the contingent player performances. In this way, certain narrative filters are applied to the memory-making potentials of games in such a way that they conform to the dominant hegemonic ideas in the contexts of production they derive from (Pötzsch and Šisler 2019; Hammar 2017a). In a different way, Attentat 1942 uses meta-historical commentary via video interviews with fictional survivors of the Nazi occupation of Czechoslovakia in the 1940's. Here, each interviewee destabilizes the central tension of the game's narrative, where someone was responsible for ratting out the player-character's grandfather to the Nazi army. By players having to navigate the hypertextual Attentat 1942, the game opens up for different experiential memory-making potentials via its narrative involvement, while the pre-scripted narrative in mainstream war games like Battlefield V or Call of Duty WWII rigidly constrain players in a fixed historical narrative that usually reproduces dominant views on the events (cf. Shaw 2015).

That said, the alterbiography of the latter type of war games offers a flexibility in terms of spatial action that a game like Attentat 1942 cannot match. Whilst this kind of narrative involvement may initially seem superficial, games like Battlefield V or Call of Duty WWII allow for the emergent creation of narratives such as desperate last stands, brave assaults, heroic actions in the dialectic movement between player and game – precisely the kind of mnemonic activity that tends to make up the collective memory of war. Thus, such games allow us to reenact the themes, even in multiplayer, that saturate collective memory. Similarly, players of games like *This War of Mine* are able to reconfigure the events of the game based on their own actions. Players are tasked with moral choices that, albeit simplistically, allow players to decide between for example stealing supplies from an elderly defenseless couple, or intervene in a potential sexual assault by a male soldier. These instances of framed player performances affirm how the experiential narrative, i.e. the dynamic between player and system, allows for a type of narrative involvement that generates different memory-making potentials based on how players choose to perform within that frame. As such, different forms of memory-making are generated in the 'to-and-fro movement' between player and game, most noticeably in more dynamic cases like This War of Mine, while more rigid ones constrain the type of narrative involvement afforded to players. On a macro-level, such forms of narrative involvement feeds into larger discourses on collective memory, where for instance, some Czech online communities saw Attentat 1942's narrative as promoting ideological content fit for the authoritarian Eastern bloc regime before the end of the Cold War. Other online commentators lambasted the game's inclusion of Roma and Sudeten-German memories and thereby treated the game's narrative as "a relevant historical articulation" (Pötzsch and Šisler 2019, 21). As such, macro-narrative involvement in historical digital games share many similarities when they are discussed and negotiated in plurimedial constellations of cultural memory (Erll 2012).

Affective involvement

This dimension refers to the affective experiences relating to games where players are emotionally involved in and outside the game. Here I want to distinguish between affect and emotion. Affect refers to immediate and direct reactions to media such as games. Affective involvement refers to the unrationalized and uncontrolled bodily and sensational reaction, while emotional involvement refers the reflective and rationalized understanding of this affective reaction. Emotions are a narrativization of the unrationalized, and uncontrolled sensations we feel when being affectively involved in something. This distinction is important to keep in mind when considering the dimension of affective involvement because it accounts for the two different experiential modes of affect and emotion. Calleja argues that the cybernetic relation between player and machine in digital games enables a "cognitive, emotional, and kinaesthetic feedback loop" (Calleja 2011, 135) that impacts players' emotional moods. Game design, he argues, "is imbued with the rhetorical strategies of affect" (ibid., 136) that are either pre-designed by creators or arise from players' own individual interpretations of "in-game events and interactions with other players" (ibid.). Calleja states that the affective dimension can range from a soothing and relaxing sensorial experience from seeing a calming virtual landscape juxtaposed with relaxing music to a frantic adrenaline-filled competition with other players in an online multiplayer match. In games, the rhetorical strategies to elicit affect in players is also configured by "the performed practice of playing" (ibid. 136), i.e. people are playing games in their own material and social context and thus are predisposed differently when engaging a digital game. This also means that the affective involvement is not always predetermined by what designers want players to experience, but rather that involvement rests on the dialectic to-and-fro loop between player and game.

Affect and memory-making are also closely intertwined, as Allison Landsberg (2004, 2015) established with the term 'prosthetic memory'. She states that experiencing the past through an audiovisual medium like film generates affect in audiences that in turn forms a 'prosthetic affective limb' to the past. While prosthetic memory denotes our affective involvement with the past, the concept still retains a naïve understanding of mass culture and power hierarchies of consumption (Hammar, forthcoming). Digital games show this form of affective involvement across the way they are designed and how players negotiate and perform within their designed frames (Linderoth 2015). In digital games, the memory-making processes of affective involvement are seen once more in the first-person shooter genre, where game developers usually emphasize action and audiovisual spectacle. In the storming of the Normandy beaches in *Call of Duty 1* and *Medal of Honor: Allied Assault*, bombs and explosions surround the player, while machinegun fire and masculine yelling between American soldiers fill the soundscape. As such, these games very much become an endless chain of affective involvement that rests on ideologically conservative politics of war⁵³ and masculine image of history (Schut 2007, 223), where moments of critical reflection and contemplation are few and far between, if

-

⁵³ It should be noted that different forms of affect are utilized in these mainstream war games. For example, in the WWII games *Brothers in Arms* and *Company of Heroes*, both games attempt to establish a sense of pathos for the main American 'band of brothers' by showing their camaraderie and compassion for one another in the group. This rhetorical strategy often serves as a way to frame the games as objects of memorialization, which is important for establishing the games as legitimate uses of a relatively sensitive collective memory and therefore warding off potential critique.

not non-existent⁵⁴. The politics of war in this genre of games are rarely treated critically due to their constant emphasis on affective spectacle, thereby echoing the uncritical cultural memory of events like WWII seen in Hollywood cinema (Sturken 2008; Ehrenhaus 2001; Ramsay 2015). This means that the affective affordances in the micro-phase of such games are always framed in accordance with the dominant hegemony in mass-culture.

In contrast, the much smaller mobile game My Child Lebensborn (Sarepta Studio 2018) serves as a counter-example to these big-budget war games. The game "works like sort of historical Tamagotchi" (Parkin 2018) where players have to take care of an adopted lebensborn child in Norway – a child with a German father from the German occupation during WWII. While the game is simplistic in its audiovisual representation and affordances available to players, it nevertheless activates the affective involvement of players by having them care for a virtual child. The game enables players to care for the child such as repairing old clothes, feeding the child, conversing with her through text dialogue, or read a bedtime story before sleep. This fills up the child's hunger, hygiene, and happiness, but players are only able to do one of each thing two times a day. At one point in the game, the child is bullied in school by other Norwegian kids for being half-German. Here, many players felt immediately moved by the sad face of the virtual child character when he or she returned home from a hard day at school⁵⁵. There is a clear example of affective involvement, affectively and emotionally, when it comes to the memory-making of digital games, as seen in My Child Lebensborn. On a macro-level, players were also affected by the game's rhetorical strategy of claiming that it is 'based on true stories' from actual Norwegian lebensborn children, thereby invoking a documentary frame that imbues the game with perceived historical authenticity. The topic of this game has resulted in wider macroinvolving discussions in Norwegian national collective memory, where for instance, the prime minister Erna Solberg publicly apologized for and acknowledged the hardships that Norwegian lebensborn children faced in Norway following the end of the German occupation (Statsministerens kontor 2018; Brenden 2018). Affective involvement outside of the game work as the emotive quality of the larger discourses of cultural memory, but that in turn also frame the playing of such games and give their events affective meaning by providing a larger context. Thus, affect is seen in the momentto-moment gameplay in historical digital games that frames the emotional type of memory being made. Wider emotional rationalizations of this affect bleed into collective memory discourses on a macro-level.

Ludic involvement

The dimension of ludic involvement maps practices of play that strive towards fulfilling the goals or win conditions posited by the game system, the community, or players themselves (Calleja 2011, 147). Such ludic involvement is very much focused on the game system and using the rules and goals as a

-

⁵⁴ This rush to entertain players with spectacle derives from the production logics at play in the digital games industry. Here, developers are told that the first couple of minutes of a game are crucial in order to capture and maintain the attention of players, so they have to overwhelm the player with action and spectacle in order to avoid 'boring' the player. In turn, this production logic has a noticeable impact on how digital games (do not) take time to treat war and conflict.

⁵⁵ As one critic noted, "I grew more and more upset that such hurt and harm was coming to my digi-child. I was furious at the time – partly at the bullies and partly at the game for making me feel this way." (Sowden 2018). Another testified that his "feelings shift from sympathy to frustration, from control to anger" (Parkin 2018) based on uncontrollable injustices that the child faced.

way to become engaged with the game. As such, this dimension revolves around the dynamics between players, their choices, and system that Jeremiah McCall classifies as 'problem spaces' (McCall 2012). Problem spaces consists of (1) players with roles and goals generally contextualized in virtual space, (2) with choices and strategies they can implement in an effort to achieve their goals, (3) that result in outcomes of choices and strategies shaped by the affordances and constraints of a game's mechanical system. Games as historical problem spaces imply narratives that deal with historical incidents. Players can act within these frames and test out different historical outcomes, or they can disregard the historical dimensions of the problem space and simply opt for winning the game. Through this problem space, players are confronted with challenges and decision-making that, according to Calleja, function as the cornerstone of games as systems with goals and rewards (Juul 2005). Finally, the ludic involvement dimension highlights the importance of analyzing games beyond simply their surface and instead capture their complexity with how they can be configured by players themselves (Chapman 2012).

Ludic involvement can sometimes mean that players are more concerned with simply fulfilling the goals posited by the system without any much consideration to the representational elements. An example of this involvement is a player who simply wants to obtain the biggest and most lethal weapon in This War of Mine and so when faced with the moral choice of saving a civilian woman from sexual assault by a male soldier, such a player does not care about saving the virtual female character, but only about securing the assault rifle the soldier is carrying. Similarly, we can think of the strategy game *DEFCON* (Introversion Software 2007), where players have to decide how many cities across the world to launch nuclear weapons at and commit global genocide counted by the millions of lives lost. If a player is only concerned with obtaining the highest casualty rate in terms of pure raw numbers just as a form of "high score" in the game, then such a purely goal-oriented play would not take into account the diegetic meaning of these actions. This is something only really made possible by DEFCON's conceptual simulation style which abstracts both in terms of scale (i.e. moving mass-murder to macro scale at which individual experience becomes less visible) and in terms of visual representation (human lives reduced to numbers). However, ludic involvement can also include goal-oriented practices of play in conjunction with the meaning of player actions, Empire: Total War (Creative Assembly 2009) situates players in the 18th century colonial era as different nations, such as the United Kingdom, France, or India. In the moment-to-moment gameplay, players are able to control miniatures in the form of imperial armies across a world map as well as a battlefield. Moreover, the game's mechanical system (cf. Juul 2005; Aarseth and Calleja 2015) allow players to, for instance, play as an Indian imperial force that conquers 18th century Britain. On a macro-level, Souvik Mukherjee points out how some Indian players in online communities recounted the joy of virtually colonizing their former colonizer (Mukherjee 2015a). Simply put, Empire: Total War provide capabilities for players to produce multiple unpredictable, contingent variables and outcomes that many players find enjoyable and fascinating. This example illustrate the agency afforded to players that allows Indian players to play colonial history counterfactually that in turn is activated both in the moment-to-moment gameplay (controlling game pieces to conquer a virtual rendition of 18th century UK) to discourses outside the game (reporting on and sharing the ludic experience with others). Another example in Assassin's Creed: Freedom Cry (Ubisoft Québec 2013), one critic saw the game's choice to free enslaved Africans by paying the slavers (Hammar 2017b) as reproducing the same system of slavery, so he opted to always kill the slavers and free the Africans without ever paying any virtual currency in the game. This means that ludic involvement in terms of achieving a goal can also be affected by one's own moral and contextual position. Again, indeed ludic involvement can be

dependent on other forms of involvement both internal and external to the game - cf. Chapman's definition of configurative historical resonance earlier. As such, ludic involvement is the engagement with a system that motivates players to choose how to navigate the system via the game's posited goals, or socially agreed upon goals with others, or via one's own personally-posited goals, that in turn, determines how players choose to perform within the memory-making potentials of said game. This type of involvement results in a form of memory-making that prioritizes achieving goals as stipulated by the system or players' own personal background, i.e. historical resonance.

Memory, play, and games - implications for memory studies

Calleja's involvement model helps us understand how players engage with historical digital games. Analyzing practices of play and game forms allows us to take the situated context in which people play into account and better capture how historical digital games can motivate different ways of memory-making. Following Calleja's framework, these involvements can be mapped onto six different memory-making processes via play. Kinesthetically in the ways that their bodily and intentional agency is translated into the game itself that produces engaging pleasurable or frustrating experiences. Spatial involvement enables the use of virtual space in historical digital games to provide players a sense of inhabiting a historical, virtual space that connects to broader collective memory discourses. Narrative involvement helps players to play history via scripted and/or self-generated stories whose events and characters potentially motivate players to become involved in the past. Shared involvement refers to the human and non-human social interactions in and outside of digital games that contribute to memory-making. Players become emotionally involved in games via their rhetorical strategies of affect produced by the relation between player and game that in turn contributes to discourses on memory. Finally, ludic involvement refers to the engagement with rules and mechanics that playfully systematizes virtual experiences of the past that puts meaning in the background and instrumental play in the foreground. As such, in such cases of ludic involvement, the semiotic layer of historical digital games is more or less changed, thereby under-prioritizing any memory-making beyond the ludic⁵⁶.

The model can be used heuristically to capture and define the memory-making potentials that digital games give rise to. For example, applying the model to the competitive performances between players in multiplayer sessions of *Battlefield 1* (DICE 2017) could illuminate their shared and kinesthetic involvement via the game's fast-paced competition on historical WWI battlefields. Conversely, a slower and more cerebral historical game like *Attentat 1942* shows how players might be more involved on narrative and ludic dimensions. As such, my contribution allows us to better hone in on how players become involved when remembering the past via historical digital games. It makes it easier to identify how players specifically are engaged with forming various historical beliefs when they activate the memory-making potentials in historical digital games. As such, historical digital games consist of a range of different avenues for generating meaning potentials latent to the game form. This form provides a medial framing of practices of play through which players are experientially involved, which I have shown through the model's six different dimensions.

⁵⁶ Of course this ludic involvement's impact on memory-making can be discussed further. I.e. would it not be possible to have some form of residue of knowledge about the past even if you play a historical digital game solely as a ludic, non-semiotic experience? Would the instrumental playing of the invasion of Normandy in WWII in *Company of Heroes* not also leave some form of mnemonic configuration?

As argued in the beginning, memory studies has by and large not engaged with play as a key part of culture and how play and games can factor into our remembrance of the past. While practices of play can take place in numerous contexts, I have in this paper focused on the play of historical digital games. While this cultural form may be considered crude by some, digital games nevertheless illustrate the medial framing that many people-young, adult, or old – engage with and play through and through which they receive ideas and beliefs about actual historical events (Chapman 2016; Fullerton 2008). Yet historical digital games are just one form through which people play with the past, where other cultural forms and practices such as sports, carnivals, analogue games, playful reenactments, all demand scholarly scrutiny. Calleja's involvement model suggests one particular approach to capturing this complexity in the playing of historical digital games. As I have illustrated, players are activated in a myriad of ways in a dialectic to-and-fro movement between player and game, where they are engaged kinesthetically, narratively, ludically, affectively, spatially, and socially, in and outside of the game. My suggestion also affirms the tension between developer and player, where on one hand, developers frame many of the forms of involvement taking place in digital games; while on the other hand, players engage and perform within these frames according to their own situated contexts. Overall, the main take-away from this article as such is to contribute to the initial excavation of how people play with the past. Play is an essential part of culture and scholars therefore need to take the unserious seriously. As Chapman (2016) argues, the invariance in historical digital games allows for a reenactment of audiovisual exploratory skills about the past. This activity of playing with affordances is concerned with the making and negotiation of collective memory in and outside of digital games.

Conclusion

In sum, this article has made the claim that play and games matter in cultural memory. First I established the role of play in the formation of cultural memory. I outlined how play creates culture and how the dynamic movement between player and game appears dialectically. I then introduced Calleja's player involvement model to account for how players come to be engaged with the past when playing historical digital games. I accounted for the involvement model's six different dimensions and exemplified each form of involvement with cases of historical digital games and how people played them or discussed them outside of the game. As such, my contribution has provided an example of how to apply concrete methodological tool in order to analyze the experiential phenomena associated with playing the past. When scholars within memory studies work to understand how memory-making and games are inter-related, the involvement model helps structure an analysis of player experience of historical digital games. Further research into how players activate and negotiate when playing historical digital games could be conducted via empirical methods, such as player interviews, autoethnograpies, focus group interviews, player diaries, and quantitative measuring of player behavior in various historical digital games. This data could then compliment formal analysis of specific historical digital games in order to advance knowledge on the role of games and play in cultural memory.

References

11bit Studios. 2014. *This War of Mine*. PC. 2015, Inc. 2002. *Medal of Honor Allied Assault*. PC. EA.

- Aarseth, Espen. 2004. Genre Trouble: Narrativism and the Art of Simulation, in "First Person: New Media as Story, Performance and Game", Ed. Wardrip-Furin and Harrigan. Cambridge: MIT Press.
- Aarseth, Espen, and Gordon Calleja. 2015. "The Word Game: The Ontology of an Undefinable Object." In *Game Studies—Humanities*, 1–8. Pacific Grove, CA, USA. http://www.fdg2015.org/papers/fdg2015_paper_51.pdf.
- Apperley, Tom. 2010. *Gaming Rhythms: Play and Counterplay from the Situated to the Global*. Theory on Demand 6. Amsterdam: Institute of Network Cultures.
- ——. 2018. "Counterfactual Communities: Strategy Games, Paratexts and the Player's Experience of History." *Open Library of Humanities* 4 (1): 15. https://doi.org/10.16995/olh.286.
- Assmann, Aleida. 2011. *Cultural Memory and Western Civilization: Functions, Media, Archives*. Cambridge University Press.
- Avedon, E. M. 1971. "The Structural Elements of Games." In *The Study of Games*, edited by B. Sutton-Smith and E. M. Avedon, 419–426. New York, NY: J. Wiley.
- Bartle, Richard A. 1996. "Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs." Article. 1996. http://www.mud.co.uk/richard/hcds.htm.
- Bateson, Gregory. 1955. "A Theory of Play and Fantasy." *Psychiatric Research Reports* 2 (39): 39–51.
- Bogost, Ian. 2007. *Persuasive Games: The Expressive Power of Videogames*. Cambridge, MA; London, England: The MIT Press.
- Boluk, Stephanie, and Patrick LeMieux. 2017. *Metagaming: Playing, Competing, Spectating, Cheating, Trading, Making, and Breaking Videogames*. Minneapolis: Univ Of Minnesota Press.
- Brenden, Jo Espen. 2018. "Erna fikk prøve sterkt Hamar-spill om lebensborn." www.hamardagblad.no. September 4, 2018. https://www.hamar-dagblad.no/hamar/nyheter/kultur-og-underholdning/erna-fikk-prove-sterkt-hamar-spill-om-lebensborn/s/5-80-51233?ns_campaign=article&ns_mchannel=recommend_button&ns_source=facebook&ns_linkname=facebook&ns_fee=0.
- Burke, Ritchard J. 1988. "Taking Play Seriously." In *Philosophic Inquiry in Sport*, edited by Williams John Morgan and Klaus V. Meier, 159–67. Urbana: Human Kinetics Publishers.
- Caillois, Roger. 1961. Man, Play, and Games. University of Illinois Press.
- Calleja, Gordon. 2011. *In-Game: From Immersion to Incorporation*. Cambridge, Massachusetts: MIT Press.
- Carlisle, Rodney P. 2009. Encyclopedia of Play in Today's Society. Vol. 1. Sage.
- Chapman, Adam. 2012. "Privileging Form Over Content: Analysing Historical Videogames." Edited by Daniel Cohen, Joan Fragaszy Troyano, Sasha Hoffman, and Jeri Wieringa. *Journal of Digital Humanities* 1 (2): 42–46.
- ———. 2016. Digital Games as History: How Videogames Represent the Past and Offer Access to Historical Practice. New York, NY: Routledge.
- ———. 2019. "The Histories of/in Games." *ROMchip* 1 (1). http://www.romchip.org/index.php/romchip-journal/article/view/70.
- Charles Games. 2017. Attentat 1942. Charles University.
- Core Design. 1996. Tomb Raider. PC. Eidos Interactive.
- Creative Assembly. 2009. Empire: Total War. PC. SEGA.
- DICE. 2002. Battlefield 1942. PC. Electronic Arts.
- ——. 2017. Battlefield 1. PC. Battlefield. EA.
- Dutceac Segesten, Anamaria, and Jenny Wüstenberg. 2016. "Memory Studies: The State of an Emergent Field." *Memory Studies*, June, 1750698016655394. https://doi.org/10.1177/1750698016655394.
- Ehrenhaus, Peter. 2001. "Why We Fought: Holocaust Memory in Spielberg's Saving Private Ryan." *Critical Studies in Media Communication* 18 (3): 321–37. https://doi.org/10.1080/07393180128089.
- Erll, Astrid. 2012. "War, Film and Collective Memory: Plurimedial Constellations." *Journal of Scandinavian Cinema* 2 (3).

- Erll, Astrid, Ansgar Nünning, and Sara B. Young. 2010. A Companion to Cultural Memory Studies: An International and Interdisciplinary Handbook. Berlin: Walter de Gruyter.
- Erll, Astrid, and Ann Rigney. 2009. "Introduction: Cultural Memory and Its Dynamics." In *Mediation, Remediation, and the Dynamics of Cultural Memory*, edited by Astrid Erll and Ann Rigney, 1–14. Berlin / New York: Walter de Gruyter.
- Fagen, Robert. 1981. Animal Play Behavior. Oxford University Press.
- Ford, Dom. 2016. "EXplore, EXpand, EXploit, EXterminate': Affective Writing of Postcolonial History and Education in Civilization V." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/ford.
- Frank, Anders. 2014. "Gamer Mode: Identifying and Managing Unwanted Behaviour in Military Educational Wargaming." PhD Thesis, KTH Royal Institute of Technology.
- Fullerton, Tracy. 2008. "Documentary Games: Putting the Player in the Path of History." In *Playing the Past History and Nostalgia in Video Games*, edited by Zach Whalen and Laurie N Taylor. Nashville: Vanderbilt University Press.
- Gadamer, Hans-Georg. 1993. *Truth and Method*. Translated by Joel Weinsheimer and Donald G. M Marshall. New York: Continuum.
- Galloway, Alexander R. 2006. *Gaming: Essays on Algorithmic Culture*. Electronic Mediations. Minnesota / London: University of Minnesota Press.
- Garde-Hansen, Joanne. 2011. Media and Memory. Edinburgh: Edinburgh University Press.
- Giddens, Anthony. 1984. *The Constitution of Society: Outline of the Theory of Structuration*. Cambridge: Polity Press.
- Hammar, Emil Lundedal. 2016. "Digitale slavar av historiske traume." Translated by Åsne Øysteinsdotter Høgetveit. *Digitale Liv*, August 27, 2016. http://digitaleliv.no/digitale-slaver/.
- ——. 2017a. "The Political Economy of Historical Digital Games." Edited by Philip Lee. *Media Development* LXIV (4): 25–29.
- ——. 2017b. "Counter-Hegemonic Commemorative Play: Marginalized Pasts and the Politics of Memory in the Digital Game Assassin's Creed: Freedom Cry." *Rethinking History* 21 (3): 372–95. https://doi.org/10.1080/13642529.2016.1256622.
- Harrer, Sabine. 2018. "Casual Empire: Video Games as Neocolonial Praxis." *Open Library of Humanities* 4 (1): 5. https://doi.org/10.16995/olh.210.
- Harvey, Colin B. 2015. "Remembering to Play/Playing to Remember: Transmedial and Intramedial Memory in Games of Nonviolent Struggle." In *Cultural Memories of Nonviolent Struggles: Powerful Times*, edited by Anna Reading and Tamar Katriel, 226–44. Palgrave Macmillan Memory Studies. London: Palgrave Macmillan UK. https://doi.org/10.1057/9781137032720_12.
- Henricks, Thomas S. 2015. *Play and the Human Condition*. 1st Edition edition. Urbana, Chicago, and Springfield: University of Illinois Press.
- Höglund, Johan. 2008. "Electronic Empire: Orientalism Revisited in the Military Shooter." *Game Studies* 8 (1). http://gamestudies.org/0801/articles/hoeglund.
- Hughes, L. 1983. "Beyond the Rules of the Game, Why Are Rooie Rules Nice?" In *The World of Play*, edited by Frank E. Manning, 187–99. West Point, NY: Human Kinetics Pub.
- Huizinga, Johan. 1971. *Homo Ludens: A Study of the Play-Element in Culture*. Boston, Massachuetts: Beacon Press.
- Infinity Ward. 2004. Call of Duty 1. PC. Activision.
- Introversion Software. 2007. DEFCON. Encore Software.
- Juul, Jesper. 2005. *Half-Real: Video Games between Real Rules and Fictional Worlds*. Cambridge, Mass.; London: The MIT Press.
- Kapell, Matthew Wilhelm, and Andrew B. R. Elliott. 2013. *Playing with the Past: Digital Games and the Simulation of History*. New York / London: Bloomsbury Publishing USA.
- Lammes, Sybille. 2010. "Postcolonial Playgrounds: Games and Postcolonial Culture." *Eludamos. Journal for Computer Game Culture* 4 (1): 1–6.
- Landsberg, Alison. 2004. Prosthetic Memory: The Transformation of American Remembrance in the Age of Mass Culture. Columbia University Press.
- ———. 2015. Engaging the Past: Mass Culture and the Production of Historical Knowledge. New York: Columbia University Press.

- Linderoth, Jonas. 2015. "Creating Stories for a Composite Form: Video Game Design as Frame Orchestration." *Journal of Gaming & Virtual Worlds* 7 (3): 279–298.
- Magnet, Shoshana. 2006. "Playing at Colonization Interpreting Imaginary Landscapes in the Video Game Tropico." *Journal of Communication Inquiry* 30 (2): 142–62. https://doi.org/10.1177/0196859905285320.
- McCall, Jeremiah. 2012. "Historical Simulations as Problem Spaces: Criticism and Classroom Use." Journal of Digital Humanities. June 26, 2012. http://journalofdigitalhumanities.org/1-2/historical-simulations-as-problem-spaces-by-jeremiah-mccall/.
- Mir, Rebecca, and Trevor Owens. 2013. "Modeling Indigenous Peoples: Unpacking Ideology in Sid Meier's Colonization." In *Playing with the Past: Digital Games and the Simulation of History*, edited by Matthew Kapell and Andrew B. R. Elliott, 91–106. New York / London: Bloomsbury Publishing USA.
- MPS Labs. 1991. Civilization. MS-DOS. Microprose.
- Mukherjee, Souvik. 2015a. "The Playing Fields of Empire: Empire and Spatiality in Video Games." *Journal of Gaming & Virtual Worlds* 7 (3): 299–315.
- ———. 2015b. *Video Games and Storytelling Reading Games and Playing Books*. Palgrave Macmillan.
- Pajitnov, Alexey, and Vladimir Pokhilko. 1984. Tetris. Commodore 64.
- Parkin, Simon. 2018. "My Child Lebensborn Review Could You Raise a Nazi Baby?" *The Guardian*, June 9, 2018, sec. Games. https://www.theguardian.com/games/2018/jun/09/my-child-lebensborn-review.
- Pötzsch, Holger. 2017. "Selective Realism: Filtering Experiences of War and Violence in First- and Third-Person Shooters." *Games and Culture* 12 (2): 156–78. https://doi.org/10.1177/1555412015587802.
- ———. 2019a. "From a New Seeing to a New Acting: Viktor Shklovsky's Ostranenie and Analyses of Games and Play." In *Viktor Shklovsky's Heritage in Literature, Art and Philosophy*, edited by Howard Mancing and Gratchev Slav. Lanham: Rowman & Littlefield.
- ———. 2019b. "Positioning Players as Political Subjects: Forms of Estrangement and the Presentation of War in This War of Mine and Spec Ops: The Line." In War Game: Memory, Militarism, and the Subject of Play, edited by Phil Hammond and Holger Pötzsch, 241–57. New York: Bloomsbury Academic.
- Pötzsch, Holger, and Vít Šisler. 2019. "Playing Cultural Memory: Framing History in Call of Duty: Black Ops and Czechoslovakia 38-89: Assassination." *Games and Culture* 14 (1): 3–25. https://doi.org/10.1177/1555412016638603.
- Raessens, Joost. 2006. "Playful Identities, or the Ludification of Culture." *Games and Culture* 1 (1): 52–57. https://doi.org/10.1177/1555412005281779.
- Ramsay, Debra. 2015. American Media and the Memory of World War II. Routledge.
- Reinhard, Andrew. 2018. *Archaeogaming: An Introduction to Archaeology in and of Video Games*. Oxford: Berghahn Books.
- Relic Entertainment. 2013. Company of Heroes 2. SEGA.
- Rigney, Ann. 2016. "Cultural Memory Studies Mediation, Narrative, and the Aesthetic." In *Routledge International Handbook of Memory Studies*, edited by Anna Lisa Tota and Trever Hagen, 65–76. New York: Routledge.
- Sarepta Studio. 2018. My Child Lebensborn. Android.
- Schut, Kevin. 2007. "Strategic Simulations and Our Past The Bias of Computer Games in the Presentation of History." *Games and Culture* 2 (3): 213–235.
- Shaw, Adrienne. 2015. "The Tyranny of Realism: Historical Accuracy and Politics of Representation in Assassin's Creed III." *Loading...* 9 (14). http://journals.sfu.ca/loading/index.php/loading/article/view/157.
- Sicart, Miguel. 2011. "Against Procedurality." *Game Studies* 11 (3). http://gamestudies.org/1103/articles/sicart_ap.
- Šisler, Vít. 2008. "Digital Arabs Representation in Video Games." *European Journal of Cultural Studies* 11 (2): 203–20. https://doi.org/10.1177/1367549407088333.
- Smale, Stephanie de. 2019a. "Ludic Memory Networks: Following Translations and Circulations of War Memory in Digital Popular Culture." PhD Thesis, University Utrecht.

- ———. 2019b. "Memory in the Margins: The Connecting and Colliding of Vernacular War Memories." *Media, War & Conflict*, February, 1750635219828772. https://doi.org/10.1177/1750635219828772.
- Smale, Stephanie de, Martijn J. L. Kors, and Alyea M. Sandovar. 2017. "The Case of This War of Mine: A Production Studies Perspective on Moral Game Design." *Games and Culture*, August. https://doi.org/10.1177/1555412017725996.
- Sowden, Emily. 2018. "My Child Lebensborn Review A Digital Pet You Want to Protect from the World." Pocketgamer. May 30, 2018. https://www.pocketgamer.com/articles/077635/my-child-lebensborn-review-a-digital-pet-you-want-to-protect-from-the-world/.
- Spielberg, Steven. 1998. Saving Private Ryan. http://www.imdb.com/title/tt0120815/.
- Srauy, Sam. 2019a. "Precarity and Why Indie Game Developers Can't Save Us from Racism." *Television & New Media*, May, 1527476419851081. https://doi.org/10.1177/1527476419851081.
- ———. 2019b. "Professional Norms and Race in the North American Video Game Industry." *Games and Culture* 14 (5): 478–97. https://doi.org/10.1177/1555412017708936.
- Statsministerens kontor. 2018. "Offisiell unnskyldning til «tyskerjentene»." Nyhet. Regjeringen.no. October 17, 2018. https://www.regjeringen.no/no/aktuelt/offisiell-unnskyldning-til-tyskerjentene/id2616004/.
- Stenros, Jaakko. 2015. "Playfulness, Play, and Games: A Constructionist Ludology Approach." Tampere: Tampere University.
- Stenros, Jaakko, and Annika Waern. 2011. "Games as Activity: Correcting the Digital Fallacy." In *Videogame Studies: Concepts, Cultures and Communication*. Oxford: Inter-Disciplinary Press.
- Sterczewski, Piotr. 2016. "This Uprising of Mine: Game Conventions, Cultural Memory and Civilian Experience of War in Polish Games." *Game Studies* 16 (2). http://gamestudies.org/1602/articles/sterczewski.
- Sturken, Marita. 2008. "Memory, Consumerism and Media: Reflections on the Emergence of the Field." *Memory Studies* 1 (1): 73–78. https://doi.org/10.1177/1750698007083890.
- Sutton-Smith, Brian. 1997. *The Ambiguity of Play*. Cambridge, MA; London, England: Harvard University Press.
- Taylor, T. L. 2003. "Power Games Just Want to Have Fun?: Instrumental Play in a MMOG." In *DiGRA Conference*.
- Treyarch. 2010. Call of Duty: Black Ops. PC. Activision.
- Ubisoft Québec. 2013. Assassin's Creed: Freedom Cry. PC. Ubisoft, Inc.
- Uricchio, William. 2005. "Simulation, History, and Computer Games." In *Handbook of Computer Game Studies*, edited by Joost Raessens and Jeffrey Goldstein, 327–338. Cambridge, Mass.; London: MIT Press.
- Wertsch, James V. 2002. Voices of Collective Remembering. Cambridge University Press.
- Zimmerman, Eric, and Heather Chaplin. 2013. "Manifesto: The 21st Century Will Be Defined By Games." Kotaku. September 9, 2013. https://kotaku.com/manifesto-the-21st-century-will-bedefined-by-games-1275355204.

Part III Appendix

UIT THE ARCTIC UNIVERSITY OF NORWAY Letter of invitation

HSL / IKL / UIT

Date: XX.XX.2016

Exempt from public disclosure: offl. §

13,1 jf. fvl. § 13,1 nr. 1

Letter of invitation to interview

Dear

I am writing to you concerning a possible interview in relation to my PhD research project for the University of Tromsø in Norway. I am currently looking into interviewing people about the topic of how history and the past is depicted in video games in relation to perspectives, identities, and experiences that might be excluded, marginalized or made dominant. I want to know more about your thoughts and ideas related to this particular topic and I think that your participation and input would be highly appreciated. Your input will contribute with great insight into the different aspects of developing and playing video games when it comes to considerations towards depicting the past in video games. The interview is entirely confidential between you and I and it is always possible to opt out at any time. I will be the only person with any access to the interview and it will be anonymized immediately.

If you are interested, we can set up a location, date, and time where we meet. If you want, I can forward you more detailed information about the research project.

Thanks in advance,

Sincerely,

Emil Hammar PhD Candidate

Emil.hammar@uit.no +47 77 64 34 14

Interview guide

Contents

ntroduction		
Selection process of interviewees		
General guidelines	182	
1. Preceding the interview	182	
2. Initial questions and building of rapport	182	
3. During the interview	182	
4. After the interview	182	
Interview Question Guide	182	

Introduction

This document details the interview form and process for the research project "Understanding the role of digital games in memory politics pertaining to conflicts with special emphasis on marginalized groups - Towards a practical and conceptual design framework" for the department of culture & literature at the University of Tromsø, Norway under the supervision of associate professor Holger Pötzsch. The research project is designed to explore and construct a theoretical and practical design framework, which highlights and draws out normative implications of memory politics pertaining to conflicts in contemporary digital games. This purpose will be done in relation to (1) the ethical aspects of memory politics in the mediation of conflicts in digital games and (2) the involvement of marginalized groups demarcated by qualifiers of asymmetrical and intersectional oppression based on ethnicity, nationality, gender, class, sexuality, and race in relation to the dominant group by the same signifiers. I do so by applying the state-of-the-art research in the field of game studies, cultural memory studies, cultural studies, and political philosophy in order to analyze and understand how memory politics pertaining to conflicts are mediated in digital games with special emphasis on marginalized groups. In turn, this allows me to draw out any ethical aspects in relation to the proposed research area and its phenomena.

The interview style adopted in this project will primarily be qualitative in a semi-structured process. This particular style is adopted in order to be attentive to the context of the interview situation and the interviewee's own individual sphere of knowledge and experience. The qualitative method allows for going into depth with a topic based on a certain narrow set of personal perspectives by the interviewees, whose perspective and viewpoint of the topic of I seek to understand. In addition, the semi-structured process allows for flexibility in case the interviewees uncover areas of knowledge that are unspecific to the questionnaire, so that the conversation will not be too rigid to constrain the statements by the interviewees.

In addition to individual semi-structured interviews, I also aim to employ methods related to focus group interviews and if the time allows for it, audience reception studies where I observe players or spectators of digital games. The focus group interviews and audience reception studies will be relegated to chapter 2 and 3 of this interview guide.

Selection process of interviewees

- 1. E-mail lists and personal contact (social media as well?)
- 2. developers associated with games and history
- 3. Groups and associations related to marginalization
- 4. Getting in touch with people who know people

General guidelines

1. Preceding the interview

- Who is the interviewee and do we speak the same language relevancy
- Set time for the interview
- Create trust and comfort so that the interviewee feels safe. A safe space.
- Open question format
- Data confidentiality and analysis

2. Initial questions and building of rapport

- Meeting & Introduction who I am, who are they
- Show interest in their background
- Stating the purpose of the interview and the project
- How long the interview will last
- How the answers will be used
- Privacy and data security

3. During the interview

- Introduce the interview with a question to describe or explain about the subject at hand.
- Focus on the broader subject
- Who, what, how, where, why, when
- Hold breaks and provide breathing space for the informant
- Ask thoroughly into the subject even if I appear naïve or uninformed. Be ready, attentive, quiet, comfortable, and remembering.

4. After the interview

- Summarize the main points
- Ask if there is anything relevant that the person might want to talk about
- Thankful and perhaps getting in touch again later

Interview Question Guide (semi-structured)

Themes	Questions
Briefing and presentation	 Introduction of myself, the project, and the purpose of the interview Making things comfortable and safe Data security and privacy Process + Procedure of the interview
Preliminary questions	 Who are you What do you do? What is your function in relation to games? Do you play, consume, produce, criticize, spectate, analyze, not follow?

	Make this relate to my project
If player	 What typically characterizes the genres you play? Platforms? When and where? What role do games play in your consumption of entertainment media? Why do you play games? What piques your interest? Is there anything you find lacking or that could be improved? Are you interested in games depicting the past? Any typical settings? Do you consider how the past is depicted in games? Anything you might not consider? How and why do games depicting the past (not) interest you? Any relation to it? Any settings or characters you think would be interesting to play as? Any settings or characters from other media that would interest you? Any settings or characters that are excluded? Included? Any actions or mechanics you would like to try out? What about existing or current actions or mechanics in games depicting the past? Do you recall a game depicting the past when being reminded of the historical period? If so, how? If not, do you recall something else? Does being able to "play" in a historical setting matter to you? Is there anything you find interesting in this regard? What about in relation to your understanding of the past? How would you feel about playing someone or something different than the usual type of games? Or do you already seek out such games? Do you reflect on who you play as, what perspective is being used for the game, and so on? Do you care who and what you play? Do you notice? Do you follow and participate in conversations about games and history? Sensitive question: What is your opinion on representation and inclusion? Does it matter to you personally? How? Why? Any personal examples?
If producer	 What is your position or role in game development? What are your interests? Dreams or hopes? Personal and collective? What goes into your production process when considering history? How do creative decisions get made? How do you factor into this? How much does hierarchy mean? What considerations go into the various stages of production? mechanics, character, setting, time period, aesthetics, narrative, perspectives? How much does economics / financial aspects factor into the creative decisions? Any examples? What sources do you use? How much does so-called historical accuracy matter? What status do non-historical / factual media have? Does the media landscape of representation of settings and characters factor into your decisions? What about play testing and focus group testing? How are they employed into the production process? Do play testing and focus testing have any effect on the creative decisions regarding history, narrative, perspective, etc.? How do you see yourself in the relationship between the developer, media in general, and society overall? Any thoughts on this relationship? Any experiences or thoughts on representation and inclusion in general? Any excluded or left-out perspectives that would be interesting to explore or represent? How different can games be if they also have to make money? Is there a balance between going against the norm and making a profit?
If critic / analyst	 What perspectives do you consider in your understanding of games depicting the past? How much does different representations matter to you in your analysis? Is it a matter of balance? Do you step out of your comfort zone to criticize? Notice any tendencies? Do you prefer the conventional over the non-conventional? Any opinions? How does history matter in your analysis? Does it change your opinion, method, approach, and so forth?

If spectator	 What are your experiences with games? How do you understand them? Why do you view and watch them? Any thing that stands out?
If non-follower	 What is your opinion on games? The culture? The experiences? What are the examples that you have noticed? Any tendencies? In comparison to other entertainment media? Anything that might make you more interested in knowing more about them? Perhaps even playing them?
General questions	 Personal questions in relation to digital games, history, marginalization Your experiences and thoughts Can you think of any examples? Does it matter?
Debriefing	 Anything you can think of that you want to add? Anything that I missed? Anything specific you want to elaborate on? Other people / contacts to get in touch with? Thank you for your time, it was highly appreciated. I'll be in touch in case anything comes up and feel free to contact me

Data privacy & security

The following conditions and requirements are met

- 1. Confidentiality
- 2. Interviewees will have to sign a waiver
- 3. The data will be stored securely physically and digitally with only me having access to it.
- 4. The data will be treated and analyze only by me
- 5. I am responsible

The informant is required to be informed about

- The institution responsible for data treatment
- As the only researcher, my contact information
- Purpose of the project and what the information is going to be used for.
- That the interview is voluntary and it is possible to opt out at any time
- That when the project has ended and what will happen with the information deletion, anonymization or further storage
- Introduction with explicit permission to interview the person
- What methods will be used to gather information
- That the data will be treated confidentially
- Who has access to personal data
- That the project has been submitted to the NSD
- Who is financing the project
- Whether or not the information will be handed out to others (it won't)
- Duration of storage of the information

Consent form

Consent form

A.

Informed Consent for X, Individual Interview:

Investigator: Emil Hammar (office TEO-H4 4.358, e-mail: emil.hammar@uit.no)

Supervisor: Holger Pötzsch (office SVHUM E-1013, e-mail: holger.potzsch@uit.no)

Research project:

Thank you very much for your participation in my research! I conducted an interview with you about your experience with depicting the historical past in digital games. If you have any concerns about this interview or the consent process that you would rather discuss with someone besides me, I have provided Professor Pötzsch's contact information above, and he can address any questions you may have. If there are any terms in the following email you are unsure of, or if you have any questions at all, please don't hesitate to contact me via email, Facebook, or phone (+45 28 89 20 99).

Before the interview, we discussed that this research was for use in my project, that it would be kept anonymous, and that you were free to end your participation at any time for any reason. I am sending you this expanded consent form to make sure all the terms of your participation are clear and to make sure you are aware of any risk you might be exposed to by consenting. Please keep in mind that you are free to withdraw your consent at any time.

Purpose of the Research: I am conducting qualitative research to investigate the topic of how digital games depict the historical past with an emphasis on perspectives and experiences left out. In addition to your interview, I have conducted an interview with other professional game developers. This research has been undertaken in relation to my PhD research project at the Arctic University of Tromsø, Norway, and may serve as exploratory or background work for future research.

Research Format: I conducted an individual interview with you on your experience with digital games depicting the past as a player.

Selection: The participant was contacted via e-mails; the participant volunteered to participate, and may choose to end their participation at any time.

Recording: All audio of the interview was recorded and stored in .mp3 format for review and partial transcription with only the investigator having access to it.

Duration: The interview took a little more than 60 minutes.

Risks: Despite precautions taken by the interviewer, there is always a small chance that data will be disclosed to third parties through theft or loss of physical property or failures in computer security. Other participants have not been asked to keep their involvement confidential, though they do not have access to a recording. Participants are not subject to more risk than they might expect in the course of their everyday life.

Benefits: Participants may benefit from reflecting on their experience in game playing practices.

Reimbursement: No reimbursement is offered to participate in this research.

Confidentiality: The write-up and analysis of this interview will be submitted in accordance with the guidelines provided by University of Tromsø. All names will rendered anonymous in the final report. Participants have not been asked to keep their participation confidential. The Norwegian Centre for Research Data have also given their approval of the research.

Right to Refuse or Withdraw: Just to be clear, you are under no obligation to continue to participate, and may withdraw at any time, at which point record of your participation will be destroyed.

CONSENT:

If you are willing to provide consent to participate in this study, please respond to this email with the following statement, followed by your full name and today's date.

"I have read the previous information contained in this consent document, and I voluntary consent to be a participant in this study."

Ex.

I have read the previous information contained in the consent document, and I voluntary consent to be a participant in this study.

Emil Lundedal Hammar

3/13/2016

Please format your response exactly in this manner.

Thank you very much for your time and participation.

Sincerely,

Emil Lundedal Hammar

