

STEPHANIE DE SMALE

**Following
translations
and circulations
of war memory
in digital
popular
culture**

**LUDIC
MEMORY
NETWORKS**

SD 49

Ludic Memory Networks

Following Translations and Circulations of
War Memory in Digital Popular Culture

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Ludic Memory Networks
Following Translations and Circulations of
War Memory in Digital Popular Culture

Spelen met het Verleden: Hoe Oorlogsherinneringen Circuleren in
Digitale Populaire Cultuur

(met een samenvatting in het Nederlands)

Proefschrift

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geboren op 22 juli 1987 te Arnhem

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Throughout my career, I always felt I was between worlds – one foot in academia, one foot out. Perhaps this is because my academic life started later in life, and why I am now “dipping my toe” in the waters of public administration. Looking back, yet not apparent to me then, the topic of translations has always been a very personal one.

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de Smale, S., Kors, M. J. L., & Sandovar, A. M. (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>

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LIST OF ABBREVIATIONS

ANT – Actor-Network Theory

AoIR – Association of Internet Researchers

API – Application Programming Interface

BiH – Bosnia and Herzegovina

CRA – Central Regulatory Agency Bosnia and Herzegovina

DMI – Digital Methods Initiative

FBiH – The Federation of Bosnia and Herzegovina

GDPR – EU General Data Protection Regulation

ICTY – International Criminal Tribunal for the Former Yugoslavia

OSCE – Organization for Security and Co-operation in Europe

OHR – Office of the High Representative

ODHIR – OSCE Office for Democratic Institutions and Human Rights

RS – Republika Srpska

SDA – Party of Democratic Action

SFRY – Socialist Federal Republic of Yugoslavia

TWoM – This War of Mine

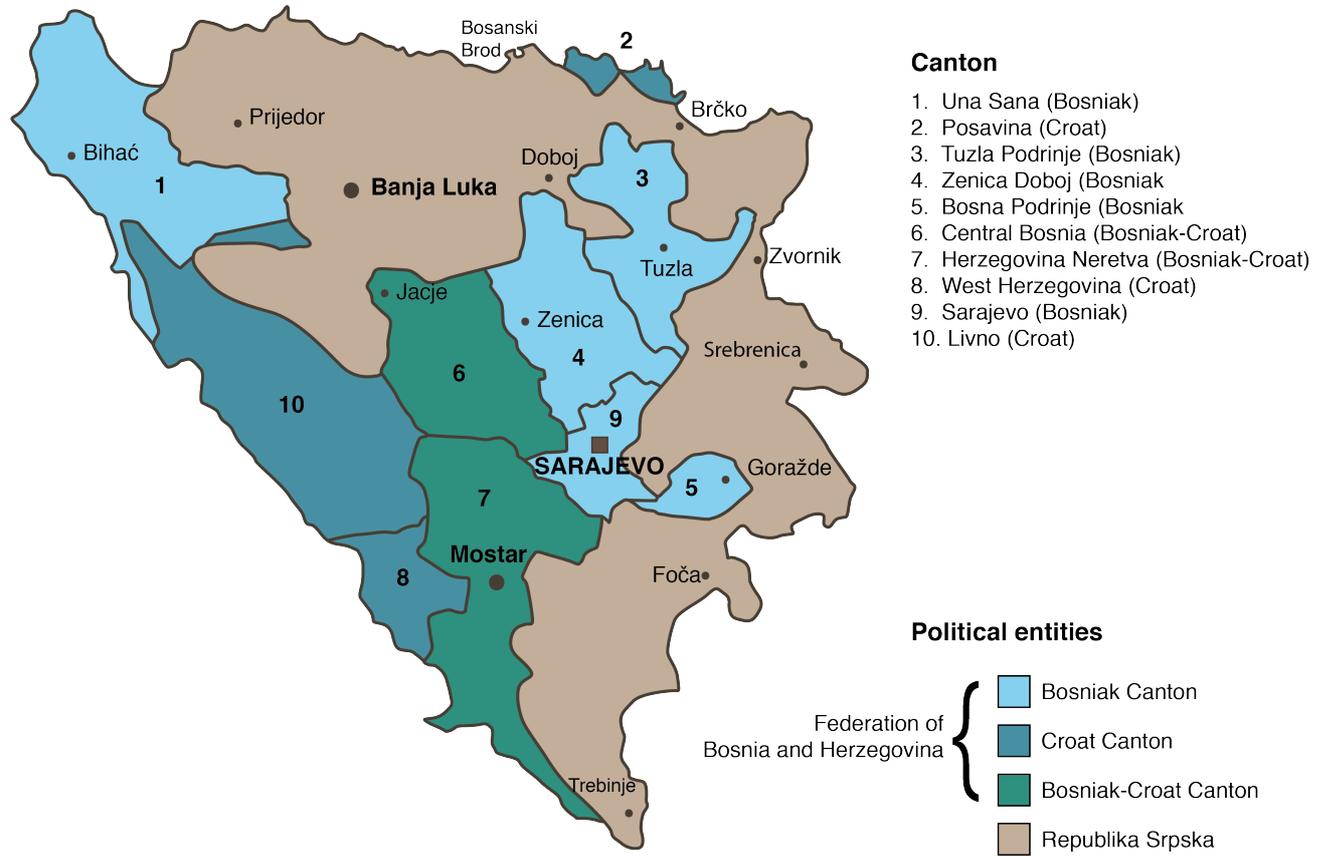
UN – United Nations

WB – World Bank

MAPS



Map of Socialist Federal Republic of Yugoslavia in 1991



Map of post-Dayton political system in Bosnia-Herzegovina

NEDERLANDSE SAMENVATTING

We zien, beleven en herinneren oorlogen via de digitale platformen die nu een integraal onderdeel zijn van ons dagelijks leven. Ook in naoorlogse staten zoals Bosnië-Herzegovina is de internetpenetratie en het smartphonegebruik inmiddels zo hoog dat het alledaagse leven van mensen – zowel jong als oud – onlosmakelijk is verbonden met platformen zoals YouTube, Facebook en Instagram. Door bijvoorbeeld YouTube video's over de Joegoslavische oorlog te bekijken, herinneren mensen zich hun verloren geliefdes door de zwarte dagen van de oorlog te herdenken. Waar het publiekelijk bespreken van de Joegoslavische oorlog een controversieel onderwerp is, bieden deze platformen individuen de mogelijkheid om te reflecteren op het verleden op een informele manier. Doordat YouTube sociale interacties tussen gebruikers stimuleert ontstaan er rondom de consumptie van video's onverwachte collectieven, zoals in het reactiegedeelte van het platform. Hierbij lopen vrijetijdsactiviteiten – zoals gamen – en familieactiviteiten – zoals het herdenken van familieleden – door elkaar heen. In een geglobaliseerde wereld speelt populaire cultuur een belangrijke rol in het overbrengen van beelden en verhalen over oorlog – ook wel culturele oorlogsherinnering genoemd. Spellen zijn een van de meest populaire hedendaagse media waarin we spelen met het verleden. Bijvoorbeeld het spel *This War of Mine* (11 bit studios, 2014), een spel geïnspireerd op de Joegoslavische oorlog en de bezetting van Sarajevo. De cultuur rondom spellen met historische referenties zijn de tonelen waarin dit soort herinneringspraktijken tot uiting komen. Toch is wetenschappelijk onderzoek naar de rol van spelcultuur in het verspreiden van culturele oorlogsherinnering marginaal.

In mijn dissertatie onderzoek ik de rol van digitale spelcultuur in het vertalen en verspreiden van culturele oorlogsherinnering door de cultuur van *This War of Mine* te onderzoeken. Geschiedenis, iconische afbeeldingen en verhalen vormen een bron van inspiratie voor historische oorlogsspellen. Deze vormen van culturele herinnering worden vertaald naar een spelervaring. Echter, deze vertalingen zijn onderhevig aan de acties en intenties van individuele spelers. Daarnaast is het delen van spelcontent een centraal onderdeel van deze digitale cultuur. Dit roept de vraag op hoe culturele oorlogsherinnering vertaald en verspreid wordt. Zo worden culturele oorlogsherinneringen wereldwijd verspreid, maar veranderen inhoud en betekenis ten gevolge van hun circulatie op verschillende digitale platformen. Ik beschrijf hoe geglobaliseerde representaties in *This War of Mine* zich verhouden tot nationale herinneringsculturen omtrent de Joegoslavische oorlog. Zo onderzoek ik hoe oorlogs-

herinnering in spelcultuur een rol speelt in de beeldvorming en identificatie van naoorlogse individuen, voor wie het verleden tot op de van dag een controversieel onderwerp is.

Mijn dissertatie beoogt de theoretische discussie over hoe culturele oorlogsherinneringen circuleren in digitale populaire cultuur te verrijken door spelcultuur en de inherente dynamieken te beschrijven. De “volg het ding” (*follow the thing*) methode die binnen dit onderzoek wordt toegepast om de ecologie van spelcultuur te begrijpen, vormt de belangrijkste methodologische bijdrage van dit onderzoek. Daarnaast is het beschrijven van oorlogsherinnering in digitale spelcultuur een cultureel significant fenomeen dat nog niet eerder is beschreven. Ook leidde de analyse van een enkele casestudy – *This War of Mine* – tot de beschrijving van sociale praktijken en verbondenheid tussen ontwikkelaars, spelers, YouTube video producenten en YouTube gebruikers. Eveneens onderzoekt mijn dissertatie de diversiteit van naoorlogse collectieven door discussies over oorlogsherinneringen te analyseren. Tenslotte geeft het onderzoek een stem aan naoorlogse individuen met een liefde voor digitale spellen en beschrijft het de rol van spelcultuur in etniciteit overstijgende identificatieprocessen in het hedendaagse Bosnië-Herzegovina – een land dat nog altijd sterk wordt gekenmerkt door de soms tegenstrijdige oorlogsherinneringen van de verschillende bevolkingsgroepen.

Het proefschrift bestaat uit vier artikelen – waarvan twee gepubliceerd, één geaccepteerd, en één ingediend ten tijde van dit schrijven – met een introductie die het onderzoek synthetiseert, de empirische vraagstukken met elkaar verbindt, alsmede de theoretische debatten, methodologie, bevindingen en bijdragen beschrijft. De artikelen zijn verbonden door de overkoepelende onderzoeksvraag: Hoe worden oorlogsherinneringen vertaald naar digitale spellen, en hoe circuleren ze in digitale cultuur? Deze vraag overstijgt een benadering van historische spellen als louter herinneringsobject, en bevraagt de dynamiek van hedendaagse herinneringspraktijken. Om de dynamiek van oorlogsherinnering in digitale spelcultuur te ontleden, volg ik de ontwikkeling van *This War of Mine* van het ontwerp, via de digitale circulatie van spelcontent, tot de receptie van het spel door spelers uit Bosnie-Herzegovina. De onderzoeksvraag is opgesplitst in vier deelvragen en corresponderen ieder met een artikel:

- (1) Wat zijn de omstandigheden die het ontwerp van *This War of Mine* beïnvloeden?
- (2) Welke rol spelen *Let's Players* in het verspreiden van culturele oorlogsherinneringen middels *This War of Mine*?

- (3) Welke herinneringsdiscourses komen voort uit de praktijken van YouTube gebruikers die via dit platform video's aangaande *This War of Mine* bekijken, en welke vorm nemen deze discourses aan?
- (4) Hoe herinneren naoorlogse jongeren in Bosnië-Herzegovina de oorlog middels het spelen van *This War of Mine*?

Hoewel ieder artikel een opzichzelfstaand onderzoek vormt met een eigen theoretisch kader, analyse en conclusie, vallen de artikelen in bredere zin onder wat ik definieer als 'ludische herinneringsnetwerken' (*ludic memory networks*). Dit concept is het resultaat van het samenbrengen van inzichten uit twee kennisvelden: 'transnationale herinnering' (*transnational memory*) en 'ludische ecologie' (*ludic ecology*). Transnationale herinnering houdt zich bezig met het begrijpen van de dynamiek tussen globale culturele oorlogsherinnering enerzijds, en het nationale collectieve geheugen en lokale identiteitsvorming anderzijds. Hierbinnen speelt geglobaliseerde populaire cultuur een belangrijke rol in het verspreiden van representaties en narratieven over het verleden. Het tweede kennisveld, ludische ecologie, tracht de rol van spelcultuur in het alledaagse leven en het belang ervan voor identiteitsvorming te begrijpen. Het ecologisch perspectief ziet het spelen van digitale spellen, maar ook andere, spelgerelateerde activiteiten – zoals het bekijken van video's over digitale spellen en het opnemen van, en reageren op, spelervaringen – als een integraal deel van het sociale leven, verweven met alledaagse activiteiten. Het principe van verbondenheid (*connectivity*) waarop sociale media platformen gestoeld zijn, speelt hierin een belangrijke rol in het begrijpen van de dynamiek tussen processen van identiteitsvorming en de sociale activiteiten van een spelcultuur.

De algehele methode voor mijn dissertatie is te beschrijven als de "volg het ding" (*follow the thing*) benadering, waarbij *This War of Mine* is gevolgd van conceptie, tot online circulatie en receptie. Dataverzameling en analyse geschiedde middels focusgroep-interviews (artikel 1 en 4); individuele interviews (artikel 4); video content analyse (artikel 2); en content analyse van reacties van YouTube gebruikers (artikel 3). Hoewel de nadruk van mijn onderzoek ligt op kwalitatieve onderzoeksmethoden, zijn de comment data van artikel 3 verkregen door het scrapen van YouTube met behulp van de *Digital Methods Initiative YouTube Data Scraper* (Rieder, 2015). Deze dataset is geanalyseerd door middel van een sequentiële gemengde methode (*sequential mixed method*) waarbij de eerste stappen kwantitatief zijn (verzameling en filtering) en de data vervolgens kwalitatief geanalyseerd is.

Het analytisch raamwerk van artikel 1 draait om de ontwikkelingsomstandigheden van spelbedrijven (*gamework*), en onderzoekt hoe de achtergronden en werkomstandigheden van medewerkers van invloed zijn op het vertalen van culturele oorlogsherinneringen naar een spel. Het raamwerk van artikel 2 analyseert de rol van micro-beroemdheden (*micro-celebrities*) in de circulatie van culturele oorlogsherinnering en beschrijft de invloed van platform ‘kenmerken’ (*affordances*) op de verspreiding van culturele oorlogsherinnering door YouTube video producenten (*Let’s Players*). Artikel 3 bouwt voort op de inzichten van artikel 2 en analyseert de media-specifieke publieken (*media-based collectivities*), die zich vormen rondom YouTube video’s over spellen. Hierin beschrijf ik hoe platformkenmerken informele oorlogsherinnering en herdenking stimuleren tussen individuen met tegenstrijdige perspectieven op de Joegoslavische oorlog. Tenslotte draait het raamwerk voor artikel 4 om de begrippen empathie en medeplichtigheid (*empathy* en *complicity*), en wordt een analyse gegeven van de herinneringspraktijken van Bosnische jongeren omtrent de Joegoslavische oorlog middels het spelen van spellen.

Tezamen demonstreren deze vier artikelen hoe culturele oorlogsherinnering in digitale populaire cultuur onderhevig is aan de dynamieken van vertaling en circulatie. De artikelen laten drie vertalingen en vormen van circulatie zien. Spelontwikkelaars, *Let’s Players* en spelers geven ieder op hun eigen manier vorm en inhoud aan historische oorlogsspellen. De eerste vertaling is te zien wanneer culturele oorlogsherinneringen vertaald worden naar een spelomgeving, waarbij werkomstandigheden en persoonlijke achtergronden van invloed zijn op het eindproduct. Nationale perspectieven op Joegoslavische oorlogsherinnering zijn aan uitwisseling onderhevig, omdat het spel aantrekkelijk moet zijn voor een wereldwijd publiek. De tweede vertaling vindt plaats middels *Let’s Players*, die de potentiële historische inhoud van het spel ondergeschikt maken aan zelfpresentatie en het creëren van vermakelijke inhoud voor het YouTube publiek. Hoewel culturele referenties in de inhoud aanwezig blijven, worden deze niet opgepakt door de *Let’s Players*. Een laatste vertaling vindt plaats wanneer het spel gespeeld wordt door Bosnische jongeren. Hier relateren naoorlogse jongeren de geglobaliseerde historische referenties in het spel en de oorlogservaringen van spelkarakters, ontdaan van expliciete nationale referenties, aan hun eigen achtergrond en kennis over de oorlog.

Daarnaast wordt de circulatie van culturele oorlogsherinneringen in spelcultuur gestimuleerd door het principe van verbondenheid. Hierdoor worden sociale interacties tussen gebruikers gestimuleerd en ontstaan er spelers die hun spelervaringen delen op digitale media platformen – ervaringen waaromheen collectieven ontstaan die spontane, informele

herinneringsgroepen vormen. Een tweede gevolg van de verbondenheid tussen digitale media platformen maakt dat de afstand tussen ontwikkelaars, spelers en content producenten wordt verkleind. De dynamiek van vertalingen en circulaties in ludische herinneringsnetwerken maakt dat individuen zich de Joegoslavische oorlog op spontane wijze herinneren en digitale platformen informele herinneringsplekken vormen. Met andere woorden: netwerken waarin wij spelen met het verleden.

PREFACE

Ever since I started the pre-master New Media and Digital Culture in 2011, I have been fascinated by how the sharing of information by like-minded individuals leads to unexpected advances in knowledge about the past, present and future. My interest in the role that digital games play in this scenario can be traced back to a moment when I was caught in a YouTube loophole. I was binge-watching videos and stumbled across heated disputes about the Cold War in the comments of a gameplay video of the ‘No Russian’ level of *Call of Duty: Modern Warfare 2* (Infinity Ward, 2009). At that time, I was also playing a game inspired by the Yugoslav War – *This War of Mine* (11 bit studios, 2014) – and started to think about the people I knew that came to the Netherlands during the Yugoslav War in the 1990s.¹

A deep interest in how post-war individuals make sense of the past through game culture started to emerge. Past wars and historical events have always been a source of inspiration for games, as well as for popular culture in general. After the war, representations of the Yugoslav civil war emerged in various different media forms, from literature (Vervaet, 2010), comics (Hansen, 2016) and music (Baker, 2009) to games (Zarandona et al., 2017). Notably, post-war individuals remember the past through everyday platforms. Sharing cultural memories of the past across platforms is part of what José van Dijck (2013) refers to as a ‘culture of connectivity’, where digital communication, self-expression, and media cultures mesh across platforms of use. This research aims to further an understanding of what this culture of connectivity means for post-war individuals whose cultural memories of war are strongly tied to the nation-building activities of young post-war states. This is one motivation why I chose to focus my research on a game inspired by the Yugoslav War, and why I focused on Yugoslav War discourse in YouTube publics.

Wanting to understand the tension between national memory politics and remembrance through global popular culture is the main reason I decided to conduct field work in Bosnia-Herzegovina. In the Balkans, collective remembrance is tied to ethnonational state building. Different, often conflicting narratives circulate within and between states. Following the dissolution of the Socialist Federal Republic of Yugoslavia, cultural memory and media

¹ The dissolution of the Socialist Federal Republic of Yugoslavia (SFRY) are also termed Yugoslav Civil War, Yugoslav War, Yugoslav Wars, or post-Yugoslav Wars. Although *This War of Mine* draws heavily from the Siege of Sarajevo, not all articles deal with the Bosnian context alone. Therefore, within the larger context of this dissertation I chose the term Yugoslav War, instead of only the Bosnian War. However, as a result of a suggestion made by the editors, I refer to the Bosnian War in article 2 because the cultural memory described draws heavily on this specific context.

expressions helped shape national narratives of young post-war states that emerged (Baker, 2018; Beronja and Vervaet, 2016; Pogačar, 2016). The evoking of traumatic war memories is one of the methods used by these nations to shape a collective national identity (Brukaber, 2004; Toal and Dahlmann, 2011). In the process of rebuilding, conflicting collective memories between states, and between ethnicities within states, became institutionalised and officially sanctioned as legitimate readings of the past (Fridman, 2015; Halilovich, 2013). These collective memories were, and still are, expressed through specific sites of memory (Nora, 1996), such as commemoration events. Who the first victim of the war actually was, is one example of conflicting collective commemoration between the ethnonational governments of Bosnia-Herzegovina (Maček, 2011: 204). While cultural expressions of collective national memory inform how post-war individuals see themselves, the nation and others, global popular cultures and the practices associated with them reconceptualise remembrance beyond the nation-state.

Inspired by the wise words of memory scholar Jeffrey Olick, this dissertation is written for all the individuals who found their “tribe” in a shared love for games despite being uprooted by war. Breaking down the individual articles, two audiences can be distilled. Article 1 (published in *Games and Culture*) and article 2 (to be published in *Memory, Militarism, and the Subject of Play*) cater to digital media researchers and game scholars in particular, whilst article 3 (published in the journal *Media, War & Conflict*) and article 4 (submitted to *Memory Studies Journal*) cater to memory scholars and war and media researchers.

A word about the format of this research is in order. This dissertation is a collection of articles, instead of a monograph. This means that, instead of a single cohesive story with one conclusion, there are four interwoven narratives, each leading to their own conclusions. Important therefore is that the articles should not be considered as chapters. Each article targets different audiences, has different academic methods, and engages with a different body of literature. Each peer-reviewed article presents the nuances and analytical depth and breadth, and should be read as stand-alone research. At the same time, the four articles are introduced and contextualised within the narrative of ludic memory networks, which will be elaborated upon in the introduction.

PART I – INTRODUCTION

Blurring Mnemonic Boundaries

War Memory in Digital Popular Culture

People remember war through the platforms they use, whether it is liking a Facebook page of a town wiped out by war or watching commemoration videos on YouTube. The interconnectedness of digital media platforms such as YouTube, Instagram or Facebook allow memories to be shared across platforms, interlinking them with all the other activities that are performed, shared and liked on these platforms. Although cultural memory is defined differently by scholars, I see memory as encompassing all the cultural expressions of the past, modified and adapted in the present (Erll, 2011). Consuming popular culture on digital media platforms – such as listening to Yugoslav music on YouTube – are popular forms of cultural memory through which the past is remembered (Pogačar, 2016). These global cultural expressions transcend and complicate national readings of the past (De Cecari and Rigney, 2014; Erll, 2011). The global phenomenon of game culture has yet to be studied systematically by memory scholars, but constitutes one of the largest global cultural industry of our time, expanding faster than other entertainment markets (Takahashi 2016). Games, as a global phenomenon, have given rise to digital popular cultures with individuals recording and sharing their views on the content of the games they play, and creating a global network of individuals connected through a shared interest in popular culture. Content is not only produced by ordinary users, but also by celebrities within the gaming community, who record and publish their own gameplay. As the popularity of historical war games increases, so does the user-generated content associated with past wars. Think of heated disputes between a Serb and Bosniak gamer on the Siege of Sarajevo on Steam's discussion board.

Digital media platforms play a central role as critical infrastructures through which cultural memory is shared globally. The pervasiveness of platforms as central infrastructures for social communication and creative expressions is described by scholar José van Dijck (2013: 4) as a culture of connectivity. Besides providing a technical architecture, platforms are intermediaries that negotiate between users, advertisers and stakeholders (Gillespie, 2010).

Digital media platforms do not only archive enactments of cultural memory and the discussions emerging around them; they also shape and structure them (Van Dijck, 2011). When expressions of cultural remembrance become increasingly digital in nature, the question becomes less about specific *objects* of memory, and more about the *dynamics* of memory (Erll and Rigney, 2009), and what *collectives of remembrance* emerge (Gibson and Jones, 2012; Knudsen and Stage, 2013; Makhortykh, 2017). Therefore, this research follows the circulation of a historical game inspired by the Yugoslav War, and examines the meanings attached to game content and the collectivities emerging as a consequence. How does cultural memory travel, and how is it transformed and re-appropriated by post-war individuals in game culture?

Empirical Puzzle

In this introduction, I will describe two interrelated vignettes of my fieldwork in Bosnia-Herzegovina that contextualise the empirical puzzle that has guided my research. The vignettes introduce a sociotechnical phenomenon that I term “ludic memory networks” – a concept I use to describe the dynamics of cultural memory emerging through ludic interactions in game culture. The first vignette focusses on Petar, one of the research participants I interviewed, and illustrates the networked aspect of digital popular culture and how games stimulate belonging beyond geographies. The second vignette introduces *El Bake* (Anonymous, 2018), a Bosnian game criticising corruption and state politics. The game exemplifies how the ludic in a post-war context cannot be seen as separate from memory politics.

Vignette 1 – Networked Ludic Identification

The first vignette features Petar, a 24-year-old gamer from Banja Luka, the capital of the Serbian entity of Bosnia-Herzegovina, Republika Srpska.² In our conversations, Petar talked about his gameplay experience of the game *This War of Mine* (11 bit studios, 2014) – a game inspired by the Yugoslav War and the Siege of Sarajevo in particular. In this single-player survival game, the goal is to survive with at least one playable character until the siege ends. The game is narrative-driven; one might think of it as *The Sims* (Electronic Arts, 2000) in a war zone. In the game, various fictional characters face difficult struggles, such as sickness, starvation and depression – challenges that appear as a direct or indirect result of the decisions made by the player during the game. After he had played the game, Petar said: ‘it is fun, and

² This vignette draws from an interview with Petar – a fictionalised name – who was one of my research participants. The interview was conducted in English in April 2018.

does bring up some emotions.’ Petar imagined the war he was too young to remember and by playing games, he experienced his own history differently.

Petar’s story highlights the erosion of global, national and local scales of memory. National memories of the past are translated into global narratives of the past, and vice-versa. The Siege of Sarajevo has become a *lieu de mémoire*, or a ‘site of memory’ (Nora, 1996) – a cultural phenomenon associated with the past and national identity.³ The games Petar plays are developed for a global audience, which means that representations and narratives of the past are adapted for a wider audience. Global popular culture dealing with suffering and war atrocities – such as the Holocaust – is developed for individuals with different interpretations of the past that do not require a particular national perspective, and indeed incorporate multiple historical perspectives (Keilbach, 2017). In the process, national narratives are combined with universal conceptions of war, decontextualising the historical event (Levy and Sznajder, 2002). The local experience of Petar playing a global game that resonates personally with his past thus raises the question of how post-war individuals make sense of their past through playing historical war games.

Petar’s story also draws attention to the social side of game culture, where belonging is not inherently tied to physical proximity, but is based on associations. Playing games with other gamers from around the world taught Petar English and educated him about other cultures and their histories. He likes to watch competitive gaming and videos of games on YouTube and hopes that Bosnia-Herzegovina will one day have its own e-Sports industry. Petar feels more connected to other gamers across the globe, or in other cities in Bosnia-Herzegovina, than with his neighbours. Ludic identity construction is a multi-sensory experience and, through the ludic interactions of everyday life and through games, constitutes a playful form of identification (Frissen et al., 2015: 36–38). For post-war individuals, the ludic offers the potential for identification beyond ethnicity. Memories of atrocities committed in the past play an important role in reifying ethnic groupness (Brubaker, 2004). As new social practices emerge – such as watching YouTube videos about historical games – they redefine how post-war individuals make sense, not only of themselves, but also of the past.

³ Besides the Siege of Sarajevo, the Srebrenica genocide, and the Belgrade bombing also serve as iconic events of the Yugoslav War.

Vignette 2 – Memory Politics in Ludic Networks

The second vignette describes the controversy of a Bosnian game occurring during my visit to Banja Luka. When I was conducting interviews, the Facebook timeline of my translator Amra was full of references to a game that stirred up national public debate. *El Bake* (Anonymous, 2018) was a game that featured a parody of Bakir Izetbegovic (“El Bake”), a Bosniak member of parliament and a member of the Party of Democratic Action (SDA). Playing *El Bake*, players collect bribes in different Bosnian cities and avoid obstacles such as street protests and police cars. The game spread on social media platforms and was widely covered by national media (Dnevni Avaz, 2018; Klix, 2018; Nezavisne Novine, 2018; Oslobodjenje, 2018; Srebrenik, 2018) as well as international media (Balkan Insight, 2018; bne IntelliNews, 2018). *El Bake* was a critical response to political corruption when campaigning for the 2018 general election was already well underway.⁴

El Bake illustrates how the social life of a game is equally as important as the game itself. Removed from the Google Play store just days after its release, YouTube videos of the game circulated on Facebook and Twitter long after the game was taken down. The emergence of user-generated content circulating across platforms is part of the ‘interconnectedness of platforms’ (Van Dijck, 2013). Connectivity means something different for each post-war state, but it has increased over the last years in the Balkans and Bosnia-Herzegovina in particular. The sudden emergence and popularity of *El Bake* was helped by the country’s increasing connectivity and digitisation. In 2017, the mobile phone subscription rate reached 97% (World Bank Data, 2018) with an internet penetration rate of 86.8% (CRA, 2018). Thus, communication concerning politics and popular culture, such as *El Bake*, spreads easily across Facebook, Instagram and YouTube – indeed, across all popular social media used in the country. *El Bake* is a prime example of how the past is translated into a game and can travel across platforms, reaching many different individuals who interpret the content within the socio-political context of their everyday lives in a post-war society.

This second vignette also illustrates the interconnectedness between play and memory politics. In a post-war state, collective narratives of past trauma are part of state-building

⁴ Political corruption in Bosnia-Herzegovina is an issue felt by many Bosnians which, together with economic decline and high unemployment rates, was one of the root causes of the nation-wide protests in 2014 (Jansen, 2018; Kurtović, 2015). Due to these pervasive problems, people in Bosnia-Herzegovina see the post-Dayton state ‘as nothing more than a *kriminalni sistem* (criminal system) – a product and a carryover from the war’ (Kurtović and Hromadžić, 2017: 264).

activities. Nowhere are the politics of war memory more apparent than in the Balkans, where the Yugoslav War created collective memories that are now used by successor states as ethnonational narratives of collective memory (Beronja and Vervaet, 2016: 5). In an official press release of the Youth Association of the SDA, *El Bake* is framed as political weapon, and related to the traumatic and sensitive war memories of ethnic cleansing.⁵ Other war atrocities etched in the minds of people are the mass rapes and the detention camps of the 1990s.⁶ Even though the game developer was anonymous, the SDA identifies that ‘[t]his attack is coordinated by the Greater Serbian and Croatian centres, with the strong support of domestic traitors’ (Youth Association SDA, 2018: n.p.). The social reality of post-war Bosnia-Herzegovina is that war memory is entangled with state-building politics – a situation confirmed during the general election of 2018.⁷ What motivates this political impasse is Bosnia-Herzegovina’s state structure. As the political map presented in the beginning of this thesis illustrates, the country is composed of two legal entities: the federation of Bosnia and Herzegovina (FBiH); and Republika Srpska (RS). The region recognises three constituent peoples: Bosniaks, Croats and Serbs (although this by no means represents the true ethnic diversity of the area).⁸ Living in a post-war state such as Bosnia-Herzegovina means that everyday life, leisure activities such as playing games and digital communication are informed by national memory politics.

⁵ One of the blackest moments in the Yugoslav War is the Srebrenica massacre. In July 1995 over 8000 Muslim men and boys were separated from their families by Serbian troops under the command of Ratko Mladić. Srebrenica was declared a ‘safe zone’ under the protection of the United Nations. Dutchbat – the Dutch battalion under the command of the United Nations – was responsible for safeguarding Srebrenica and failed to protect its refugees during the massacre on July 11 (Duijzings, 2002; Halilovich, 2014; Nuhanović, 2007).

⁶ Exact numbers are difficult to estimate, since many women are not open about these violations. It is estimated that in Bosnia alone, at least 20.000 women and girls were raped during the war (Amnesty International, 2017: 10). The systematic nature of rapes during the Bosnian War caused the UNSC to adopt resolution 798 and introduced rape and sexual enslavement as crimes against humanity. As others noted, sexual violence was used systematically as a weapon of war, as women were enslaved, tortured and frequently raped in camps (see Allen, 1996).

⁷ The election was segmented along ethnic lines and candidates focused on fearmongering and personal attacks, using polarised narratives and negative rhetoric (ODHIR, 2018: 1). These find their way into local events, such as protests in Baja Luka asking ‘Justice for David’. During my fieldwork in April, there were civic protests demanding justice for the unexplained death of David Dragičević in March 2018. Protesters gathered from around Republika Srpska, led by David’s father, and demanded that the perpetrators of the alleged murder would be held accountable (ODHIR, 2018: 10).

⁸ The constitutional framework, which only recognises Bosniaks, Croats and Serbs as civic peoples, discriminates, since it deprives members of these national minorities, such as the Romani, of passive suffrage rights (ODHIR, 2018: 13). This structure is the political heritage of the Dayton Agreements. Whilst the Dayton peace agreement ended the war in Bosnia, the agreement was a complex compromise. For the preservation of Bosnia’s sovereignty and political independence, Bosnia-Herzegovina’s ethnonational groups were each given a fair degree of political autonomy to safeguard their collective rights (e.g. Chandler, 2006).

These two entangled vignettes are part of a much larger social phenomenon of memory in digital popular culture – a phenomenon that I refer to in this dissertation as ‘ludic memory networks’. Ludic memory networks draw our attention to the role of play and playful interaction in the process of memory-making. These practices have important implications for post-war individuals, who identify, interpret and share mnemonic game content across digital media platforms. As suggested in the vignettes, rather than being a neatly ordered phenomenon, a ludic memory network is inherently “fuzzy” and “messy”. On the one hand, the global industry of games erodes scales such as global, national and local, and transforms cultural memory to fit wider audiences. The ludic aspect draws attention to the ways in which interactions of cultural memory are not only context dependent, but also provide room for social practices that offer possibilities for (ludic) identification based on a shared interest in games. Post-war individuals such as Petar find like-minded individuals and learn about the past through an interest in games that exceeds geographical boundaries. On the other hand, remembrance is still territorially bound, as war memory is strategically used by young post-war states still defining their national narratives. The controversy around *El Bake* illustrates that national narratives of the past are used even when interpreting the meaning of a game and that the circulation of game content across digital media platforms is equally important as the games themselves. Platforms play a central role in ludic networks, the interconnectedness of which affords interactions that inform what content circulates and how this content appears to users. The question that therefore arises is: How does war memory travel through a ludic network? The concepts of translation and circulation serve as key concepts to understand the dynamics of ludic memory networks.

Translation and Circulation as Key Concepts

Memory is inherently unstable – it inevitably mutates as it moves from place to place. When a person shares a memory, for instance after watching a YouTube video, a moment of remembrance is enacted. As cultural memory travels, it adapts to the context in which it finds itself. ‘[R]ealities (including objects and subjects) and *representations* of those realities are being enacted or performed simultaneously’ (Law, 2008: 635, emphasis in original). Memory scholar Andrew Hoskins (2011) has termed these ‘connective memory moments’; instances of digital interaction with the past that constitute moments of remembrance. The dynamics of these memory moments can be explained via the concepts of translation and circulation. User-

generated content remixes and appropriates cultural memory, for instance by taking historical images and creating memes. In the process, memory is translated, taking on different meanings and circulating across platforms.

The *work* that these translations do, consists of taking otherwise mundane practices and transforming them into accidental and serendipitous moments of remembrance. The connective turn transforms memory, because remembrance is part of the digital media ecology where digital communication, media consumption and cultural memory are interconnected across platforms (Hoskins, 2009). On the one hand, platforms democratise cultural memory, as it can be creatively appropriated, accessed, stored and circulated (Garde-Hansen et al., 2009). Whilst on the other hand, memory is mutated via the rules of engagement of the platforms on which they are expressed (Van Dijck, 2011). Furthermore, ludic memory networks create spaces for mnemonic interaction based on shared interests. Whilst these discourses create space for a more inclusive experience of war both within and between post-war states with conflicting collective memory narratives, they are undeniably shaped by them as well.

The Translation of Memory

In the opening of this introduction, I stated the importance of how memory is translated. How and what we remember in ludic memory networks is always mediated through digital communication. Mediatisation is a process of translation, which can be denoted as a symbolic translation (different meanings), but also as a material translation (different forms). Practices such as playing historical war games, liking Yugoslav Facebook pages, or listening to Yugoslav pop stars on YouTube, are all part of the digital communication of everyday life. This interrelatedness is part of the mediatisation of everyday life, or the ‘permeation of a media logic’ into everyday social interactions, and our social reality more broadly (Hepp, 2013: 40). The idea that all aspects of social life – from the moment we wake up until we go to sleep – are already mediatised is what Nick Couldry and Andreas Hepp (2016) identify as ‘deep mediatisation’. Couldry and Hepp argue that, in order to understand the construction of our everyday social realities, we have to take into account the fundamental role played by mediated communication. Media scholar Winfried Schulz (2004: 88–89) distinguishes four different aspects of mediatisation: the ways in which digital media (1) extend the limits of communication (*extension*); (2) substitute social activities and thus change their character (*substitution*); (3) do not only extend and substitute non-mediated communication, but are interwoven with the fabric of everyday life (*almalgation*); and lastly, (4) the ways in which

social actors internalise media logic for their own political or economic gain (*accommodation*). In short, the intimate relationship between our communicative and social processes follow from an increasing reliance on the media we use. These four aspects change the ways in which memories are produced and shared through video, images, sound or text. In other words, they transform the practices of remembrance.

An example of one such translation is the ICAR Canned Beef monument (see Figure 1). Placed in front of the UN building in Sarajevo by local artist Nebojsa Seric Shoba in 2007, this monument is an ironic “thank you” to the international community for sending barely edible canned beef instead of military support. Subtly finds its way into *This War of Mine*, canned food is a crucial element to a character’s survival. There are several translations at work: the historical reference of canned food during wartime is translated into a monument by an artist, which is translated into a playable element in a game that players can interact with. Whilst the public sentiment towards humanitarian aid in the war gets lost, references to the poor flavour are preserved, as the description of the item of canned food reads that one has to ‘get used to the taste’. Translations such these beg the question of how war memories are translated into digital games, and what meanings are inscribed in the process.



Fig. 1 The ICAR Canned Beef monument, created by artist Nebojsa Seric Shoba in 2007 as a form of cultural criticism towards the lack of military support during the Siege of Sarajevo. The monument, ironically, sits in front of the UN building in Sarajevo (photograph by the author, 2019).

One of the key processes to investigate is how memory is translated from, and into, different forms. These translations can arise from iconic references to war events into a physical object – as is the case when a monument is erected. However, digital translations add another layer of complexity, as they translate the material into an immaterial form. This process of translation is best described by memory scholar Martin Pogačar (2016), who writes that ‘[i]ndividual action unravels at the intersections of intimate renditions of the past and institutionalised canons and at the point of “translation” of the physicality of material artefacts into intangible coded instantiations of past moments’ (9). Thus, translations draw our attention to the ways in which memory shifts between different material and immaterial forms, drawing meaning from the intended framings of their designed objects on the one hand, whilst taking on the material limitations and possibilities of its (new) material form on the other. A good place to start studying the dynamics of translation is by tracing what happens when the cultural memory of war is translated into a game. The second step, however, is what other translations follow as a result of this new form.

The Circulation of Memory

Closely linked to processes of translation are processes of circulation – a linkage that inevitably raises questions about the practices and activities central to how memories traverse geographies and cultures. Transcultural memory draws attention away from static sites, such as monuments or museums, and focuses on the *movement* of memory instead of a *static* attention to culture. As memory scholar Astrid Erll (2011: 65) points out, a focus on the transcultural aspect of memory (1) enables us to see the shared sites of remembrance that emerge through cultural exchanges; (2) enables mnemonic interactions in subcultures and communities, across ethnicities and nationalities; (3) and investigates how the formation of emerging cultural forms, such as digital popular culture and games, provide relevant frameworks for memory beyond those of national memory.

The formation of a ludic memory network is best approached through the lens of ecology (Apperley, 2011; Taylor, 2018), which recognises the networked aspect between media practices and industries and how they grow and develop. As others have noted, everyday media practices of game culture are key to understanding the sociality of games (e.g. Apperley and Parikka, 2018). Game developers, Let’s Players and players – their practices are all part of the processes and products of a ludic memory network. The disappearance of the distance between these actors also provides opportunities to trace how meaning is inscribed as a game

travels from form to form. By following social actors and their practices, I shift the attention to action – to the events and interactions that enact memory in digital culture.

Further, the concept of circulation raises the question of via which specific media expressions cultural memory flows in the ludic network. One central phenomenon in the circulation of game content are ‘Let’s Players’ and the videos they produce. Let’s Play videos are produced by players who record their gameplay performance and publish them on YouTube (Radde-Antweiler et al., 2014). Watching such Let’s Play videos is an emerging phenomenon and integral part of game culture (Glas, 2015). The dynamics of self-presentation are part of a “platformed” sociality’ that revolves around user agency, content and technology (Van Dijck, 2013: 5). Let’s Players are key figures in the distribution of games, often publishing content before the official launch date, and providing feedback to developers at various stages of the development process. These ludic expressions of global game culture are part of the dynamics that inform how cultural memory travels across and between national boundaries.

Lastly, within the ludic memory network, acts of remembrance emerge in the interaction between media content and communicative practices such as commenting. Although sharing content across platforms is a key affordance of the sociality of platforms, their focus differs per platform. On YouTube, sociality is centred around the video (Burgess and Green, 2018). The comments underneath a video, for example, have their own dynamic, as video watchers can reply to other commenters as well as the poster of the video, or leave general reactions. Groups of individuals connecting—albeit temporarily—around media content, are what others call *media-based collectivities* (Couldry and Hepp, 2016). Notwithstanding, as historical game content is shared on YouTube, commenting opens up possibilities for commemorating those wars represented in games through engagements with videos and other users. This mechanism represents a key part of the “messy” network between memory and play. Think of the fan art, the amateur games, game mods, YouTube videos, Wikis and all of the other user-generated content produced within game culture. Individuals express their creativity through these means, but also communicate their desires, hesitations and memories of the past.

In conclusion, rather than considering the game or the mnemonic aspects in isolation, the study of the intersection between war memory and game culture entails an engagement with the messy and intermingled connectedness of the phenomenon as a network. The question of how memory travels in and through game culture demonstrates two important dynamics, namely, translation and circulation. My approach is to follow these translations as they travel

– a game is designed, a game is played, a game is recorded, a recorded gameplay is shared, and finally, a game is played.

Research Problem

This dissertation consists of four articles. Although addressing different topics and drawing from a range of analytical vocabularies, the articles coalesce into the following research question: how are war memories translated via digital games, and how do they circulate within the realm of digital culture. These questions are operationalised into four specific research aims that correspond with each article:

1. Describe how game developers translate cultural memory into morally complex gameplay.
2. Describe the role of YouTube video producers and their role in circulating war memories.
3. Describe the Yugoslav War discourses emerging in game publics on YouTube.
4. Describe how post-war Bosnian youth remember intergenerational memory via digital games.

The first part of the research question focuses on processes of translation and is operationalised in aim 1 and aim 4. As memory is recast into different cultural forms, it mutates. The process of translation is necessarily tied to the actors that play a role in that translation. Game developers create a virtual world, yet in defining how such a world should be created, developers are faced with a set of problems (for example, how to transform a story into a playable level). The processes that inform a game's design shape the historical worlds created by developers. Thus, the first specific aim describes the process of development and the translation of cultural memory into the design of morally complex (yet still compelling) gameplay. The fourth specific aim describes how Bosnian players interact with the translated cultural memory of the Yugoslav War. Players are dependent on the use of various platforms in order to play their games. Platforms, both in the form of hardware (game consoles, laptops, personal computers, smart phones) as well as software (social media platforms such as YouTube or game applications like Steam) become the gateway via which players access the

games they want to play. Thus, as becomes clear in the above, processes of translation do not cease once a game has been designed.

The second part of the research question, operationalised in aim 2 and aim 3, focuses on the circulation of war memory and the publics that emerge as a consequence of these sociotechnical networks. We move from translation to movement and mobility, and analyse key actors in processes of circulation. As others have noted, players occupy a central role in the development process and the reception of gameplay experience (Ash, 2012). Besides development, Let's Players, as a very specific type of player, are key actors in the circulation of game content. They are seen as spokespersons of the game community and their feedback is taken very seriously by game developers. For this reason, they are crucial to the circulation of cultural memory. Thus, the second aim describes the role of YouTube video producers in circulating war memories. Yet another layer of complexity in the ludic memory network are the audiences that emerge around the cultural form of Let's Players. The third research aim is to study the audiences emerging around game content on YouTube, and the Yugoslav memory discourses emerging within these collectives in particular. This section focuses on remembrance as an affective response within the global flow of cultural war memories. Drawing attention to the combination of both content and processes of circulation provides a more complete overview of war memory in game culture.

Research Questions per Article

The research aims are explored via a case study on the ludic memory network emerging around *This War of Mine* (11 bit studios, 2014), following its production, online circulation and reception. Focusing on one case study allows me to describe in detail the essential features of how memory travels in ludic networks. Networks have as many dimensions as they have connections, and as sociotechnical phenomena they cannot be described without tracing and following the interconnections of these fibrous, wiry and stringy connections (Latour, 1996: 3) – seen for example, in the way YouTube users engage with the rules and conditions of use the various platforms impose. In order to properly trace these interconnections, this research follows the relations between social actors and their interactions with technical actors of one ludic memory network. Translating the four abovementioned aims results in the following questions per article:

1. What are the conditions that informed the design process of *This War of Mine*?

2. How do Let's Players communicate the cultural memory of the Yugoslav War through gameplay videos of *This War of Mine*?
3. What Yugoslav War memory discourses emerge from game publics surrounding *This War of Mine* on YouTube and what form do they take?
4. How do post-war Bosnian youth remember war through *This War of Mine*?

Combined, by tracing the mnemonic meanings of game content through specific social actors, these questions lead to a description of how ludic memory networks are enacted, as well as describing the dynamics of the network that inform remembrance. Whilst each article can be read separately from the others and has its own central question, reading them consecutively creates a narrative that follows the journey of how memory travels through a single game.

Significance

The four articles presented in this dissertation aim to expand the theoretical discussion on how cultural memory travels in and through digital popular culture. In this section I break down and examine more closely the significance of my research. Explained in detail below, these can be summarised as five contributions. First, the unique challenge of understanding the wider social context of a game has led to the development of a methodology based on the idea of experimentation in computer science. Second, the research interprets and aims to make sense of a culturally significant phenomenon, since it points towards war remembrance enacted via digital popular culture in post-war and post-socialist states. Third, the close examination of *This War of Mine* has led to the discovery of practices and social arrangements that advance media and memory theory by describing the connections between developers, Let's Players, YouTube commenters and players. Fourth, the research explores the diversity of post-war publics by analysing vernacular memory discourses in game culture. Lastly, the research gives a voice to the ludic identification processes of post-war individuals who love games and game culture.

Methodological Innovations

Methodologically, I have combined different, previously isolated forms of empirical data and methods that have not been used together before in research of this nature – for example, the

inclusion of visual data collection (mind-mapping) in qualitative research; conducting player research in post-war states; as well as collecting and filtering a large data set of comments using mixed methods research. Although each article can be read and engaged with separately, I would like to draw attention to the methodological insights that this PhD trajectory has given me as a whole, which I consider to be valuable knowledge for future humanities scholars engaging in technically-oriented research.

Doing research on non-static digital objects required me to learn from, and draw upon, several different analytical vocabularies: namely, computer science, conflict studies, game and play studies, media studies, and memory studies. The methodological insight I share in this dissertation is the value of experimentation in order to gain a deeper understanding of the technologies and tools we use. A deeper understanding of the technical side of game culture was needed practically (to generate data) as well as empirically (in order to understand my research subjects). The idea of engaging with research through experimentation is not new: media scholars have long advocated the development of media literacy through maker practices (e.g. Resnick and Rosenbaum, 2013), as have those working in the field of digital humanities (e.g. Hayles, 2012). Engagements with the software programs and algorithms used to select, scrape and study data is needed because they shape how we can empirically study everyday digital life. Indeed, one of the risks of the growing use of digital tools is that the very tools used by humanities scholars to study digitally native content is black-boxed (Rieder and Röhle, 2012: 75–76). Experimentation with creating tools and writing tools, alongside using them, becomes crucial, since these usages stimulate a deeper understanding of how software shapes interaction. Therefore, what is needed for studying memory digitally is what digital humanities scholar David Berry (2012) calls ‘iteracy’: the ability to understand programming, computer languages and interfaces.

Figure 2 shows a snippet of the decisions made by Let’s Players playing *This War of Mine* in a so-called special event named “Girl in Peril”. In this event, players witness a sexually violent act and have to decide whether or not to intervene. Elaborately described in article 2, special events require players to make morally complex decisions, stimulating reflection on the ethics of a player’s decision. The experiment shown below combined the approach of ‘distant reading’ (Moretti, 2013) – which ‘aims to generate an abstract view from observing textual content to visualizing global features of a single or of multiple text(s)’ (Jänicke et al., 2015) – and automatic image detection in order to quantitatively analyse different game scenarios by developing a scenario tree. Although the project did not produce an article, the collaboration

between computer scientists and humanities scholars created what Hayles (2012:53) describes as shared frameworks of assumptions and collaborative networks.

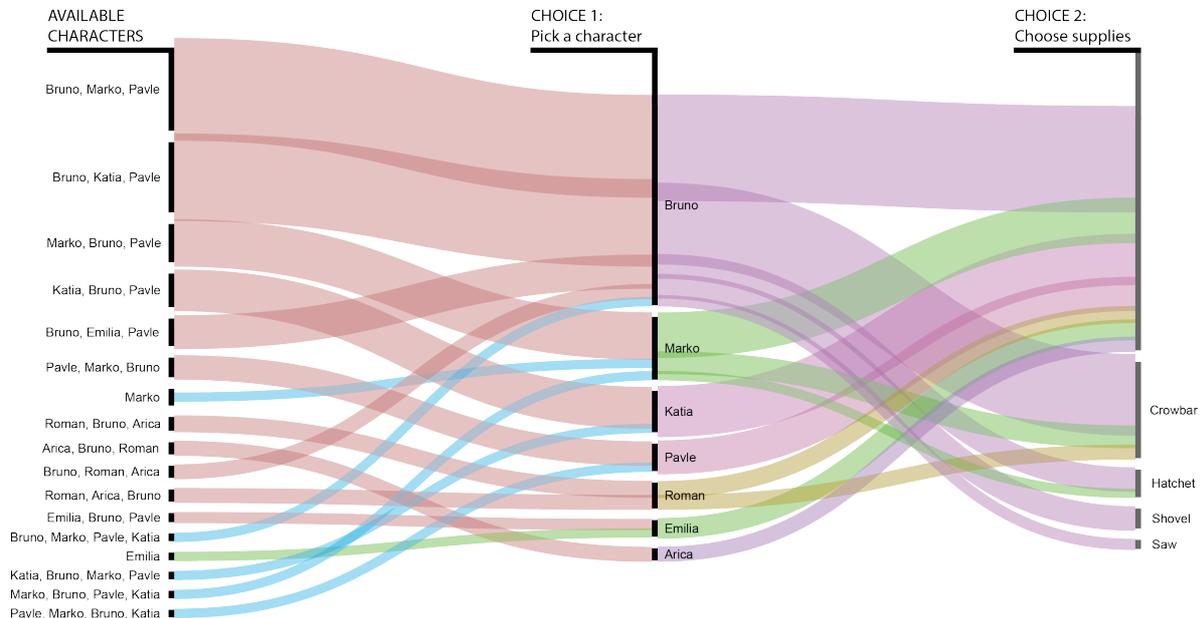


Fig. 2 A graphic representation made with RAWgraphs, depicting different scenarios and player choices. Players start out with different playable characters (available characters), depending on their level and earlier engagement. Players choose one specific character that engages in the upcoming event (choice 1) as well as a particular item to take with them (choice 2).

Interpreting a Culturally Significant Phenomenon

The research focuses on the translation and circulation of Yugoslav War memory in game culture. The case study is culturally significant because of its productive value in research on post-war states. Through the empirical research gathered in the articles, I offer a modest insight into the value of digital popular culture by describing how individuals come together in unexpected ways, and the dynamics that inform their wartime remembrance.

Advancing Theory by Describing Social Practices

Researching *This War of Mine* led to the discovery of practices and social arrangements that advance media and memory theory through insights into the ways in which developers, players and platforms are intimately connected in a ludic network. Studying cultural memory in games is relatively new, with the majority of research focusing on the representation of past wars (Chapman, 2016). Recognising the central role of the player in the production of meaning, some scholars have studied cultural memory of war in games through player research (e.g.

Jørgensen, 2019 [forthcoming]). However, what I aimed to delineate in the four articles presented here, is how games, as a medium of cultural memory (Erll, 2011), are not static objects, but rather depend on social *and* technical actors in their enactment of the past and the meanings they produce. The Polish developers working at 11 bit studios developed a war game because they felt the need to develop a game that focussed on the civilian aspects of war – of course with the intention to be commercially successful. However, as article 1 illustrates, the designers were also personally motivated to create a game that represents the emotional and difficult aspects of wartime suffering, enforced by the subtle in-game references to Polish cultural memory of the Second World War (Sterczewski, 2016). Viewers who watch gameplay videos of *This War of Mine* on YouTube serendipitously encounter other like-minded commenters with a shared Yugoslav history who may also share their memories of war. The social practices that emerge within this ludic network are thus a product of these interactions.

Exploring the Diversity of Memory Cultures

One of the premises of transnational memory is recognising the increased mobility of memory and how it is transformed through global interactions (De Cesari and Rigney, 2014). Hence my decision to “follow” one particular game, *This War of Mine* – from the conditions of its production, through its digital social life, as well as via its reception by post-war individuals affected by its content. Although scholars agree that digital media platforms offer modes of remembrance and connection outside of national frameworks, and that popular culture plays a key role in contemporary memory cultures (see Erll, 2011), game culture as a cultural phenomenon thus far, has not been studied deeply. Through this research, I set out to describe the diversity of digital remembrance and in doing so, show that digital popular culture is a culturally rich and complex phenomenon that can be studied in the context of that complexity and that illustrates how the affordances of platforms such as YouTube offer post-war individuals unexpected ways to commemorate the past with other users.

Giving Voice to Post-war Gamers

By describing the meanings produced by post-war individuals through game content, a voice is given to those who imagine and remember the past through the games they love. In the opening of my dissertation, I shared with you the story of Petar. Players like Petar play games for a variety of reasons; for some, war games like *This War of Mine* bring back memories of sometimes turbulent pasts, whilst others play war games to empathise with the war experience

of their parents. In the other articles, I share further stories of individuals who affect and are affected by games. Voicing the stories of Bosnian youth who remember through playing games, I describe their gameplay experiences and how their reactions are embedded within the larger context of growing up in a post-war state and, in doing so, I set out to enhance the visibility of this group (Ragin and Amoroso, 2018: 40). By drawing attention to the collectives emerging in and around popular culture spaces, I hope future research will consider these types of experiences when researching reconciliation processes.

State of the Art: Transnational Memory in a Ludic Ecology

In the first section I introduced the empirical puzzle of this dissertation – how war memory is translated into games, and how it circulates in ludic memory networks. Following sociologists such as Charles Ragin, I see research as a continuous interaction between theory on the one hand, and the analytical concepts that constitute ‘ways of seeing’ empirical data on the other (Ragin and Amoroso, 2018: 57). The state-of-the-art theoretical discussion presented here elaborates the heuristics of how I made sense of my empirical data and how my analysis in turn enriches existing theory. The interdisciplinary nature of this research means there is not one clear-cut field in which I ground my research, but as a whole the research of this dissertation can be positioned within two fields – memory studies and digital media studies – and the interactions between them. The study draws on: (1) a transnational memory paradigm that draws attention to the role of global media forms for local and national remembrance; and (2) a ludic ecological paradigm – a paradigm that sees game culture as a fluid and temporal network in which media practices and leisure activities intersect across all aspects of everyday life, and recognises the interrelated practices between platforms, developers, user-generated content and players. By presenting “what this is a case of”, I conceptualise how my findings may move from specific to generalised knowledge (Lund, 2014). I ask the reader to be patient with me, as interdisciplinary research requires the description of multiple fields as well as the productive linkages formed in this thesis. This section describes the theoretical insights relevant for each article, as well as my contribution to the fields of memory studies and digital media studies, which can be summarised as (1) studying conditions of production that inform the development of historical games; (2) game research that focuses on the reception of these games by players;

and (3) informal commemorative practices in digital game culture that (4) materialise as a result of the content generated by Let's Players and users.

The Transnational Memory Paradigm

Individuals imagine and remember past wars through the media they use, and digital games are one cultural expression amongst many, in which individuals experience the past. In an age of global media cultures, some expressions of cultural memory are now translated into a form that make them accessible to a worldwide audience. However, these media of cultural memory are used by individuals in local contexts. Thus, whilst war memories circulate within the global flow of game culture, they are appropriated by individuals in post-war contexts in which ethnonational politics and state-building inform everyday digital interactions. From this perspective, the theoretical debate this phenomenon feeds into is the national paradigm vis-à-vis the transnational paradigm of remembrance.⁹ Below I describe the move from national to transnational memory remembrance, (digital) processes of translating memory, and digital processes of translation and circulation.

From National to Transnational Memory

Expressions on digital media platforms – such as the comments left under a commemoration video of the Srebrenica genocide – are ways in which individuals remember the past. Increasing globalisation in combination with digitisation have profoundly affected how we remember and what we forget. Adopting the broad interpretation by Astrid Erll (2011), cultural memory can be defined as ‘the interplay of present and past in sociocultural contexts’ (2). The media we use – comics, games, films and music – are inscribed with information that prompts remembrance as well as forgetting (Erll, 2011: 100). Although in a contemporary context it should come as no surprise that global forms of culture that traverse territorial boundaries affect what and how we remember, memory studies has a history of thinking about the territorially bounded nation-state as the primary point of entry.

A key insight taken up in this dissertation is the interplay between national and local forms of remembrance vis-à-vis global cultural expressions of memory. The national memory

⁹ The dissertation refrains from discussing the entire body of work within the field of memory studies and how the field has developed over the years. Many other scholars who will not be discussed at length in this introduction have contributed to shaping the understanding of cultural memory in this thesis, such as Aleida Assmann (2014), Jan Assmann (1995), Maurice Halbwachs (1980), Marianne Hirsch (2008) and Pierre Nora (1996).

paradigm is in support of the nation-state as the entry point of collective remembrance. This is unsurprising if one considers the coinciding rise of nationalism and historicism in the nineteenth century, as Benedict Anderson ([1983] 2016) aptly illustrates. The ‘biography of nations’ (Anderson [1983] 2016: 204) serves the purpose of connecting the nation to personhood, by way of shaping a collective identity (Assman, 1995). As others have noted (De Cesari and Rigney, 2014; Erll, 2011), the problem with this point of departure for memory is that this paradigm departs from a methodological nationalism that sees the nation as both authority over, and curator of, memory.

National memory materialises through commemorative events, monuments or other canons of collective memory. In the case of post-Yugoslav states, the material reminders of ethnic nationalism are still disputed between states, as well as within. For example, before the Bosnian elections in September 2018, a monument in the form of a 3.5 meter high mural was erected to honour Bosnian Serb Army Commander Ratko Mladić.¹⁰ This illustrates that the national paradigm of memory is still very much alive in post-war states building their identity. Although these national frames are still important forms of memory that shape collective and individual identities – think of the rise of nationalism in Europe – they do not describe how digital popular culture fits into this scheme. However, a more recent memory paradigm includes aspects and cultures of remembrance beyond the nation-state.

The transnational memory paradigm recognises the importance of global cultural flows, whilst not completely dismissing the nation as an important indicator. Increasing attention towards the influence of global processes on remembrance informed a new paradigm in memory studies – transnational memory. Transnational memory draws attention to the “fuzzy” interrelations and global flows between cultures, media and people. As Aleida Assmann (2014: 547) succinctly summarises, the global arena of transnational memory rests on (1) the connectivity of digital media technologies, and (2) transnational actors and networks that reshape the global world – both from above, and from below. This is why memory scholars have turned to media theories in order to describe and explain the mediatedness of memory. Astrid Erll and Ann Rigney (2009) adapt the concept of remediation, whilst Andrew Hoskins (2011) builds upon, amongst others, the work of media theorist Nick Couldry in order to

¹⁰ Radko Mladić, also known as the butcher of Bosnia, is a Bosnian Serb general and was the officer in command of the Siege of Sarajevo as well as the massacre of over 8000 Bosniak men in Srebrenica. Mladić was found guilty on one charge of genocide (Srebrenica) and five separate charges of crimes against humanity by the ICTY (Human Rights Watch, 2017). However, Bosnian Serbs view Mladić as a hero and freedom fighter of the Serb people.

explain the networked moments of memory described earlier as ‘connective memory’. Importantly, these digital modes of remembrance cannot be seen as separate from the situated experiences of everyday life.

Although Benedict Anderson ([1983] 2016) described the transnational character of nationalism, scholars such as Arjun Appadurai (1996) drew attention to the global flows that created increasing mobility between cultures, media, individuals and economies. Although other terms to describe the global mnemonic arena have circulated – for example, global memory, cosmopolitan memory, multidirectional memory, or global memory – the term transnational is preferred because it draws attention to the ways in which memory travels and circulates – as transcultural memory does – whilst not completely letting go of the role of national borders (De Cesari and Rigney, 2014; Erll, 2011). Indeed – and especially when studying the role of memory in post-war states, as this dissertation does – the role of ethnonational framings still plays an important role. Thus, the transnational paradigm is best suited to explore how war memory travels digitally.

Although memory scholars have recognised the importance of global media cultures in general, and popular culture in particular, little attention has been paid to game culture. However, remembrance takes place in all aspects of everyday life – both at work and at leisure. In contemporary societies, digital games and play are part of our everyday lives. Coming home and playing a game or watching YouTube videos on games are now normal forms of leisure – also in post-war states. Therefore, the analytical addition to the field of memory studies is to describe how post-war individuals engage with the past in the sociotechnical systems of game culture. In the following section I provide an overview of recent developments within the field, and how this research brings game research into productive contact with memory studies.

Games as Expressions of Global Cultural Memory

In the context of the study of games and gaming, a productive insight from the transnational memory paradigm is the role played by global media cultures in the circulation of memory. Transnational memory places an emphasis on ‘global media cultures and popular representations of the past’ (Erll, 2011: 5). Indeed, global media industries play a significant role in creating the infrastructure for the circulation of content that is distributed internationally as narratives and representations of the past adopted for a global market (Keilbach, 2017).

Since the early 2000s, many authors (Lammes, 2003; Squire and Barab, 2004; Uricchio, 2005), including myself (Lammes and De Smale, 2018), have focused on the linkages between

playing games and learning about the past. In the field, the seminal work of William Uricchio (2005) – who wrote about the suitability of games for thinking about the past – has informed the area of historical game research. Uricchio (2005) draws attention to the simulation potential of games to afford a multiplicity of historical beginnings and endings, and emphasises the potential for games not only to represent historical events, but also historical processes. In fleshing out the links between history and games, scholars have turned to case-based research that focuses on specific games and specific franchises. For instance, case studies have been carried out on games such as *Sid Meier's Civilization* (Lammes, 2003; Lammes and De Smale, 2018; Mukherjee, 2016; Squire and Barab, 2004), or other popular franchises such as *Call of Duty* (Pötzsch, 2015) and *Assassin's Creed* (Hammar, 2017; Shaw, 2015). Research conducted on past representation tends to be based on case studies and oriented towards a specific geographical region in a specific historical context – for example, how the Warsaw uprising is a recurring site of memory in Polish digital and tabletop games (Sterczewski, 2016), or how *Call of Duty: Black Ops* (Activision, 2010) dramatises Cold War history (Pötzsch and Šisler, 2016). One of the contributions of this dissertation is to focus on lesser-known conflicts of the post-Cold War era.

The majority of research on historical games deals with their accuracy in representing past wars and tends to focus either on the representation of individuals or minority groups, or historical accuracy. For instance, scholars emphasise how the representation of past wars is always mediated through a series of violence filters that limit representations of war (Pötzsch, 2015). Examples of such mediation can be seen in the misrepresentation of non-Western Others as terrorists (Allen, 2011; Schulzke, 2013; Šisler, 2009); in the continuing perspective of the Western soldier-hero (Andersen, 2014); or in the representation of national-socialism in WWII games (Kingsepp, 2007). Here, scholars tend to highlight failures to adequately or ethically represent – or equally not represent – the past correctly, either at the level of rules, narratively, or graphically (Allen, 2011; Andersen, 2014; Breuer et al., 2011; Gieselmann, 2007; Mantello, 2012; Schulzke, 2013). For example, addressing questions of the representation of suffering and “Otherness”, Vít Šisler (2009) – following the work of Edward Said – describes the representation of the Middle East in games as a form of Orientalism. Furthermore, civilian suffering is omitted in most conventional first-person shooter (FPS) games. A systematic empirical study conducted by Pieter van den Heede et al. (2018) confirms that the majority of war game titles focus on a hegemonic, Western, Anglophone perception of war and prefer to

fictionalise armed conflict in order to avoid controversy on the topic of representing modern warfare.

Whilst these types of studies are relevant to our understanding of the representation of the past, they do not tell us anything about how the past is perceived and experienced in the present. An analytical blind spot of this type of research is that it studies representation and ignores the importance of player context in appropriating the historical framings afforded in games. This is limiting, because the potential for mnemonic meaning-making can only be realised in its reception (Erll, 2008: 395). As a result, much of this research seems to be falling into the representational paradigm – an issue that is symptomatic of much cultural memory research (Kansteiner, 2002). What seems to be missing in this debate are the actual mnemonic experiences of individuals playing the game.

In article 4, I focus on the reception of historical games by post-war youth. Earlier empirical studies of players playing historical games yield interesting results, for example that players experience pleasurable discomfort when confronted with traumatic representations of the past (Jørgensen, 2016). What Kristine Jørgensen (2016) and a small subset of game scholars (Keogh, 2013; Smethurst and Craps, 2015) draw attention to are war games that focus on suffering and confront the player with moral dilemmas faced during wartime. A productive focus for these types of atypical historical war games is to depart from the idea of humanitarianism, which brings with it a necessary emphasis on how post-war individuals make sense of the past through gameplay.

Conditions of Production Beyond Militarism

Whilst the majority of war game titles depart from a military perspective – think of AAA series such as *Call of Duty*, or *Battlefield*, which glorify war – in this context, humanitarianism draws attention to game titles that focus on human suffering and war atrocities. This research studies a subset of war games that are also termed “serious games”, “political games”, or “critical games” – all of which subvert conventional war game experiences.¹¹ Examples are *Spec Ops: The Line* (Yager Development, 2012), *Papers Please* (Pope, 2013), *Czechoslovakia 38-89: Assassination* (Charles University in Prague/Czech Academy of Sciences, 2015) and the game central in this study – *This War of Mine* (11 bit studios, 2014). Via innovative and self-reflexive

¹¹ In the interest of brevity, I will not delve further into serious game discourse. For an overview of games for educational purposes, see De Smale et al. (2016).

game design (Flanagan, 2013) these types of games progressively critique, subvert and reinvent the war game genre (Pötzsch, 2015). The emphasis is on gameplay that reflects on human suffering, either by incorporating moments of mnemonic reflection (*Czechoslovakia* 38-89); by incorporating the effects of migration and displacement (*Papers Please*); by addressing the consequences of post-traumatic stress faced by soldiers (*Spec Ops*); or by focusing on civilian suffering during wartime (*This War of Mine*).

Militarism is a recurring concept within historical game research. More broadly, this theoretical debate is concerned with militarisation which, as an ideology, glorifies (Western) military power through symbolic displays such as parades and propaganda, and promotes militarisation in the cultural industry (Der Derian, 2009), as well as all aspects of everyday life (Graham, 2009). The game industry has an intimate connection to the military industry, both politically and economically (Lenoir, 2000; Mantello, 2012; Nieborg and Van der Graaf, 2003; Ottosen, 2009; Payne, 2012; Schulzke, 2013). Flowing from the involvement of the military within the film industry, the ‘military-entertainment complex’ conceptualises the interrelations between the game industry and the military industry (e.g. Herz, 1997; Huntemann and Payne, 2009; Lenoir and Lowood, 2005).¹²

Unfortunately, the recurring emphasis on militarism in war games research also leads to an analytical blind spot. By continually focusing on the relationship between the military industry and the entertainment industry, the focus will always be on the limits of hegemonic representations that promote militarism as an ideology. However, this draws attention away from so called new wars and their respective ideologies (Kaldor, 1999, 2013). New wars are the conflicts of the post-Cold War era – hybrid types of conflict, characterised by aggression by various constellations of state and non-state actors, fighting in the name of identity politics, attempting to achieve political control, and financed through other means that seek a continuation of violence. Humanitarian intervention policies – or a lack thereof – cannot be seen as separate from these new wars. One relevant example of a new war is the Yugoslav War, in which Srebrenica is widely known as a failure of humanitarian intervention. The precipitation of the Srebrenica genocide by failing to send air support to the Dutch UN

¹² In this dissertation, the term military-entertainment complex is chosen because this is the most well-known term used to describe this phenomenon. Different scholars have coined different terms, for example militainment (Stahl, 2010), or Military-Industrial-Media-Entertainment Network (Der Derian, 2009). Other incidental spin offs are the military-industrial-media complex, or the military-media complex. All of these concepts revolve in varying forms around the promotion of militarism and the militarisation of societies.

peacekeepers –Dutchbat – caused a pre-emptive intervention in the Kosovo conflict via the Bombing of Belgrade.

This research therefore combines the insights of scholars within the field of historical game research, but focuses on new wars, and moves away from focussing on militarism as a central concept. The main insight I draw upon is an emphasis on tracing the political-economic relationship between the development of historical games and the ecology of game culture. Most notably in this area are the publications *Militainment Inc.: War Media and Popular Culture*, written by Roger Stahl (2010) and *Games of Empire: Global Capitalism and Video Games*, written by Nick Dyer-Witherford and Greig de Peuter (2009). Each in their own way, these scholars emphasise the political-economic relationship between military and civilian industries – how digital war games are part of a global economy that capitalises on the pleasures of simulation and entertainment, and sustain inequality and conflict. Digital media platforms such as YouTube or Twitch, as well as application platforms such as Steam or Google Play, are intermediaries in the ludic network and are key in the distribution of game content (Kerr, 2017). As the production of digital games becomes increasingly platform dependent, they also increasingly become economically, politically and infrastructurally tied to those platforms and their corresponding market structures and modes of governance (Nieborg and Poell, 2018). Article 1 translates these insights into an analytical framework, studying the conditions that inform the development of historical games that focus on human suffering.

Previous research on conditions of development and production reveals how conditions of labour inform the design of games – for instance, how game studios negate financial risks and how creative design practices are part of stressful work environments with extreme deadlines (O'Donnell, 2014). Furthermore, the production of historical games is informed by forces that sustain inequality in the industry, such as (1) the localisation of the U.S.A, Canada and other Western European countries as the geographical centres of power; (2) the employment of a homogenous group of workers, often white, heterosexual men in their late twenties or early thirties; and (3) the continuation of racial hierarchies within game studios; which (4) affect design decisions on how the past should be represented (Hammar and Woodcock, 2019 [forthcoming]). One important outcome of this debate is its emphasis on the processes and powers of production, and how these inform the eventual mnemonic experience. The contribution I make to this field, is the emphasis on micro-interaction, and how everyday work environments inform the design of historical game experience.

In sum, a transnational paradigm draws attention to the relationship between the global industry of digital games and both national and local mnemonic practices. Operating within the field of historical game studies, this research goes against the grain by choosing to study a game that follows a humanitarian, rather than a militaristic perspective on war. Although this may make the case study atypical, the dynamics that are studied align with researchers that study the development and production of games. Two valuable additions to the field are (1) a focus on player context, and (2) how conditions of development inform historical game experiences.

The Ludic Ecology Paradigm

Now that the transnational memory paradigm has been established, I turn my attention to the second paradigm that informs this research – the ecological paradigm. This paradigm concerns the interrelatedness between media industries, users and platforms. Through this paradigm, developers, user-generated content and their platforms are all part of a sociotechnical system. In a similar fashion to transnational memory, the focus here is on the dynamic that exists between actors, translation and the circulation of content. More importantly, scholars considering this paradigm recognise the interrelatedness between playing games and other media practices (e.g. Apperley, 2011; Taylor, 2018). The concept of ludic memory network as defined in this work, draws from this conceptualisation of game culture and the interrelated social practices. My contribution to the ecological paradigm in game research adds the insight that commemoration and remembrance practices (article 3), which materialise as a result of the digital game ecology (article 2), can be seen as forms of ludic identification.

In the last decade, a subset of digital media scholars has studied the sociality and materiality of game culture as an ecosystem (Apperley, 2011; Consalvo, 2017; Frissen et al., 2015; Taylor, 2018). Within an ecological paradigm, leisure activities and media practices intersect across multiple digital media platforms and collectives (Taylor, 2018: 13). The ecological paradigm in digital media studies emphasises the materiality of game culture and the interlinked sociotechnical practices that emerge as a consequence. Studying the materiality of game culture draws attention to the meanings attached to games, but also to the cultural objects that materialise as a result (Apperley and Jayemane, 2012: 10). Game culture, approached in this dissertation via the term “network”, is also termed an assemblage (Taylor, 2009), or a digital game ecology (Apperley, 2011). What these concepts share is a focus on the rhizomatic, networked aspect of media practices and industries. This notion infers that

sociotechnical systems – including game culture – are dynamic, emergent and open. In this respect, the game is not the central and only object of study; consideration is also given to other practices that emerge within game culture, such as live streaming, Let's Play videos or modding. These practices are considered as objects of study in their own right; not simply as paratexts of games, but as social practices that are part of digital game culture (Consalvo, 2017). Key to this ecological paradigm is the interconnectedness of digital media platforms, conceptualised by Van Dijck (2013) as a culture of connectivity; 'an ecosystem of connective media with a few large and many small players', giving way to a "platformed" sociality' (4–5). For example, a nineteen-year-old woman from Banja Luka in Republika Srpska who likes to go to an Internet café to play *League of Legends* with her friends also uses Instagram, and watches YouTube videos as well as national television. Remembrance via game culture takes place within this ecosystem.

This research examines the role played by the user-generated content published by Let's Players in the circulation of cultural memory. The interrelatedness between user-generated content and the development of games is described by other game scholars (Dyer-Witherford and De Peuter, 2009; Kerr, 2017; Stahl, 2010), yet there remains a gap in knowledge concerning how significant these interrelations are to the study of cultural memory and remembrance – a gap this research aims to fill. Again, by conceptualising game culture as a dynamic phenomenon, the act of watching Let's Play videos or live streams becomes a media event in its own right (see Taylor, 2018). Just as game developers are dependent on a platform's affordances for the distribution of their games, so too are the producers of user-generated content. Whilst the educational value of Let's Players is recognised (Burwell and Miller, 2016), scholars emphasise that Let's Players should be seen as performers rather than players (Nguyen, 2016), since in these videos it is not so much the skills, but the reactions of a Let's Player that are the source of entertainment (Menotti, 2014). Furthermore, Let's Players may diverge from structured narratives or intended game design (Glas, 2015; Kerttula, 2016).

Let's Players represent a specific player context and differ from regular players, precisely because their intention is to instrumentalise their gameplay for personal gain by distributing it online. Axel Bruns (2008) considers these forms of user-generated production, coining the term 'produsage' to describe them. Recent research on the practices of players posting gameplay content has drawn attention to the stress of producing video content on a regular basis and engaging with audiences (Postigo, 2016). In order to monetise their gaming practices, these content producers aim to grow their visibility and increase views until gaining

celebrity status (Johnson and Woodcock, 2017). This form of micro-celebrity is self-made, platform- and topic-specific (Marwick and boyd, 2011; Senft, 2008). It is a form of self-presentation in which persons position themselves as public figures, allowing others to consume their content. Using the same platforms as traditional celebrities, micro-celebrities use similar strategies to communicate directly with their audiences.

The possibilities for interaction on YouTube offer potential space for commemoration around game content to emerge. Key in developing possibilities for commemorations are the affordances offered by platforms such as YouTube, which emerge in the complex connections between digital platforms, users, the technologies that structure them, the economic model in which they are enveloped and the institutional bodies that govern them (Van Dijck and Poell, 2013). These dynamics play out via different entanglements, such as YouTube's governance of copyright protection (Hilderbrand, 2007), or features that allow for different levels of participation and engagement (Benson, 2016). These affordances – as elaborated on in the methodological section – invite specific usages. Affordances such as the ability to embed videos reconceptualise how post-war individuals remember by enabling videos to be distributed on dedicated websites to commemorate the local identities and memories of displaced persons – even if, for example, the physical village is no longer there (Halilovich, 2014). This brings me to the second addition to the field: the emergence of commemorative practices as a result of the circulation of game content.

Commemoration and Ludic Identification

A focus on the social practices that emerge via digital media practices is augmented in this research with the study of ludic identification. Ludic identity construction is a multisensory experience in which images, sounds and gestures are appropriated by individuals. Playful identity construction can be characterised by (1) the prefiguration of everyday life as playful; (2) more formalised expressions of play through games; and (3) playful identity construction through the ludic interactions of everyday life and through games (Frissen et al., 2015: 36–38). The latter is a reflective internalisation of the former two expressions of play. Playful identity construction characterises itself through the freedom and choice offered in play (Frissen et al., 2015: 36–38). This insight is taken up in order to analyse how the content of global games and their interactions inform local and national forms of identification through commemoration. More broadly, identification processes via games and play are part of the 'ludification of culture' (Raessens, 2006).

In order to make sense of collectivities, identification and globalisation, scholars redefined publics from a territorially bound collective to networked cultures that enable people to connect globally (Appadurai, 1996; Castells, 2011). Digital publics are publics restructured by the internet from which imagined communities emerge ‘as a result of the intersection between people, technologies and practice’ (boyd, 2014: 8). In this (re)conceptualisation of publics, imagined communities become structured around personal interests and tastes, rather than the nation. Moreover, these publics form their groupness around a collective media interest (Livingstone, 2005: 9). Publics form around shared interests and, whilst digital platforms may enforce collective imaginings of the nation, they also offer opportunities for individuals to communicate beyond territorial boundaries in transnational networks.

Ludic identification through commemoration feeds back into the nation-state through everyday expressions and identifications. In post-Yugoslav states such as Bosnia Herzegovina or Croatia, national news media are strictly regulated (Baker, 2018). On YouTube, however, individuals across the globe, regardless of their ethnicity or nationality, can watch commemorative videos of politically charged events such as the Srebrenica Memorial Day. For those who still mourn the Yugoslav War, digital media platforms serve as a global ‘accidental community of memory’ (Huttunen, 2016: 257). In this respect, digital media platforms offer a different form of media freedom for post-war societies in which national media such as radio, television programmes and news still have limited freedom. Thus, individual cultural expressions potentially democratise commemoration because they empower individuals to connect on the basis of shared memory. This view concurs with other researchers who argue that YouTube potentially enriches remembrance by offering an experience unavailable via traditional forms of commemoration (Gibson and Jones, 2012; Makhortykh, 2017). In addition, whilst acts of remembrance differ in their dynamics, digital publics gathering around shared interests and passions have the potential to strengthen identification beyond ethnicity.

In sum, this research draws on a transnational approach to memory, and an ecological approach to game culture. Transnational memory is concerned with issues of translation and the circulation of memory, but is still attentive to how these globalised cultural flows inform ethnonational identification on the ground. The ecological paradigm sees games, producers, consumers and their practices as part of a sociotechnical system. There is a long tradition of game research that focuses on describing and analysing the relationship between war, games and the past. More broadly, there are two influential paradigms used in research on games and war: the representational paradigm, and the recurring emphasis on militarism as a hegemonic

ideology. However, I instead propose a focus on atypical war games and humanitarianism, which necessarily raises questions concerning empathy and complicity. These frames focus on the role of human suffering and representing war. By focusing on game cultures of so called serious games, my dissertation contributes to an analytical shift that moves away from the military-entertainment complex. With my study, I will still consider how production contexts and other power relations shape and transform the past into designed objects with which to play.

Methodology

We are reminded by John Law (2004) that different research methods carve out different versions of empirical reality, which is why we must always make them explicit. In the preceding sections I have presented the empirical focus of my research, which now invites the question of how my research questions will be answered. Methodology, understood here as the general principles via which to structure an investigation, serves as a basis for understanding my research design and the methods chosen. As stated in the previous section, my interest is in the translation and circulation of war memory. The challenge is how to empirically study the translation and circulation of memory in a field that is informed by social and technical actors, and that is temporal and continuously in a state of flux. The task is – in the spirit of Christian Lund (2014: 228) – to deconstruct this “thing” that constitutes a research object into observable empirical elements that signify different aspects of the whole. The approach taken in this dissertation is a material-discursive exploration of how war memory is digitised through translation – how it circulates online in different cultural forms, and how (and in what context) different users draw meaning from it. Actor-Network Theory (ANT) and scholars such as Bruno Latour and John Law focused my attention to the way in which technical objects and social life mutually shape each other. Aware of the paradoxical position of ANT regarding method and theory, I describe how ANT as a lens has helped me to develop my methodology and the “follow the thing” approach (see below). Given the broad scope of actors and subsequent practices I have studied, each article presented itself with unique challenges. Since articles leave little room for methodological discussion, I conclude this section by zooming in on some of the limitations of my approach.

Operationalisation: “Follow the Thing”

Matters grow from the middle, and from many places. But one also has to start *somewhere*.

— J. Law, *Aircraft Stories: Decentering the Object in Technoscience*
(2002: 1, emphasis in original)

The focus of this dissertation is not to explain *why* memory travels digitally, but *how* it does so. What happens when memories are translated into different forms, and how are they appropriated in different user contexts? Methodologically, I approach this process through the lens of Actor-Network Theory (ANT). With its origins in science and technology studies, ANT focuses on heterogeneous networks of relations between social and technical actors and is interested in describing processes. In ANT, both human and non-human agents have agency. Together, they form heterogeneous networks, as constellations coming together, and form networks that vary in their stability and duration (Latour, 2005). Although scholars state that ANT is a theory rather than a method, there remain contradictions to this stance. For instance, Latour (1999) describes ANT as ‘simply a way for the social scientists to access sites, a method and not a theory, a way to travel from one spot to the next, from one field site to the next’ (20). I use ANT as a lens to guide my methodology.¹³ Latour (1990: 106) argued that, in order to understand the meanings produced by objects, we need to *follow* the production of an object and the contexts of its use. As a designed game travels and is used in different contexts, its form and meaning change depending on that context. Taking Latour’s (1990) call to heart, the approach chosen in this research is therefore quite literally to follow a thing – in this case, a game.

The approach chosen in this dissertation is to follow one case study (a game) from its origin, to the online circulation of its content and its appropriation by players. “Follow the thing” is a useful concept via which to study how memory travels and changes in digital environments.¹⁴ “Follow the thing” resonates with ANT researchers, as well as cultural geographers such as Mike Crang and Ian Cook (2007) who follow material objects from their origin – the journeys they make, and the encounters they have until their use. Cook’s (2004)

¹³ And yet, it also was Bruno Latour (2005) who explicitly stated that ANT is not a method. This is one of the paradoxes of ANT, which according to scholars who voice it is not a method, but use it as such anyway.

¹⁴ “Follow the thing” as used in this dissertation is heavily inspired by the work of the *Playful Mapping Collective*, a group of innovative researchers who incorporate elements of play into social and cultural research (see Wilmott et al., 2016).

famous example involved a study of the sociality of food consumption. He did this by following a papaya from where it was grown, to its packaging and exportation, right up until its consumption. What we learn from Cook’s approach is a sensitivity to the enactment of power relations and the negotiation of (economic) values as objects travel from their place of production to their consumption. Naturally, these enactments shift as material objects move from place to place and other social actors take central positions in the networks through which they move.

If one wants to study the movement of memory in game culture, the “thing” to follow is a game inspired by a historical event. The digital game chosen for this research was inspired by the Yugoslav War. I chose for my starting point the designers of *This War of Mine*. Memory is an enactment of the past in the present by (in the case presented here) sociotechnical actors. Therefore, I chose to focus on key actors and their respective practices in relation to remembrance in game culture. As seen in Figure 3, these are (1) developers and the practices of designing; (2) Let’s Players performing during gameplay; (3) YouTube users commenting on videos; and (4) players playing the game. Whilst, already early in my research design, the beginning and end of the project were clearly discernible – a game’s origin is with its developers, and a game’s consumption is with its players – I was unsure about the actors in the middle. However, after interviewing the developers of *This War of Mine* and understanding more about the culture of gaming, the importance of studying Let’s Players quickly became apparent.

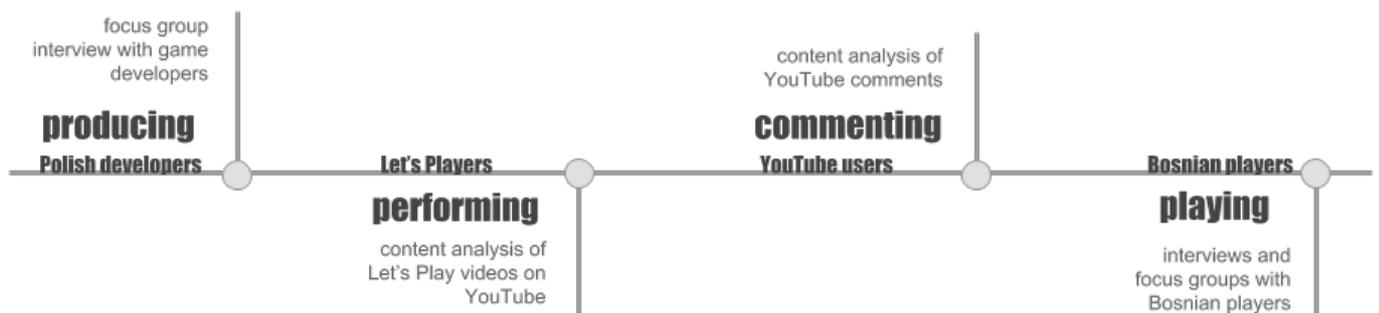


Fig. 3 The “follow the thing” approach as applied in this dissertation.

Besides defining what actors to study, another aspect was the fact that the specific geographical and historical context of the case was determined by the game's historical inspiration, namely, the Siege of Sarajevo. By choosing to focus on one particular historical and geographical context, the findings of this research resonate with other works focusing on the cultural memory of the Yugoslav War and add to the body of work, making 'sense as well as a new sense' (Lund, 2014: 227). As memory scholars studying cultural memory in the Balkan region remind us, the desire to remember the past has been accelerated by the Yugoslav War and its social and political consequences in the 1990s (Vervaeke, 2010: 2). Popular culture does not escape the tension between the local and the global, as global deterritorialised cultural forms are reterritorialised in local vernaculars (Baker, 2009). Thus, I was able to trace the process of decontextualisation and recontextualisation through a series of steps:

1. Follow the technical design of the game to Warsaw, where Yugoslav War memory is deterritorialised as a global experience;
2. Trace how Let's Players further decontextualise the historical framing of the game and distribute it to a wider audience;
3. Follow how YouTube users recontextualise mnemonic meanings through interacting with video content of the game;
4. Trace the game back to Sarajevo and Banja Luka, by describing how the re-appropriation of meaning reterritorialises the game as a medium of Yugoslav War memory.

Analysing Platforms Through Affordance Theory

Affordances refer to the relationship between a subject and its environment. The concept is used by digital media scholars to describe the social and technical features of platforms (e.g. Bucher and Helmond, 2017), and finds its roots in environmental studies, coined by James J. Gibson ([1979] 2011) in order to describe how animals relate to their environment. For Gibson ([1979] 2011), 'affordances are what it *offers* the animal, what it provides or *furnishes*, either for good or ill' (127, emphasis in original).¹⁵ Important to note is the relationality of

¹⁵ The concept of 'affordances', although coined by Gibson, was popularised by Donald Norman (1990 [1988]) in his book *The Design of Everyday Things*. The idea has been widely adopted and appropriated in human-computer interaction research. For a good historical overview of affordance theory and its contemporary usage in digital media research, see Bucher and Helmond (2017).

affordances, to both the subject – a user – and its designed environment. Affordances are different properties of the environment. A chair made of wood has a flat surface; it is strong, rigid, and its design invites users to sit on it. However, this particular chair can also be used to stand on, or be thrown around the room. However, a chair made of a fragile material, such as glass, cannot be thrown, since it might break. Objects *afford* and *facilitate* our activities, *obliging* us to do certain things and *forbidding* us from doing others (Yaneva, 2009: 276). According to Gibson ([1979] 2011), we perceive the environment through possibilities of action.

In the ludic memory network examined in this dissertation, two platforms are key sociotechnical actors: YouTube, and the game *This War of Mine*. When I talk about digital games or YouTube in the context of this dissertation, I talk about platforms. Platforms emphasise their intermediary-ness and the tensions via which they operate – for example, those between commercial interests and community building, or between intervention and neutrality (Gillespie, 2010: 348). Digital media platforms are environments – in the Gibsonian sense – yet no two platforms are alike, although there seem to be functional and feature similarities, such as commenting or tagging (Bucher and Helmond, 2017: 19). Intermediaries define roles between actors – users, producers, advertisers, policy makers – and position themselves towards these different actors (Gillespie, 2010). An intermediary is anything that links actors and helps to define the relationship between them – such as texts, laws or software. The ‘intermediary-ness’ of platforms is the effect of assembling heterogeneous materials (application programming interface [API], regulations, data structures) that impose specific ways to use a platform. Intermediaries channel other actors in two ways: by acting on their behalf, and by expressing their values and ideas. The YouTube platform, as an intermediary, acts on behalf of YouTube’s management, as well as representing its values. Thus, the social reality of how and what a content creator can publish is an effect of the platform as intermediary.

Developers Inscribing Meaning

Platforms are inscribed with values, ideas, morals and desires, and developers do their best to control their output to achieve the intended effect. These processes of inscription (Akrich, 1992) determine what a user can and cannot do with the technologies they use. In order to achieve the desired gameplay experience, game designers playtest their games with users. However, once the intermediary is inserted in the network – for example, when the game is

published on Steam, the intermediary travels and is interpreted according to the specific context of its use (Yaneva, 2009). When games or intermediaries are placed in the network, they may be used in different ways than originally intended by their designers. Madeleine Akrich (1992) refers to this process as de-description. An analysis of the interaction between the intended design and the users of platforms enables an understanding of how meanings of cultural memory are inscribed in designed objects, and how those meanings are appropriated by users. In this research, this is achieved by analysing the design processes and analysing user practices. Through interviewing game developers, I describe the conditions via which a historical war game is produced. How players in turn make sense of the gameplay content through processes of de-description is addressed by analysing Let's Play videos as well as interviewing players.

Studying digital practices on platforms can be challenging because of the constant evolution of platforms and their affordances. Changes in the platform have an effect on their potential use. For example, a change in the monetisation structure of YouTube has a knock-on effect, causing video producers to adapt their content accordingly in order to (re)maximise their profit. This is part of the messiness of studying actor-networks. How to deal with a site that is mutable and ever-changing – especially since these changes inform the very practices I was studying? Alice Marwick (2013: 8) draws attention to the importance of studying industry blogs that represent the values of the tech community. For example, the effect of the change in the monetisation structure of YouTube– and the controversy that surrounds it – is well-documented in the blogs that focus on publishing YouTube content professionally. These blogs were therefore used to study YouTube's affordances. Another form of empirical data used in article two and three were the instructions given by the platform to its content producers in the YouTube Creator Academy. Just as industry blogs may represent the values of the community, user blogs such as the YouTube Creator Academy are intermediaries that channel a platform's values.

YouTube Users Appropriating Games

Another important aspect to consider are the publics and discourses that emerge within a platform. These are micro-interactions that occur within a platform, for example as comments on YouTube. However, as a site of interaction between the platform, video poster and viewer, the comment section of YouTube is a separate space that differs significantly from other platforms such as Twitter. Although the short, reactive and asynchronous nature of comments makes them shareable (Reagle, 2015: 80), this function is limited on YouTube. YouTube

differs precisely because the platform has detached the practice of commenting from the ‘share-ability’ of other interactions on the site, such as video posting. Comments are ‘the things that ordinary people encounter in daily life’ (Reagle, 2015: 17). As I note in article 3 – which looks in greater depth at the practice of commenting – the “share-ability” of comments differs from comments on other platforms. This is best illustrated by the fact that these comments – although they can be scraped using an API – are not searchable by users on the platform itself. In order to make them available to analysis, research depends on digital tools that use YouTube’s API to scrape data. Therefore, I turned to the use of tools such as the YouTube scraper by the Digital Methods Initiative (Rieder, 2015).

Players Re-Appropriating Historical Game Content

In the context of my research, physical sites were the settings in which the practice of playing converged with the historical context of the game. In this case two cities were chosen, namely, Sarajevo and Banja Luka. To gain a deeper understanding of the field, I went to Bosnia-Herzegovina for fieldwork. I stayed from March 2018 until May 2018. The two cities were selected because of their scale, history and also their difference. Banja Luka is the second largest city in Bosnia-Herzegovina, and the political centre of the Bosnian Serb government. Sarajevo as a city sits both symbolically and architecturally between East and West. One sees the architectural remnants of the Austro-Hungarian Empire next to buildings that would be equally recognisable in Vienna whilst conversely, in the heart of the city – the *Baščaršija* (“old town”) – the cultural heritage of the Ottoman Empire embraces you as you walk past the *Gazi Husrev-beg* mosque and the markets. Although cities like Sarajevo are multi-cultural, in Bosnia-Herzegovina ethnicity is still an important consideration for employment and higher education (university), as well as political appointments (Markowitz, 2010: 55). Since the ethnonational labels of Bosniak, Croat and Serb still carry profound significance (Brubaker, 2004), individuals from different cities may experience cultural memory via popular culture differently.

Data-Gathering Techniques

Now that my approach (follow the thing) and my actors (developers, Let’s Players, YouTube commenters and players) have been defined (see Fig. 3), I will review the methods used in the articles. For the research, I had to study different digital practices related to game culture, in different places in the world. The digital and spatial aspects of this research required me to be

methodologically flexible, adopting a tailored method per article. Some were more conventional – such as focus group interviews and interviews – whilst others were more experimental, using mixed method content analysis and mind-mapping. In the remainder of this introduction I briefly discuss the empirical data collection process.

Interviewing

Articles 1 and 4 of this dissertation used interviews as empirical data. This technique provided insight into the individual's perception, lived experience and practice. In the study of how players enact memory through gameplay, interviewing also provided insight into the actions, interactions and interpretations of the intended design and the mnemonic meanings attached to them. Upon arrival in Sarajevo, I met my translator Amra. Together we visited the two sites chosen as entry points: two gaming centres, one in Sarajevo, and one in Banja Luka. From there, we sought research participants, applying the snowballing technique. During my fieldwork between March and May 2018, I worked closely with Amra, who translated my English research documents (survey, interview questions, informed consent, etc.) and also translated during the interviews (see appendix A). I offered my participants the opportunity to conduct their interviews wholly or partially in Bosnian. The use of Bosnian and English was helpful in several regards. I noticed that some participants, when given the option, preferred English. A possible explanation of this observation is that English enables individuals to talk about their past with more distance than if it were in their mother tongue. More importantly, I found that the presence of Amra eased the conversational flow between myself and the participants. This was, at least in part, because Amra was highly skilled in the art of socialising, and thus she was able to ease sometimes painful conversations about the past. Additionally, the ability to easily switch to Bosnian when a participant could not describe the event in English was extremely beneficial.

Besides individual interviews, I also conducted three focus group interviews: two with *This War of Mine* players in Bosnia-Herzegovina (Sarajevo and Banja Luka), and one in Warsaw with the designers. The focus group interviews were semi-structured (see appendix B). Those in Bosnia-Herzegovina were moderated by me, and the focus group in Warsaw by me and my colleague Martijn Kors. The research was conducted by myself, Martijn M. L. Kors and Alyea M. Sandovar.

To include individual perceptions on game development in the Warsaw-based focus group interview, we augmented our study with visualisation techniques. Mind-mapping – a

technique adopted earlier by my colleague Alyea M. Sandovar (2018) in her dissertation about the design practices of indie game designers – helped participants to map their position within the development process. Interestingly, as illustrated in Figure 4, the maps drawn by the developers illustrate how their practice is intimately connected to both sociotechnical processes – developing the game together with colleagues – and sociotechnical actors such as e-mails, being inspired creatively by both historical music and oral history.

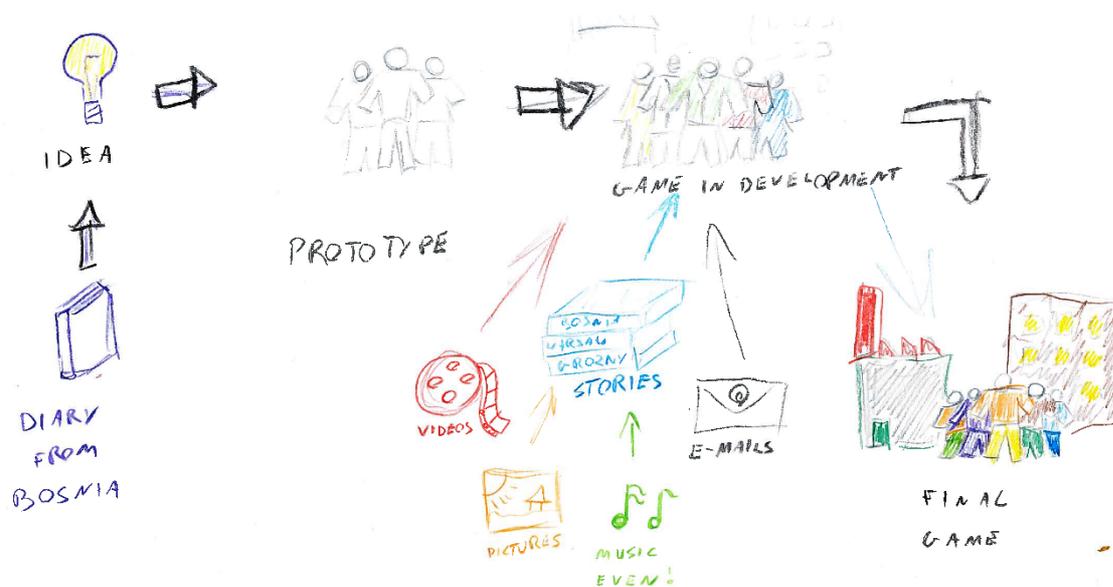


Fig. 4 The development process according to one of the game developers.

Mixed Method Content Analysis

In order to study how discourses of war memory circulate on YouTube in the third article, I opted to employ comment analysis of a large dataset of YouTube videos, filtering out the discourses on Yugoslav War memory that emerged in the comment section. For a systemic filtering of a large set of comment data, the method chosen for article 3 is a sequential mixed method content analysis. The sequence begins with quantitative research, performed via the scraping, filtering and evaluation of data, and ends in a qualitative content analysis (Creswell, 2014). This article breaks down the approach taken into five steps: scraping data; filtering data through keyword searches; evaluating data through variables; grouping data through coding; and finally, analysing clusters of data through qualitative content analysis.

In order to obtain a sample of YouTube comments in the sphere of *This War of Mine*, an open source data scraping tool called *DMI YouTube Scraper* was used (Rieder, 2015). This

first phase of scraping and filtering resulted in a final sample set of 61,542 comments derived from 331 videos. The second step was to select comments related to the Yugoslav War, whilst the third step was to evaluate 721 comments regarding their specificity to war and their personal tone (this step was performed by a researcher and a research assistant). The fourth step was to group comments into thematic clusters. The final step was a qualitative analysis of the comments of the two largest clusters – war memories and conflicting discussions of war events – focused on a close-reading of the content and describing the content, the individuals mentioned, the perspective of the commenter, as well as the sentiment of the comment. As I elaborated earlier, it is through the spirit of experimentation learned through my encounters with computer science that this type of methodological exploration came into being.

Ethics and Limitations

Since parts of the research deal with post-war individuals, as well as research subjects who are unaware that their data is used for scientific research, a word about research ethics is in order. After describing the ethics of my research, in the final part I describe the methodological limitations of my research, as well as some aspects left out of the analysis.

Because articles 1 and 4 deal with qualitative data, I ensured my participants were fully informed about the research and what would happen to their data. Informed consent was given in two ways: at the beginning of an interview (the focus group interview in Warsaw), as well as through informed consent forms (for the interviews in Bosnia-Herzegovina). I described the nature and background of the research in plain language – both orally and in writing – specifically explaining what participants could expect during the interviews, how the data would be processed and stored, as well as describing their rights as participants to withdraw their consent and asking for their oral consent. The informed consent form was translated into Bosnian in plain language as well.

Furthermore, I was also fully aware of the ethical considerations for dealing with young post-war individuals. Interviewing players who were subsequently playing fictionalised versions of their own violent pasts poses the ethical challenge of how to deal with post-war subjects without potentially re-traumatising them. My role as interviewer was not to do harm to those whom I interviewed, even if I did not agree with their perspectives on the war, or on others involved in the war. If I had to ask difficult questions regarding their pasts or family histories, I tried to do this honestly and genuinely, by becoming a vulnerable listener and being

aware of body language, subtle gestures and other signs of discomfort (Norkunas, 2013: 93–93).

For my digital research in articles 2 and 3, I found the key guiding principles of the Association of Internet researchers (AoIR) provided a helpful overview of how to conduct my digital research ethically, particularly regarding the differentiation between the expectations of the data subjects regarding what happens to their data, as well as their expectations surrounding the issue of privacy (Markham and Buchanan, 2012). Firstly, all traces of user interactions (graphics, text, video, etc.) are considered to be “Content” by YouTube. The Terms of Service dated May 24, 2018 state that when a user uploads or posts content on YouTube, the user grants:

1. to YouTube, a worldwide, non-exclusive, royalty-free, transferable licence (with right to sub-licence) to use, reproduce, distribute, prepare derivative works of, display, and perform that Content in connection with the provision of the Service and otherwise in connection with the provision of the Service and YouTube’s business, including without limitation for promoting and redistributing part or all of the Service (and derivative works thereof) in any media formats and through any media channels;
2. to each user of the Service, a worldwide, non-exclusive, royalty-free licence to access your Content through the Service, and to use, reproduce, distribute, prepare derivative works of, display and perform such Content to the extent permitted by the functionality of the Service and under these Terms. (YouTube, 2019: n.p.).

From these Terms of Service, we can conclude that users understand that YouTube may use their content for commercial and communicative purposes and that their content is used in various contexts. Nothing in these Terms of Service describes the possibility that users can be contacted about their content, which led me to refrain from contacting users – both Let’s Players and commenters – because this exceeds the accepted terms of what users might expect to happen with their data.

Second, although YouTube users are aware that their content is public, the question is what the expectations of users around issues of privacy are. YouTube’s Terms of Service (2019) says the following: “[y]ou understand that whether or not Content is published, YouTube does not guarantee any confidentiality with respect to Content” (n.p.). Here a distinction between the YouTube community as a whole and specific types of users is relevant.

Naturally, video posters are aware that the content they publish has a certain amount of publicness. However, users who post comments do not necessarily expect their comments to be scraped or analysed. Furthermore, while gameplay videos are generally not sensitive types of content, the comments dealt with personal stories of war. Therefore, I chose to anonymise the entire dataset, as well as the replies within a comment. Lastly, the personal data of the research subjects was processed and stored in a lawful, fair and transparent manner. All data (transcripts, survey results images, comment dataset) were anonymised in order to protect the personal identity of the research participants. The data is stored digitally in a secure data base for a maximum of ten years. In order to protect the data against unauthorised processing, the data is only available on request.

Limitations

Although outside of the scope of this research, the “follow the thing” approach in the context of this dissertation could have been augmented through multi-sited ethnography. The emphasis in multi-sited ethnography is on describing the connections and relations between actors and sites (Marcus, 1995: 14). By following objects as they circulate, multi-sited ethnography describes ‘transcultural space, in different locales at once, in parallel, separate but simultaneous worlds’ (Marcus, 1995: 40). Actor-Network Theory complements experimental forms of ethnography and is thus often employed in the exploration of platforms as digital sites of meaning. Multi-sited ethnography of the digital – also termed virtual ethnography (Hine, 2007, 2015) or technography (Bucher, 2012) – aims, as media scholar Tania Bucher (2012) states, to ‘observe, describe and interpret’ technical objects ‘on its own material-discursive terms’ (72). Further research using multi-sited ethnography would result in a more detailed account of how memories are attached to game objects as they travel.

One analytical limitation is that I did not conduct a sociotechnical analysis of YouTube. Two aspects for further research regard the role of platforms more explicitly. The first would be to trace how commemoration and cultural memory are structured via sociotechnical governance by tracing the institutional protocols and selection mechanisms that structure the collective memories archived on platforms such as YouTube – for example through the work of José van Dijck (2011: 41). The second would be to expand the sociotechnical study to include an analysis of how public debates inform YouTube’s institutional protocols, which would provide a more dialectic insight into the mutual shaping of sociotechnical platforms. Lastly, the analysis did not include Twitch or Steam because of time constraints, although both

are important platforms particularly relevant for the distribution, circulation and monetisation of game culture.

Outline and Findings

The structure of this thesis is in line with my “follow the thing” approach, and follows a historical war game inspired by the Yugoslav War – *This War of Mine* – as it travels from its origin, to how it circulates online, to how it is played in Bosnia-Herzegovina. In the first article, I focus on developers and the practice of designing by firstly documenting the design context (gamework) and secondly, the designers’ perceptions about the game and how they inform game development. In the second article – focusing on Let’s Players as micro-celebrities and the practice of performing – I address the role that digital popular culture plays as a carrier of informal cultural war memory. Digital popular culture and cultural war memory inevitably meet when players publish their war gameplay content based on past conflicts on YouTube. In the third article – focusing on YouTube users and the practice of commenting – I examine how war memory circulates, connects and collides on digital media platforms driven by digital publics that coalesce around popular culture. Media-based collectivities emerging on YouTube are influenced by the reactive and asynchronous dynamics of comments that stimulate the emergence of micro-narratives. Within this plurality of voices, connective moments focus on shared memories of war and displacement beyond ethnicity. However, clashing collective memories cause disputes that reify identification along ethnic lines. Lastly, in the fourth article, which focuses on Bosnian players and the practice of playing, I address how contemporary post-war generations engage with their violent pasts through digital war games. For individuals with personal memories of the war, playing evoked memories of the past through intertextual connections to the Yugoslav War, whilst younger participants imagined the war through playing. Key elements for these imaginings are the game elements that afford empathy and complicity. Whilst family stories informed players’ gameplay experience, selective silence on an institutional and familial level created forms of forgetting, making players hesitant towards mnemonic reflection.

Together, these four articles demonstrate how cultural memory in digital popular culture is transformed through the dynamics of translation and circulation. By following *This War of Mine*, the articles draw attention to three particular translations and circulations. Designers,

Let's Players and players – as social actors – transform the game, each in their own way. The first translation is when cultural war memory is transformed by designers into a game experience for a global audience, decontextualising specific national narratives, and incorporating multiple perspectives by creating a more universal experience. The second draws attention to the role of Let's Players, translating the potential historical framing, appropriating the game as a setting to perform in, caring less about the historical framing and more about entertaining potential audiences. Another translation occurs when the game is played by players with specific local knowledge on the game's historical setting. Here, the decontextualised experience stripped of national references is beneficial because it allows individuals with conflicting collective memories of the war to reflect upon the same conflict and in doing so, on how the suffering of game characters relates to their own war.

Furthermore, the affordances of both digital games and digital media platforms to stimulate social interaction and the sharing of content leads to unexpected moments of connection. The interconnectedness between platforms means that content may reach unexpected audiences, causing serendipitous moments of connective memory, an example of which is seen in the comment section of YouTube. Here, vernacular memory discourses circulate in collectivities surrounding historical game content on YouTube. However, because this platform is more than an archive for digital content and stimulates interaction between users, commenters do not only share their war memories as a response to watching a video, but also as a response to other commenters. Combined, the dynamics of translation and circulation of historical game content transforms cultural war memory, creating informal communities of remembrance and stimulating serendipitous encounters. Through ludic memory networks, individuals with a shared interest in games play with the past.

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PART II – ARTICLES

ARTICLE 1

The Case of This War of Mine

A Production Studies Perspective on Moral Game Design

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Abstract

This article reports on a study with 11 bit studios and their game, *This War of Mine*. Rather than a formal analysis of the game, our objective was to situate the research in game production studies by documenting the design context (gamework) and designer perceptions about the game that inform morally complex gameplay. The research was conducted with four team members of 11 bit studios: a senior game designer, a writer, a senior writer (with stakes in marketing), and a quality assurance lead. We employed reflective interviewing techniques and visual methods to better understand how moral gameplay was designed. Our analysis illustrates the roles underlying narratives in the design process and balancing everyday work negotiations play in the design of moral gameplay, how a designer's research informs the vision to create emotional realism in the game, and the importance of a player-centered iterative design process to produce morally engaging gameplay.

Keywords

war games, moral game design, production studies, focus group, visual methods

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It is my second night out scavenging; I approach a deserted residence. I am short in resources. The people that I care for are hungry and we need food to get through the next day. As I enter, I notice an older couple sitting in the living room. I sneak inside quickly to scavenge whatever I can find. The couple hears me in their basement. The older guy asks what I am doing. His wife is sick, and they both look scared. As I continue to rummage, I think that he might become violent but he just stands there. He begs me to leave. I feel uncomfortable with my actions, but I need food for my people to survive. I stop searching through all the rooms and run toward the entrance. As I run past the elderly couple, I drop part of my loot. I feel ashamed by my actions. I wanted to play as a moral person, but the situation is harsh, am I bad? Days later I still wonder, do they feel safe in their home, are they still scared, and most importantly, are they still alive?

The above vignette demonstrates the moral nuances present within *This War of Mine* (*TWoM*), a single-player war survival game released in 2014 by Polish game company 11 bit studios. Unlike games which are played from a military perspective, such as *Call of Duty* (*Infinity Ward*, 2003) or *America's Army* (U.S. Army, 2002), *TWoM* is played from the civilian perspective of war. The game takes place in a civil war setting where a player must keep a mixed group of playable characters called survivors alive by scavenging for resources to ensure their safety, as well as maintaining their physical and mental health. As the game progresses, resources become scarce. During scavenging sessions, the player encounters conflicting choices as illustrated in the vignette above. Ambiguous choices in the game creates a moral gameplay experience that reflects the disorientation and difficulties of being a civilian in wartime.

To achieve a realistic moral experience of war, the designers of *TWoM* incorporated certain game mechanics not often found together in conventional military war games.¹ First, the gameplay provides ambiguous moral choices. Altruism costs the player time and resources, but returning without resources can mean death to nonplayer characters and the loss of the game. Second, the game does not have an onboarding process. To parallel a civilian's experience of war, the player must learn to survive without instructions. There are no guides coaching the player to learn as she plays. Third, there is no respawning. Once a playable character is dead, she cannot be brought back to life. By incorporating permanent death, the game simulates the precariousness of life in war and the psychological trauma that occurs to survivors of war. Finally, the gameplay includes nonplayable children and infants.² In most war games, children are absent in the design, while in war, children do exist and must be cared for. Omitting these aspects of war is one way in which conventional military war games

selectively filter the reality of conflict (Pötzsch, 2015). The inclusion of these elements of innocent civilians, suffering, trauma, and children incorporates elements normally filtered out of military war games. The successful integration of these elements, as well as the critical acclaim 11 bit studios received, supports a deeper exploration of the moral gameplay in *TWoM*.³ To better understand *TWoM*'s moral gameplay, the conditions under which the game was designed must be explored. We analyzed how designers at 11 bit studio reflected on the design process and on the many factors that informed their design choices. Our claim is that designing better moral gameplay goes beyond a consideration for ethical play (Zagal, 2009), or the actions defined by the game for the player (Fullerton, 2008; Sicart, 2009). We build on game ethics scholarship by asserting that designing better moral gameplay includes an exploration of the conditions under which games are produced (Bourdieu & Johnson, 1993; Julier, 2006), including business ethics (Zagal, 2009), the context of design (Sandovar, Braad, Streicher, & Söbke, 2016), the designer's responsibility (Julier, 2006; Lawson, 2006; Sicart, 2009), and gamework culture (O'Donnell, 2014). A closer exploration of the social and technical context within which morally complex games are created can illustrate the dilemmas faced by designers (O'Donnell, 2014). Our aim is to highlight the importance of the designer context (gamework) and designers' perspectives as a dimension not included in existing research on morally complex gameplay. Literature on ethics focuses on the artifact and business models not on the production of the game. In *TWoM*, this could include an understanding of the impact that traumatic events, such as war, have on a design team.

In this article, we set out to explore the design process and designer perceptions of morally complex gameplay in *TWoM*. To showcase the importance of such a production studies context, the structure of this article is divided into several sections. First, we present current discourses in games ethics and war game literatures, and position how this research is a step toward filling an empirical gap. Then, we define important considerations in the production studies field relevant to the study of moral game design by building on reflective design literatures (Julier, 2006), production literatures (Bourdieu & Johnson, 1993; Nieborg, 2011; O'Donnell, 2014), and ethical design practices (Sandovar et al., 2016; Sicart, 2009; Zagal, 2009). Lastly, after a short consideration of the methodological challenges and limitations of a focus group interview, we focus on the main results of our analysis.

Games Ethics and Morality

In this section, we signal the need to position a production studies perspective in the study of war games and ethical gameplay. Current research on morality and games is focused on the game's content, the player as moral being, or organizational ethics. Sicart (2009) and Zagal (2009) provided the initial foundation for the consideration of ethics in games. Sandoval, Braad, Streicher, and Söbke (2016) built on Sicart and Zagal's definitions to include the design context and designer's perceptions. While Sicart and Zagal did advocate for designers' responsibility and acknowledge networks of agents outside of game design play roles in game development, these were not explicitly stated in their variables.

For Sicart (2009), game ethics includes three variables: (a) ethical game design—the object and its components, (b) the ethical experience—ethical values projected into an experience from which agents can make a choice; and (c) the ethical player—the capacity of the player to play with moral reason. Similarly, Zagal (2009) included aspects of the cultural artifact and the frameworks that define the ethical experience. He did not define the ethical player per se but rather referred to the experience of ethical play: what it means to play fairly. Zagal (2009) also included one variable not discussed by Sicart, that of business ethics (what it means to develop a game ethically). These components are critical, as they highlight the multiplicity of factors that inform game ethics. In particular, Zagal's (2009) business ethics aspect reflects on the importance of the organizational entity in the design of games.

Sandoval et al. (2016) reflected an information ethics perspective when they claimed that technologies carry the values and beliefs of those who design them (Flanagan & Nissenbaum, 2014). For this reason, they advocated that designers' perspectives be included as variables in game ethics. Also proposed was the inclusion of the designer context—the context within which games are built. Although not explicitly outlined in their paper, their inclusion of contexts advocates for an integration of production culture—the culture of work in which games are produced (O'Donnell, 2014)—as part of the design process. In this article, we wish to include all the differing aspects of game ethics as part of the design of moral gameplay. To understand moral gameplay, all aspects of a game, including ethical game design, ethical experience, ethical gameplay, business ethics, designer context (gamework), and designer perceptions, must be understood. We focus specifically on the designer context and designers' reflections in the design of war games that deal with morally complex gameplay.

Morality in War Games

Including the designers' context and their lived experience could augment existing war game research. These discourses describe the relationship between war and the military. Most war games, for example, *America's Army* (U.S. Army, 2002), *Call of Duty* (Infinity Ward, 2003), and so on, are played from the military perspective. As such, these texts critique the ideological and technical structures that exist between the U.S. military and the game industry. War games that diverge from using dominant representational strategies known in the war game discourse, such as *Spec Ops: The Line* (Yager Development, 2012) and *TWoM*, are positioned as critical alternatives to the military war game genre (Pötzsch, 2015). Currently, there are three prominent perspectives from which to examine the relationship between war and games.

The first set of literatures addresses meaningful play within a conflict simulation and wargames as a sociotechnical system of warfare (e.g., Crogan, 2011). This material perspective, which can be traced back to the Toronto School of Communication, studies the physical aspects of war games, such as computer simulation technology, and examines how the technology has developed historically in relation to the military industry. The second set of texts focuses on the economic and political relationships that exist between the game industry and the military industry (e.g., Dyer-Witheford & De Peuter, 2009). For example, Dyer-Witheford and De Peuter (2009) examined the imperial tendencies of the U.S. war game industry, including the role war games play in the global economy. The third set of literatures addresses the relationship between in-game representations and ideological warfare. These portray the main characters, their enemies, and the conflict within the game (e.g., Schulzke, 2013). From this semiotic perspective, moral games are analyzed through a textual reading. Although these war game literatures are theoretically sound cultural critiques, these texts do little to highlight the designer intention for these strategies. Thus, war game literatures do not include production aspects that could inform the final design. Finally, war games literature does not offer critical examinations of the moral and ethical components of war games. In the section that follows, we explore three main aspects of production: (a) production contexts, or the contexts under which texts are produced; (b) industry contexts, the various actors, networks, and relationships that inform game production; and (c) gamework context, which is game development work culture and respective practices.⁴

Production Contexts

To understand how images and media texts inform society, the contexts in which these texts are made must be understood (Bourdieu & Johnson, 1993; Thompson, 1995). Moral games are produced by a diverse team that includes writers, designers, programmers, play testers, and external stakeholders. Both sociologists John Thompson and Pierre Bourdieu argued that focusing solely on the internal analysis of a text without consideration for the larger forces that created the text leads to inaccurate interpretations. For Thompson (1995), such an interpretation required an understanding of (a) the social and historical conditions in which texts are produced, (b) the way they are received by real people, and (c) and how people perceive what is familiar to them. This study addresses the specific social and historical conditions under which TWoM was produced.

For Bourdieu, the production of texts required two aspects, habitus and field. By habitus, he meant the attitudes that individuals absorb over time through their social world. Bourdieu argued that these attitudes are often aggregated and used unconsciously. As the habitus can reflect unconscious attitudes, and unconscious attitudes have been argued to be imbedded in design (Flanagan & Nissenbaum, 2014), design therefore suggests reflexivity by the designer (Sicart, 2009). Social working conditions and designers' individual attitudes play a role in decisions about the kind of moral dilemmas that are included in gameplay (discussed later in this article). Not only is the designer a member of society, but she possesses knowledge which through her designs informs aesthetic and political aspects of our world (Julier, 2006). As cultural opinion makers, designers have a large role in shaping culture (Sicart, 2009).

Bourdieu's reference to field, by which he meant the conditions under which an individual produces a text, is particularly important to digital games. These conditions inform and influence how attitudes are incorporated in texts. Solely studying the moral gameplay without including the social and historical forces that inform the design (context of design) and the perceptions of those who create the texts (designers' perceptions) misses the cruciality of why moral gameplay contains those choices.

Industry Context

To address moral gameplay, it is necessary to explore the complexity of the industry. The design of games is informed not only by the designer and the technology but also by the culture's studio, and the variety of relationships the studio may have with the publisher, the

marketers, and the platform. These three aspects in the industry are relevant to the study of game design in the following ways.

First, tension between creativity and profit often drives aspects of design and development in games (Nieborg, 2011). Like any product-based industry, having a skillset and an idea is not sufficient to be successful; capital is critical for production. Decisions about the design of a game may be driven by profit rather than by the game mechanics that best fit the vision of the game.

Second, as many in the industry know, game development is precarious in the sense that software development is more of a nonlinear process than a straightforward method. Even before the code is handed to the publisher, setbacks can occur in programming, or when integrating art and sound during play testing, or even during distribution (Dyer-Witthford & De Peuter, 2009). For example, a developer from *Half-Life* described the many difficulties they encountered while implementing specific events into the game that were designed to be fun until they adopted a more iterative design process (Birdwell, 1999). The lack of management structures and varied-sized teams across the different studios can affect deadlines and the design of the game (Dyer-Witthford & De Peuter, 2009).

Third, dependencies in the industry inform design indirectly through gamework organizational structures. Hierarchical structures based in networks of secrecy and professional recognition become barriers to entry and remaining in the industry. This dependency supports hierarchical work structures that leave little room for creative autonomy (Deuze, Martin, & Allen, 2007; O'Donnell, 2014) and instead produces debilitating periods of unreasonable work hours. These factors demonstrate that the game design process is not isolated to the designer and the game itself. Rather, the game design process exists within a larger context that requires exploration.

Gamework Context

Until recently, gamework research centered on data derived from direct interviews with game developers outside of work settings, with scant exploration of the working conditions within companies (Kerr, 2013). Of the few reviews in the United States that have explored the day-to-day lives of game developers, most of the findings emphasized the console and its respective production network, or aspects of game developer culture, de-emphasizing data about the reflective experience of game developers. Reviews of game developers' day-to-day lives are limited, as it is difficult for researchers to enter into the inner sanctum of a game studio, mainly

due to game studios' hesitancy to share company secrets and the need to protect their intellectual property (Kerr, 2013; O'Donnell, 2014).

One of the few reviews of gamework that teases out the lives of game developers was by O'Donnell (2014). In his ethnographic study, O'Donnell (2014) explored (a) the creative collaborative practice of developers; (b) the manner in which developers negotiate underlying social, technical, and conceptual systems; and (c) the challenges developers face in the production process. Through his research, O'Donnell discovered developer dilemmas: the tensions that exist between gamework and industry's hierarchical structures. One dilemma refers to the negotiation between game professionals (and their tools) in the preproduction phase of a game. This negotiation plays a role in the design choices and the implemented gameplay and showcases the difficulties game developers face that inform games' content. Such negotiations raise questions as to what extent these negotiations also inform moral game design.

Designing Moral Experiences

Having discussed the context of design, the next important issue is a reflection on ethical design. Sicart (2009) argued that ethical games ought to be designed for play, instead of being designed to create an ethical experience. His claim was that a game with an ethical system creates a richer play experience. For example, in *Papers, Please* (Pope, 2013), the play is primarily about shifting documents around in search for discrepancies, but the experience is enriched for the player through the impact her choices have on the lives of other characters in the game.

Sicart (2009) described two types of ethical game design: an open design where the values of the community and the player can be implemented and a closed design where the player cannot implement values beyond constraints. The design of *TWoM* could be considered closed, though player decisions exist that appear to drive the game's main narrative. The game does create the two types of closed experiences outlined by Sicart (2009). As a subtracting experience, the game mechanics allow the players to draw their own conclusions. In *TWoM*, a player can delve into her thoughts and perceptions about a situation (i.e., what happened to the elderly couple). As a mirroring experience, *TWoM* also forces the player into ethical decisions, which yields uncomfortableness. For example, the decision to steal resources from the older couple leaves the player feeling uncomfortable and questioning herself, her identity.

Sicart (2009) stated that most players think strategically because the play is instrumental, not moral. So he suggested that to make moral play, games should be designed with a pause to force players to think differently, which he called Ludic Phronesis. This is not an immediate choice but is included in the sequence of play. If a design asks of the player to think differently, then it arouses the ethical agent within the player. He also suggested that for a player to pursue moral reasoning, the player must be presented with wicked problems. Giving players a good or evil meter does not help develop morality. By contrast, having players face ill-defined problems asks players to be responsible for their choices and supports their development as moral agents. The requirement to scavenge for resources in *TWoM* places the player in constant reflection about her actions and choices within a war experience. This is a perfect example of a wicked problem, because it offers imperfect information without clear outcomes. Lastly, he suggested designing technology such that players cannot save a particular state or start over from a certain point. This is exactly the mechanism employed in *TWoM* when the playable character cannot be respawned. If a player chooses to restart the game, the conditions are different each time. This means that the same gameplay can never be repeated. Sicart's claim for a play-centric approach to the study of moral games is complementary to current design approaches that advocate something similar.

Game design scholars have expressed the importance for the player experience to be at the center of the design process (Fullerton, 2008; Salen & Zimmerman, 2004). As predicting player experience is difficult, placing the player at the heart of the design supports better outcomes for the design (Salen & Zimmerman, 2004). Often the iterative game design process is suggested as a tool for creating player experiences, involving the cyclical periods of conceptualizing, prototyping, and evaluating (Fullerton, 2008; Kors, 2015; Salen & Zimmerman, 2004). To understand this process and the perspectives that informed the design, this study turned to a qualitative approach to studying the game's production.

Method

For this qualitative study, we drew from two approaches. To better understand perspectives on game production (Kerr, 2011), gamework (O'Donnell, 2014), and designers' reflective experience (de Smale, 2016), we used a focus group format to interview four members of 11 bit studio. Focus groups are supportive of examining participants who "have all been involved

in a particular concrete situation” (Eklund, 2015, p. 134). The focus group format engages all participants in discussing a shared experience. Sharing perspectives of a common experience supports exploration of novel ideas (Eklund, 2015; Kitzinger, 1995) and supports rich descriptions about social norms and shared values in a dynamic collaborative process. Although Eklund (2015, pp. 134–136) utilized the method to explore the experience of coordinated gameplay by players, the strength of a focus group to examine the same situation supports its use in game development settings.

As not all participant voices may be heard equally, we also employed visual methods, specifically drawing (Cross, 2011; Sandovar, in press). Visual methods support understanding of symbolic composition and visual components that inform the game design process, further contributing to our understanding of the development of *TWoM*.

Data Collection

To prepare, the authors participated in focus group training. The structure of the interview (Eklund, 2015, pp. 134–136) as well as an open-ended questionnaire were based on previous production studies (Guevara-Villalobos, 2011; O’Donnell, 2014; Sandovar, in press). The questionnaire addressed the designer’s vision of the game, the design process (including drawings), and moral choices during the design. The data were collected in a 2-hr semistructured interview with four members of the studio’s team (a senior game designer, a writer, a senior writer with stakes in marketing, and a quality assurance [QA] lead) on September 29, 2016, in Warsaw, Poland. Diverse studio roles provided differing perspectives about the development process.

Limitations

While the focus group was arranged to include a variety of team members to represent the different perspectives on the production process, their perspectives might not be representative for all members of 11 bit studios who worked on *TWoM*. As the interview was conducted roughly 2 years after the release of the original *TWoM*, narrative reflections may have been distorted over time. Another issue was that the interviews were conducted in English rather than in the participants’ native language, Polish. Although the language did not appear to hinder participants’ reflections, some nuances could have been lost in translation. Finally, this was a short study, not an ethnographic study conducted over a longer period of time, which would likely yield more in-depth perspectives about production culture.

Analysis

To identify, analyze, and report patterns within the data, a grounded theory informed approach was employed (Braun & Clarke, 2006; Kors, Ferri, van der Spek, Ketel, & Schouten, 2016). The objective was to generate detailed insights in relation to the development of *TWoM*. While the goal was not to develop a theoretical framework, grounded theory provided a clear structure to follow, including (a) in vivo coding, (b) open coding that led to core categories, (c) memo writing, and (d) selective coding, which related categories together to form three larger themes.

The recorded interview⁵ was professionally transcribed and imported to a qualitative research software. First, each researcher coded the interview separately. To confirm the type of in vivo coding implemented, researchers met to discuss the in vivo codes. The first session yielded over 300 in vivo codes. After the first discussion, each researcher recoded the interview, employing active verbs that described the elements in the interview. Researchers met for a second time to discuss these open codes. This next phase yielded a combined 100 codes. Together the team discussed the codes and agreed how to relabel these codes in relationship to one another. The codes were reorganized into 25 codes and added to a spreadsheet. Over a series of meetings, these codes were recoded into categories, which also included the relationships codes had with one another. In the final coding session, these categories were further reduced to 10 main themes. After this, the authors collaboratively grouped the 10 themes in 2 parts: themes related to gamework and themes related to game design.

Results

As mentioned above, the final coding yielded two groupings: aspects related to gamework and elements of game design. Gamework includes underlying narratives within game development (*habitus*) and creativity and sustainability (*the field*). Game design includes vision (*emotional realism*) and gameplay is the language. These results reflect the elements that defined the design of *TWoM* and its moral gameplay.

Gamework

The first category of themes relates to the design culture at 11 bit studios. We included the hidden narratives that influenced the development as well as themes that reflected the balance between creativity and sustainability.

Hidden Narratives

There were two underlying stories that occurred in the team's work culture. The first reflects their cultural memory (the habitus, as referred to by Bourdieu & Johnson, 1993) and proximity to Eastern Europe, and how this proximity informs what they design.

John, senior writer and marketing And after a week of research I had to take a break because it was taking a toll on me. No matter what—I had some knowledge of history beforehand. You need to keep in mind that it [the game] was from European perspective and mostly Western European. So for people from South America it was like European story in general. And we set it in this setting, not other, because it was easy for us to make a coherent one. Because we are from Eastern Europe so we know how to recreate buildings, the look, the feeling, the look of people—that kind of thing.

Sep. 29, 2016

The second narrative referred to the emotional impact the subject of war had on the team. Difficulties and challenges in studios are also highlighted in game production studies (Nieborg, 2011; O'Donnell, 2014; Sandovar, in press); however, these did not extend to exploration of emotionally charged design topics.

Dave, writer, And after a week of research I had to take a break because it was taking a toll on me. No matter what—I had some knowledge of history beforehand. No matter what I wanted to incorporate I was able to find something even more extreme that did happen actually. There were some scenes that were deemed by us too violent, too hard to witness even in the game, in a fictional setting to include them.

Sep. 29, 2016

Creativity and Sustainability

Similar to other production scholars, our research also found a tension between creativity and sustainability (Nieborg, 2011). As the game was not funded by an external party, *TWoM* had to sell well to break even. Though the intention for the game was to provide a serious perspective to the war game genre, ultimately their goal was to become financially sustainable. The designers described the tension:

John We don't need to struggle every day to get salaries. Because on one hand you are the artist. On the other hand and probably represented by me in this group—the businessman. Because we need to make a living out of it. Otherwise it will be horribly tough.

Despite their need to become financially sustainable, their discourse reflected concerns about monetizing from war. This concern may also be related to their cultural memory. The justification extended to a comparison with a similar struggle in representing the Holocaust in films:

John Well, Polanski was a victim as well. And same goes to Schindler's List by Spielberg or any other message that is about war. In the end you either make a living out of it or you need to do something different to make a living because we have wives and families.

Game Design

The second category refers to aspects in game design, including (a) the vision the designers held throughout the development, (b) the unique language of gameplay to convey messages, (c) the value of iterations, and (d) the continuous negotiation between seriousness and entertainment.

Vision

The vision for the game was to provide an emotionally realistic experience of war from a civilian perspective. We termed this designed experience emotional realism. To create emotional realism, the designers of *TWoM* included conditions civilians face, such as famine,

sickness, death, suffering, and boredom. The emotional experience conveyed closely resembles what cultural theorist Raymond Williams called structure of feeling (1977). For Williams, this structure captures a feeling or an emotion that is specific to a place, group, or period. Emotional realism for *TWoM* was expressed through their detailed research of civilian perspectives of war and their attempt to balance seriousness and entertainment. They reflected on other war experiences as central to their vision for the game:

Dave You know that there is fighting and you can believe that it is for the right cause and our guys, those who we support, are right. But it doesn't change the fact that people are suffering there as long as the fighting is going on. In war games you have invariably the bad guys and the good guys and in *This War of Mine* there are us and there are many with guns. I learned about this term reading about massacres in Colombia. What the right wing militias and the left wing revolutionaries were doing. And people who lived in those villages that were visited in this side and the other side, they have a name for both sides. Men with guns. They didn't care about what kind of ideology they professed.

To achieve emotional realism, the designers conducted extensive research on aspects of war related to civilians. Specifically, they investigated the historical background and also interviewed people who were survivors of war.

Dave But we wanted to have extensively researched background so when we built up the game we think up new events and scenes we can check them against our background to see if they fit. If something like that could happen in the game. And, the inspiration behind the events that transpire in the game are found in history. All those events are inspired by actual memories of the victims of armed conflict. And during the—after a week of researching because I wanted to root the story in actual stories in history so I can point when asked about some particular aspect of the game I can point to a time and place when something like that actually happened.

Although the designers' goal was not to represent a real conflict, the game could easily be contextualized by the player, as pointed out in other studies (Kors, van der Spek, & Schouten, 2015). Because of this, they described their responsibility not to misrepresent history:

Dave If we set the game as a recreation of particular conflict we would have to take sides. And even if we didn't we would be accused of it. We would be accused of presenting historic events in some wrong way and so on. So, the game could have been attacked from the start as inaccurate. And secondly, we didn't want it to talk about any particular conflict.

Negotiating between entertainment and seriousness

Another code relating to emotional realism in *TWoM* is how the team negotiated between entertainment and seriousness.

John It was one of the very few proofs that games can be a serious media or a serious muse. Another muse.

An emotionally realistic experience meant creating gameplay that would be a meaningful gameplay experience of what it was like to be in war:

Dave Even when it was a very bare bones experience but what is obvious from the start is that it's serious. When you play a survival game about a zombie apocalypse you are starting from the premise that this is a fantasy. This is something that cannot happen. That makes it a safe experience. And here we wanted to show something that can happen, that does happen right now and it can happen to you. And that changes both the emotional impact of the game and the requirements that it places on the developers because there is very little humor in the game.

As seen in the drawing by Tim (Figure 1), the QA lead, a constant concern was to find a balance between entertainment and meaningful gameplay.

Dave

A game that can be enjoyed, because people wouldn't play *This War of Mine* if they didn't take some kind of enjoyment from it, of overcoming obstacles, of seeing things through the end, of saving the people they were given the care of.

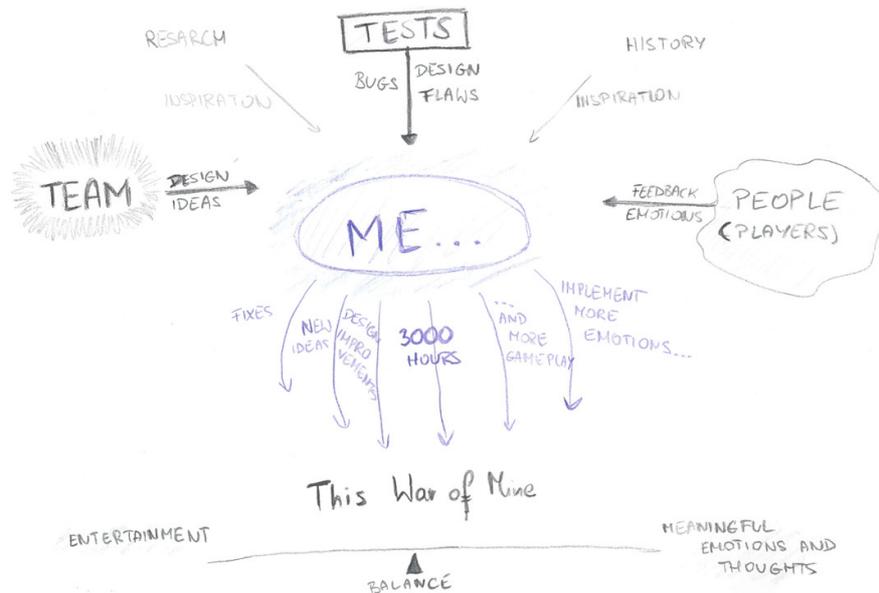


Fig. 1 Drawing of quality assurance lead on his role in the development process of *This War of Mine*.

Gameplay is the language

The interactive nature of games provides players with the opportunity to actively engage with the message through gameplay. For the designers, this is seen as a unique language that might make games more convincing than movies and, possibly, more effective in spreading messages.

John

My point was that games are capable of covering every story, be it controversial or whatever, as long as the gameplay is good. Because gameplay is the language. It needs to be engaging. Maybe not more successful than movies but maybe a little more convincing because they put you in the middle of the experience but they're interactive. That's why they can be effective when it comes to spreading the message.

Gameplay revolves around making morally ambiguous choices in social dilemmas. In the game, dilemmas materialize as special events during nighttime. For example, in the supermarket location, one such event is the Girl in Peril scenario, where a young woman is being sexually assaulted by a soldier. Here, the player is forced to make the decision whether or not to intervene.

John You can visit supermarket believe and you can peek what you want to do. Either way, there is no good choice. There is no white and black. There is only gray.

Such ambiguity creates a dissonance, which begs the player to reflect on her actions in the game. This strategy arouses what Sicart (2009) referred to as the ethical agent within the player. As in real life, there are no rewards or punishment for everyday actions. The game rather presents the question “What would you do?” in this situation, given the difficulties that a civilian might encounter in war:

Dave There are some situations in the game where you don’t have any good recourse. It’s just shit happens. You can just deal with it or sometimes die.

Other arguments are more overt, including those presented as a direct evaluation of how well the player performed.

Rick, designer The endings depend on the amount of trauma they experience during our
Sep. 29, 2016 gameplay during the war.

Game Design Elements

Although the designers did use several techniques to increase what Galloway (2006) termed realisticness, their intention was to create an emotional experience.⁶ The characters have been modeled on real people, the animations are motion captured, and in-game objects are based on their real-life counterparts.

However, this kind of realism was not the most important, and the designers stated that it was not their intention to have everything as realistic as possible in terms of visuals and simulation. What mattered for the team was to humanize the experience of war. Players’

resources were named our things instead of the typical inventory found in other war games. Also, the character's health status was displayed with terms of affect (i.e., sad, depressed) instead of a numerical indication. The designers' intentions were to move the player away from what Sicart (2009) called the strategic gameplay mode that instrumentalizes play:

Dave We need to think of people as people not as resources. The moment you start to treat them as resources you don't really care because they could be a resource, gold, oil, coal—whatever.

The team incorporated realities of conflict usually filtered out of conventional war games. For instance, in the introduction of children as part of the game:

Dave If you look up The Little Ones in the game perspective, how they [children] fit into the equations, they really don't. They shouldn't be there. They are a burden. Not a big one. Not to the point of breaking the game because they can help a little bit but they really don't belong here. Our city is actually in a war zone.

One of the ways they did this was to create the experience of war, taking it to the edge but not including everything that is real about war.

Dave There were some scenes that were deemed by us too violent, too hard to witness even in the game, in a fictional setting to include the game.

Particularly when it came to violent content, these realities of war were filtered. For instance, in discussing whether or not children could be killed in the game:

Rick If you start to kill children in a war game it stops to be an action game, right? It becomes a slaughterhouse. That's not what you want to achieve. On the contrary, in our game you have children but they cannot be killed as well. Because we didn't want to make it a gore game.

Another technique used to create emotional realism required the player to establish an emotional connection with the game's playable characters. The aim of this move was to stimulate feelings of discomfort:

Dave We wanted to create an emotional bond between the player and the characters in putting the players in an uncomfortable situation, [...] pushing the player out of his comfort zone.

They described the strength of the bond that one player experienced as follows:

Dave And the guy said that he played for nine days in game and one guy has starved to death, the second one was sick, and the third hanged himself. And he couldn't handle the game anymore because it was his fault they died. He wanted to play the game. He will return to the game. But he can't for now. It's too much. He will come back in a couple of days.

One technique that supported emotional realism was the experience of boredom. Through their research, the designers discovered that war is not a constant stream of traumatic events; sometimes there are long uneventful periods. Another design decision to note in regard to emotional realism is the lack of tutorial. Part of creating emotional realism is matching the disorientation that occurs during war. In war, no one is prepared. There is no guide book, no instructions on how to navigate the everyday. The designers utilized this technique to recreate the experience of disorientation.

Dave There is no hand holding. And when you start the game you just have to survive and you have to figure it out when you start. You are dropped into the deep end and you just have to figure out what to do, what not to do. You learn not to fight if you can avoid it very quickly. You learn that wood is more important, especially in the beginning, than the weapons which is—we wanted in a way we wanted the player to feel helpless and lost initially. Because people who find themselves in this situation they get no tutorial, no cliff notes on war.

Iterative design

How the player will respond to the gameplay experience is uncertain. The designers pointed to the importance of the iterative design process. In the sketch drawn by Dave (Figure 2), the writer, we see the clear cyclical nature of his work. He included smaller iterative cycles that refined each step before moving on to the next cycle. Also, he described that including gameplay (as part of the iterative design process) can be helpful in generating ideas.

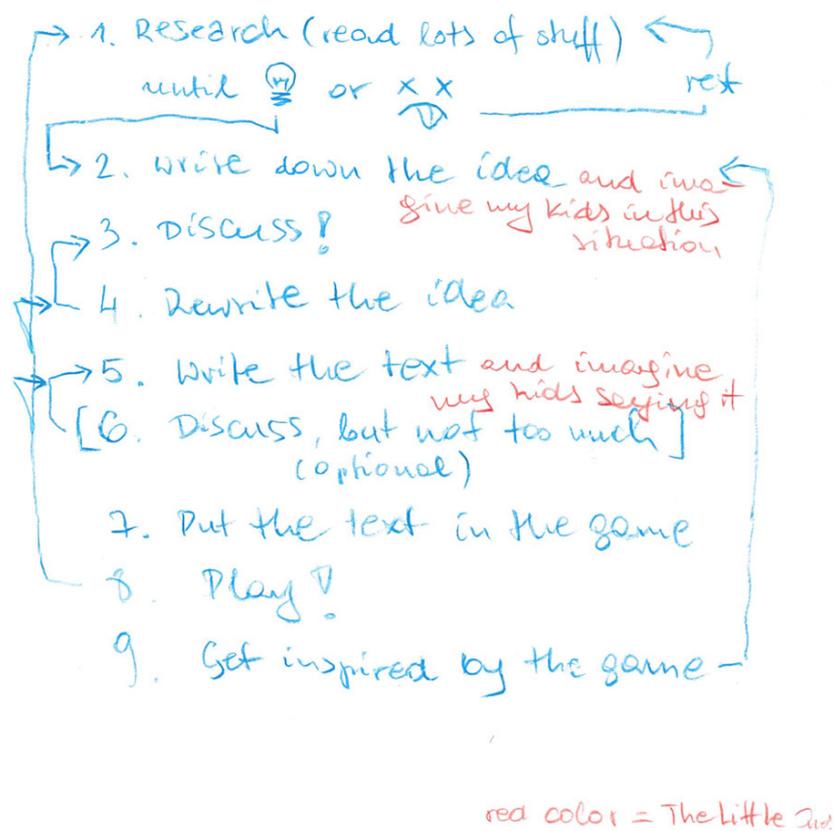


Fig. 2 Sketch of writer (Dave) on his role in the development process of This War of Mine.

In explaining this iterative design process, the designers highlighted player testing as central to recreation of emotional experiences.

Tim For me it's mostly, like I said, I've been in the middle of everything so it
 QA lead came from the whole team of designers, programmers, research, history, where we were searching for facts or testing people where they gave the

Sep. 29, 2016 feedback and emotions on everything. And giving a small adjustment to make as good bonds between entertainment and meaningful gameplay.

The importance of play testing was particularly important in relation to the game's moral design. After playing the game over and over, the designers noticed that they started to feel an emotional numbness, which made it difficult to evaluate the emotional experience themselves.

John The tests—people from the outside, at least for me it was a big deal because I remember that after some time you start to lose that emotional bulk with people. Especially when we added children. I didn't feel they were children. But, when we took people to test they started to play differently, act differently, and make safer decisions to reassure that they will come back to their children to the shelter, et cetera.

Because of this moral desensitization, the designers pointed toward the importance of play testing with different testers who hadn't played the game before. "It's very important to make tests on new people" (Rick). "Yeah, new tests because the guys who test games are also becoming a bit jaded" (John). Taken together, participants' reflections describe design aspects and gamework narratives that cannot be surmised by evaluating texts only. Not including the context of design and designers' perceptions limits the understanding required to develop moral gameplay.

Discussion and Conclusion

Through a focus group study with 11 bit studios, we examined TWoM by including designer perceptions and the design context as aspects that inform the design of moral gameplay. A focus group format supported an understanding of the different development roles in the production process. The data yielded two thematic groupings: gamework narratives and game design. In what follows we discuss the application of these findings to moral game design.

Defining Moral Gamework Narratives

We defined gamework narratives as the underlying stories present throughout the design of TWoM. The first theme reflects the team's habitus (Bourdieu & Johnson, 1993; Julier, 2006)—

the manner in which the designers perceived their own lived reality—and how these perceptions motivated the vision for the game. The designers' geographical location (Eastern Europe) informed the game's visual aesthetic. The vision of the game, that of war, is deeply imbedded in Polish history (Sterczewski, 2016), particularly the Warsaw Uprising, which has been used as a central theme in other Polish games. Thus, the habitus illustrates that designers' cultural heritage informed the game design (Sandovar, in press).

The second refers to Bourdieu's concept of the field (conditions under which a text is produced). Specifically, the data reflect two of O'Donnell's (2014) developers' dilemmas. The first is the tension between creativity and profitability (Nieborg, 2011). Bourdieu and Johnson (1993) also referred to the struggle between art and money, and the manner in which this tension "structures the field of power" between the "symbolically dominant 'pure art,'" and "economically dominant 'commercial art'" (p. 250). Although the game is defined by designers as an art form, their responses also reflected the demands of the market. A closely related dilemma referred to the tension between entertainment and the capitalization of war. Although the team at 11 bit studios articulated the goal to design a game with a message against war, they also explicitly expressed the importance of creating a game for entertainment. They justified their work by naming war films, such as *The Pianist* (Polanski, 2002) and *Schindler's List* (Spielberg, 1993). These critically acclaimed films are not only based on real stories and address the inhumanity of war but are also dramatized to captivate audiences and ultimately generate a profit.

A final gamework narrative included the hidden costs of designing a game with morally complex content, such as killing innocent civilians or sexual violence. We found that the designers were aware of their position of power in shaping the eventual moral gameplay experience, and expressed reflexive responsibility (Sandovar, in press; Sicart, 2009). The expression of this reflexive attitude was found in the team's extensive research for the game. In part, the extensive research for the game was conducted to understand the experiences civilians face in war. Exploring conditions such as famine, illness, death, and boredom affected the designers. One respondent described the emotional toll of studying civilian experiences in wartime. Later in development, the cost of this responsibility manifested itself differently. Designers felt apathetic during gameplay, having lost the connection to the traumatic experience. The gameplay represents emotional realism absent in other war games; however, creating engaging moral gameplay also has hidden costs.

Designing Moral Experience Through Emotional Realism

To create moral gameplay, the team needed to balance emotional realism and entertainment. Although the setting for the game required the civilian experience of war, a game's entertaining properties are of equal importance to create good gameplay. The designers reflected that games convey messages; as such, the game itself is the language. TWoM was designed to stimulate discomfort as did *Spec Ops: The Line*. Including other design elements, such as boredom and the lack of tutorial, are nuances that although designed intentionally by the designers, might not be noticed in a classical critical reading of the game as text. These elements are based on designers' experiences with the research as well as their cultural history. This illustrates the importance of including designers' perspectives in understanding moral gameplay.

The role of play testing was essential in the design of TWoM's moral gameplay. Understanding player experiences through play testing is crucial to the development of a balanced play experience (Sicart, 2009). The play testing was central in the design of elements, such as the inclusion of children, unclear moral decisions, the lack of tutorial, and the use of boredom. The role of testers was acknowledged by Ash (2012). He conducted ethnographic research to understand how game designers make use of feedback sessions to test the positive or negative affective encounters they design for. The designers of TWoM also stressed the importance of continually testing with new players, because desensitization toward the emotionally engaging gameplay happens over time. An iterative design process means that gameplay is in constant negotiation. This could indicate that the moral value system is not fixed, but rather a combination of many factors influenced by many agents (Sicart, 2009).

From our findings, several suggestions can be proposed for the design of moral gameplay. First, a player-centric iterative design process refines the player experience. This is particularly relevant for gameplay containing moral content, since the design process tends to desensitize designers during development. From a critical perspective, the moral value system is a culmination of all these different iterations, where different player reactions informed gameplay. Another finding from our study was that the importance of conducting elaborate background research about a subject for a game (such as war) supports game-world coherence. At the same time, designers should be aware of the various underlying narratives of their work environment, as they could unconsciously influence the design.

Implications and Future Research

We advocate for the inclusion of production studies as a crucial component of understanding game design. The context of design and designers' perceptions (symbolic capital) ought to be considered as intricate to the producers of the cultural work (Bourdieu, 1993). Further research could investigate this form of symbolic capital, and how it enacts within the field. Field research requires academics to work outside of their institutions in lieu of working side by side with studios (Nieborg, 2011; O'Donnell, 2014). We also advocate for the use of visual methods (i.e., drawings, photographs, sketches) as part of production studies. Designers notice and see the world visually, and in doing so express and work with their ideas in a graphical manner. Inclusion of these methods also supports a better understanding of the habitus, supports designers in self-reflection, and deepens an understanding of the field. In sum, this article has been a first step toward filling the empirical gap of including a production studies perspective on moral game design in war games.

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Notes

1. By conventional, this article is referring to first- and third-person shooter war games such as Call of Duty, Medal of Honor, or Gears of War, whose commercial success is dominating the current war game genre.
2. Here, we are referring to the original game This War of Mine (TWOm; 11 bit studios, 2014). In an expansion of the game: This War of Mine: The Little Ones (11 bit studios,

- 2016), 11 bit studios incorporated child survivors as playable characters. The actions of these playable characters are limited. For instance, these children cannot guard, barter, or defend themselves.
3. For TWoM, 11 bit studios has won a variety of national and international awards, for instance, Games for Change best gameplay award (Games for Change, 2015) and the Independent Games Festival audience award (Independent Game Festival Winners, 2015).
 4. Gamework was originally coined by Aphra Kerr (2013) to describe the socially constructed work practices in game development that result from interactions between human and nonhuman actors. This term is in opposition to gameplay practices. Later, this term was expanded upon by Casey O'Donnell (2014) to reflect upon the specific aspects of game development work culture, including secrecy and instrumentalization.
 5. The language of all interview quotes had been recorded verbatim to retain the authenticity/ originality/spontaneity of the text.
 6. Realisticness, a term adopted by Alexander Galloway (2006), elaborates on the way in which games use not only (photorealistic) digital imagery but also socially realistic behavior, such as character movement, to create an immersive gameplay experience.

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ARTICLE 2

Let's Play War

Cultural Memory, Celebrities and Appropriations of the Past

Stephanie de Smale

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Fig 9.1 A Let's Player performing with the game *This War of Mine* (jacksepticeye 2015).

Figure 9.1 shows the performance of *jacksepticeye* in his series on the game *This War of Mine* (11 bit studios 2014). *jacksepticeye* is the online persona of Seán McLoughlin – a 'Let's Player'

whose YouTube channel, which features gameplay content, has over 16 million subscribers. Videos of Let's Players are 'increasingly and widely popular self-recorded gaming videos where the respective gamers...comment on their journey through the game as well as on various aspects of it' (Radde-Antweiler, Waltemathe and Zeiler 2014: 17). With an estimated net worth of €2.2 million, McLoughlin belongs to the top ten YouTubers worldwide (*Independent* 2017) and can be classified as a micro-celebrity: a type of 'self-made' celebrity who has emerged on platforms such as Instagram, Twitter and YouTube. This particular video, which at the time of writing had been watched over 1.4 million times, concerns *This War of Mine* (*TWoM*), a game inspired by the 1992–95 Bosnian war, most notably the Siege of Sarajevo.¹ As this example suggests, Let's Players can play an important role in the translation and global circulation of cultural war memory by sharing their recorded gameplay videos.

Recent debates have drawn attention to the relationship between cultural war memory and digital popular culture (Bond, Craps and Vermeulen 2017, Hoskins 2009), including how cultural memory travels on and through digital platforms (Erll 2011), and how it 'morphs' when adapting to the specificities of each medium (Rigney 2005). Previously, the relationship between cultural memory and games has been explored by scholars focusing on the formal aspects of games and play, such as representations, narrative, procedures or performativity (Pötzsch and Šisler 2016, Chapman 2016), as well as those studying production processes (de Smale, Kors and Sandovar 2017), and those designing games to deal with complex memories of conflict (Šisler 2016). Whilst the formal aspects of games in relation to cultural memory have already been studied, this chapter contributes to existing scholarship on memory and games by focusing on the specific context of Let's Players, describing how cultural memory travels through these cultural expressions. It complements Kristine Jørgensen's work (Chapter 5 in this volume) examining the appropriation of memory by players.

Josef Nguyen (2016) proposes that Let's Players should be seen as *performers* rather than simply players since, through their performance, they frame their gameplay for an imagined audience. In these videos it is not the skills, but the reactions of Let's Players that are the source of entertainment (Menotti 2014). More importantly, Let's Players may diverge from structured narratives or the intended game design (Glas 2015, Kerttula 2016). Thus, references to past wars embedded in a game's design may be appropriated differently by Let's Players with their own specific interpretations of its potential historical framing. In other words, Let's Players may appropriate cultural memory in games for their own specific needs. Their performances raise the question of how Let's Players appropriate, mediate and communicate cultural memory through their gameplay videos. Videos of Let's Players playing games about

past wars and atrocities are an aggregate of the cultural memory embedded in the game environment, Let's Player performances, as well as how they frame the game on YouTube. This chapter analyses video content and metadata of Let's Players playing *This War of Mine* (11 bit studios 2014). As collections of informal cultural memories, gameplay videos made by Let's Players become part of the everyday expressions of memory.

Cultural War Memories and Digital Popular Culture

Memory scholars such as Astrid Erll or Ann Rigney remind us that media and memory are intimately connected. The concept of cultural memory 'highlights the extent to which shared memories of the past are the product of mediation, textualization and acts of communication' (Rigney 2005: 15). As Erll (2011: 2) suggests, 'cultural memory is the interplay of present and past in socio-cultural contexts'. When discussing the role of digital games as transmitters of cultural memory, it is fruitful to establish a distinction between *media* of cultural memory, and *institutions* of cultural memory. Institutions of cultural memory collect, archive and preserve culturally relevant information about the past, whereas media which portray cultural memory prompt both forgetting and remembering through their representation of the past (Erll 2011: 100).² Media should be understood here in a broad sense, including statues, literature, films, music and games. All such forms of (popular) culture can serve as material reminders of war and can direct attention either towards specific events (such as the Siege of Sarajevo), or towards particular aspects of a conflict (such as sexual violence). These may serve as conflicting, yet iconic references to the past. As Erll (2011: 116) observes, media are 'not neutral carriers or containers of memory', but rather 'create media worlds of cultural memory according to their specific capacities and limitations'. Game culture comes with its own cultural practices, through which cultural memory travels along different paths. With the widespread circulation of historical gameplay content come specific cultural circuits of memory.

The networked and digital characteristics of games allow for the emergence of different media practices – such as the immense popularity of Let's Players on YouTube. The ease with which gameplay videos can be recorded, and the availability of platforms such as YouTube or Twitch upon which to post or stream the content generated, have given rise to a huge online culture of gameplay videos. Indeed, as T.L. Taylor (2009) aptly illustrates in her study of eSports communities, the game itself is only a small part of the wider social reality of games.

Thus, Let's Play videos should be considered as a social phenomenon in their own right, rather than as mere paratexts of games (Consalvo 2017). Digital games afford the sharing of play experiences, and platforms such as YouTube or Twitch stimulate these user practices. It is precisely by tracing different enactments such as gameplay videos that we can study the complexity of digital popular culture's convergence with cultural war memory. This requires understanding the relationship between how games afford potential frames of cultural memory, and how Let's Players, through their specific situated context, are transforming memory-making by producing content specifically for YouTube.

Games Affording Frames of Cultural Memory

Game environments offer potential historical frames through affordances that invite specific actions. The term 'affordances', popularized by Donald Norman (1990), but originally conceptualized by William Gibson, refers to the relationship between a subject and its environment. '[A]ffordances are what it *offers* the animal, what it provides or *furnishes*, either for good or ill' (Gibson [1979] 2011: 127, original emphasis). Key in affordance theory is the relationality between the subject and the designed environment. A designed environment affords specific interactions, but they have to be perceptible to the subject. In other words, games afford potential historical frames through representations such as objects, architecture, narratives (for example, character development), yet all cases are dependent on a player's interpretation of a specific situation.

How (and indeed if) games can be considered forms of cultural memory is dependent on the situational framing of the material affordances of a given game environment. A game environment offers a primary frame of reference that provides both organizational structure and coherence. Sebastian Deterding (2013: 222) refers to this structure as the 'game frame', which consists of all the actors involved (and their dispositions), as well as the objects, settings, events, communications and experiences. Holger Pötzsch and Vít Šisler (2016: 6) delineate four aspects relevant for the memory-making potential of games: representation, narrative, procedure and performativity.

Representational and narrative aspects are the historical references to a particular time or event found, for instance, in the objects used, historical references and the representation of individuals, events, places or documents. However, game environments, like other platform environments, are not neutral spaces: design decisions leave both visible and invisible traces through formal aspects of gameplay (see Pötzsch Chapter 13 in this volume). War games offer selective representations of conflict through a series of filters that exclude certain aspects of

war, such as suffering civilians and sexual violence (Pötzsch 2017). As illustrated in the case study analysis, *TWoM* differs in this respect, in the sense that these forms of violence are featured in the game, and players navigate narratives of moral decision-making via engagement with these atrocities. Intertextual connections, title sequences, notes with historical information and cut scenes all tie a game's narrative to a specific historical time or event (Pötzsch and Šisler 2016: 10). Combined, these intertextual references to a wider historical discourse give fictional content an aura of authenticity (Erlil 2011: 141).

If a game's representations and narrative afford the *mise-en-scène* of memory-making, its procedural and performative aspects enable potential mnemonic enactments. An obvious point of reference is Ian Bogost's (2007) concept of procedural rhetoric, which postulates that digital games communicate real-world social norms and values through their rule systems. Thus, a complete analysis should also focus on the individual gameplay experiences of players. This is precisely the argument that Miguel Sicart (2011) makes when he suggests the 'need to understand the design of the game, but only if we acknowledge that a living, breathing player will engage with it in ways that make gameplay a personal affair'. Thus, the performative aspect of games illustrates how mnemonic gameplay is always a negotiation between a player's performance and the boundaries afforded by the game (Pötzsch and Šisler 2016). Together, they offer potential enactments of cultural memory. As Adam Chapman (2013: 327) illustrates, the multiplicity of narratives that unfold as players progress in the game allows 'opportunities for play *within* and *with* history' (original emphasis). One of the ways in which a multiplicity of narratives is achieved in *TWoM* is through particular encounters (called 'special events'). The narratives and the game environment in these special events resonate with the Bosnian war through intertextual connections. As players navigate moral dilemmas in these special events, different actions cause a multiplicity of narratives to develop. Combined, these aspects afford the primary memory-making potential of a game. However, Let's Players add another layer of complexity to the gameplay because they are playing with another environment in mind: YouTube.

Let's Players and YouTube Frames

To study cultural memory and Let's Players, we must focus on YouTube as another environment that informs a player's gameplay experience. How designed experiences and their inscribed meanings are enacted in gameplay is dependent upon their perceive-ability (Deterding 2013, Linderoth 2013). In other words, whether or not the player perceives the

afforded framing as historical depends on the specific disposition of the player in question. There is a clear distinction between ‘the player’s ability to *perceive* affordances or the player’s ability to *use* affordances’ (Linderoth 2013, original emphasis). Just as our perception is conditioned by specific frames through which we interpret our environment, Jonas Linderoth (2013) argues we must learn to discover affordances by cultivating our perception. The distinction made between perception and action is important when studying how a player interprets the past through games, because these are dependent on a player’s own dispositions and knowledge of that particular time or event in history. We make sense of the world by becoming attuned to our environment (Gibson and Pick 2000). Someone with a specific interest in a particular historical event inevitably picks up subtleties and fine-grained historical references that other players with limited knowledge would miss. Players frame their experience by narrating their gameplay experience (Deterding 2013: 185–6). How a Let’s Player positions him- or herself with regard to the characters and specific historical gameplay events is one way of analysing how the game’s historical framing resonates with that particular player.

Let’s Players may transform, or potentially subvert, the intended gameplay experience because the practice of Let’s Playing is all about performing for an imagined audience (Nguyen 2016). As a result, the Let’s Player may subvert a game’s intended design (Glas 2015, Kerttula 2016). The rise of competitive video gaming and eSports paved the way for gamers to generate income through their gameplay. This coincided with the possibility for cultural production and self-promotion via platforms such as YouTube and Twitch. Users can also use different social media platforms such as Twitter or Instagram to market their work. With this in mind, it is useful to examine how Let’s Players have become part of a new type of celebrity emerging on digital media platforms: micro-celebrities.

Micro-celebrity entails a form of self-presentation whereby individuals position themselves as public figures, inviting others to consume their digital media content. The micro-celebrity is a topic-specific, platform-specific, self-made celebrity (Marwick and boyd 2011, Senft 2008). The focus by micro-celebrities on specific topics means that they remain relatively unknown to people outside of their particular realms of interest. The ‘self-made’ nature of micro-celebrities could be said to stem from the fact that, within the constraints of the YouTube environment, they make, edit, publish and manage all of their own content.

In this process, their ‘self-made’ character is co-constituted by the specific ‘rules of engagement’ of the platforms they use. On YouTube, their growth coincides with increasing numbers of viewers and subscribers. By understanding the rules of how to amass more views,

clicks and ‘watch time’ (YouTube’s term for the total time viewers have watched a video), Let’s Players are able to increase their audience. To do this, platforms provide tutorials on how to increase the number of viewers. By providing a ‘guidebook’ in the form of tutorials and the YouTube Creator Academy, in combination with success stories from the top earners on the platforms, YouTube offers a ‘carrot’ to draw in new content producers. Those who are successful are able to generate a significant income from their videos. However, just as Let’s Players are dependent on YouTube for their income, YouTube in turn, is dependent on game content. The importance of game content producers to YouTube is evidenced by the 2015 launch of YouTube Gaming – a dedicated application through which viewers can directly access YouTube gaming content.³

There is a small group of Let’s Players who achieve success on the platform, and are able to maintain the stable and growing fan base needed for generating profit. Individuals are informed on how they can increase their audiences by following the rules of content creation on YouTube. The fame of a micro-celebrity materializes through self-presentation: successful Let’s Players such as *jacksepticeye* can draw millions of views. These successful Let’s Players excel in branding their online persona. This branding success materializes in how gameplay content is personalized, either through performance, or by adding unique content such as opening or closing sequences, music and catchphrases.

To summarize, games afford potential mnemonic frames through representations and narratives with intertextual references to historical events or periods, as well as procedural and performative aspects that offer plural historical narratives. However, the constrained historical gameplay experience is dependent on a player’s interpretation in specific situations. Let’s Players add another layer of complexity to gameplay in this regard, because their experience is informed by the affordances of YouTube. Thus, the practice of performing in a Let’s Play video brings with it a double framing. On one hand, players are given game worlds in which to perform, yet on the other, their performance is informed by the rules and norms for participation on YouTube. In the following subsection, I describe the method for studying Let’s Players.

Method: Studying the Performance of Let’s Players

For this chapter, video content analysis was conducted on a special event in *TWoM*. The Girl in Peril event. This event was chosen because it is one of the most iconic special events in the

game, in which the player makes an explicit moral choice in relation to wartime atrocities (see further Pöttsch Chapter 13 in this volume). More importantly, the frame of sexual violence is explicitly related to the Bosnian War – a parallel can be drawn to the war atrocities committed between 1992–95, when it is estimated that around 20,000 Serbian, Croatian and Bosniak women (who made up the majority) and men were victims of sexual violence (Council of Europe 2009: §6).⁴

A dataset of 174 videos featuring the supermarket location was obtained by scraping YouTube titles related to the special event in *TWoM*, using the DMI YouTube application (Rieder 2015). Since the Girl in Peril event does not occur in every instance of players visiting the supermarket location, this sample set was checked to see if the event took place. This resulted in a dataset of 13 videos that featured the Girl in Peril event, all published between November 2015 and November 2016. The total views of the 13 videos up until the moment of scraping in December 2016 was 1,102,439, with an average of 84,803 views per video. Sixty-two per cent of channel owners were male, whilst the rest of the video posters were unidentifiable. Forty-two per cent of the Let's Play channels were from the United Kingdom, and 33 per cent originated from the United States, thus the majority of Let's Players were Anglophone.

The data analysis focused on the Let's Players' interactions in the YouTube environment and the game environment, as well as the interrelations between them. First, I analysed player behaviour during the event by analysing the choices made by the player. For this event, key choices were which character was chosen, which weapons were brought (if any), and if the player intervened in the sexually violent event. Second, the performance of the player was analysed by studying players' narrations and facial expressions if video footage of the player was recorded. Sixty-two per cent of the Let's Players narrated their gameplay experience through audio recording, and of these videos 25 per cent also recorded themselves visually. The performance in combination with player behaviour renders the primary framing of the game and the meanings attached analysable. Third, I analysed how Let's Players personalize gameplay content for the YouTube environment, focusing on the meta-data (title, description, tags), as well as personalization of the video in player narration (through catchphrases or calls to action), intro-and outro-shots. This personalization is particularly salient because the gameplay activity is re-framed for the YouTube environment. In frame analysis, this process is also called 'frame transformation' (Benford and Snow 2000). In sum, to analyse the meanings produced by the Let's Players, the analysis focused on (1) behaviour, (2) performance and (3) personalization. In the next section, I describe how the game environment

and the YouTube environment are intimately connected in the situated action of the Let's Player.

Case Study: Micro-Celebrities and Bosnian Cultural Memory in Gameplay Videos

Originally released in November 2014, *TWoM* is a single-player survival game set in a city under siege. The game focuses on civilian suffering in wartime and the goal is to survive with at least one playable citizen until the siege ends. For example, one of the playable characters is Katia, who used to be a reporter before the war, and keeps a war diary. She is traumatized because her parents are reported missing, and her fragile mental state makes her even more susceptible to the hardships faced in the game – she can even commit suicide as a consequence of a player's actions.

The game sets the stage for the player to experience how it feels to be in war, and the difficult moral choices that survival entails. As one of the game's writers explains:

Our goal was to make the city feel real, so even though its significance is meant to be universal, we decided to use subtle cultural touches, mostly inspired by Eastern Europe (including Poland) and the Balkans, for instance in the architecture and the names of the characters (Kwiatkowski 2016: 694)

A keyword here is universality, as the designers adapted the narrative to fit a global audience the experience is made to feel Eastern and South-Eastern European via the names and the architecture. Since the designers are Warsaw-based, some elements of the Warsaw Uprising find their way into the game, but more prominent is the inspiration drawn from the Siege of Sarajevo. Although the game is fictionalized, symbolic references to the Bosnian war are embedded in both the game's representations and its narratives. The game's setting, which implicitly and explicitly frames *TWoM* in relation to the Bosnian war, (1) includes representations related to Sarajevo's architecture; (2) contains references to specific war zones as locations; (3) draws upon objects made and used during the Siege of Sarajevo; and (4) references narrative elements related to the Siege of Sarajevo, such as the incorporation of neighbour solidarity, suffering children and sexual violence. Of course, narrative elements such

as suffering children are not exclusive to Bosnia-Herzegovina, yet combined, these references make the game environment resonate with the specific history of the war.

This resonance with the Bosnian war is further strengthened through intertextual connections that connect the game's representations to the war's historical discourse. One of the most iconic buildings of the Sarajevo skyline is the 'Executive Council Building', also known as the parliament building. An image of the building burning features prominently on the English Wikipedia page of the siege. As seen in comparing Figures 9.2a and 9.2b, the designers created an inverted representation of the iconic image visible as the game's loading screen between each new day, thus making it a prominent part of the imagined landscape of the game environment. Another intertextual connection is seen in Figure 9.2c, which references a prominent place during the siege, known as Sniper Alley. Since Sarajevo is enclosed between hills, snipers positioned themselves around the city, making specific areas, such as Zmaja od Bosne Street and Meša Selimović Boulevard, areas where civilians were particularly in danger of sniper fire. Crossing these streets was necessary for some civilians, either to reach family on the other side of the city, or to get supplies. Echoing this, a location in the game is called Sniper Junction, and the playable civilians have to run to cross the square without being harmed by sniper fire. The level even shows similar warnings (*Pazi Snajper*) painted on the walls of buildings during the siege. Lastly, during the siege, Sarajevans made their own appliances to stay warm and to cook food (Figure 9.2d). The Sarajevo Museum of National History features a permanent exhibition of a variety of stoves, heaters and other objects made by those caught up in the violence. The designers used the online version of the exhibition as inspiration for the design of objects and items, such as the stove players craft in the game (Figure 9.2e).⁵



Fig 9.2a Image of burning parliament building, Sarajevo: Mikhail Evstafiev, 1992 (CCBY-SA 2.5)



Fig. 9.2b Screenshot of Burning parliament building in *This War of Mine*



Fig. 9.2c Screenshot of Sniper Junction's location description



Fig. 9.2d Image of stoves used during the Siege of Sarajevo taken from the permanent exhibition of the History Museum of Bosnia-Herzegovina, 2018. Author's own image

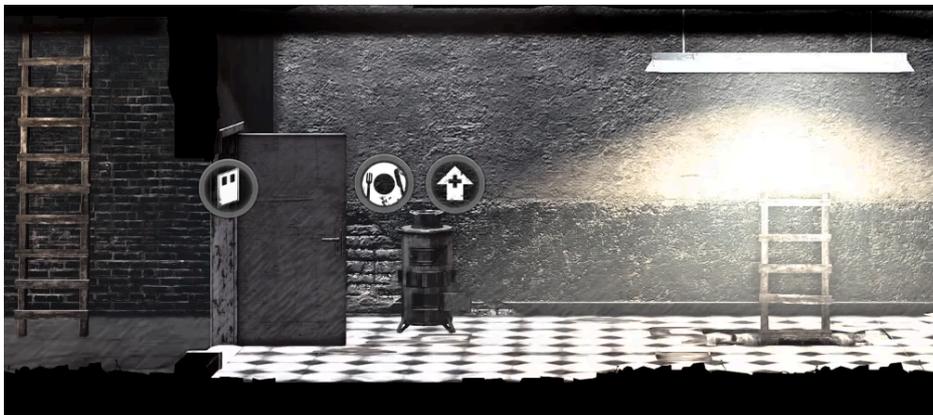


Fig. 9.2e Screenshot of homemade stoves used by civilians in the game

The designers used historical documentation, images, digital archives and life histories, such as *Zlata's Diary* (Filipovic [1993] 2006), to set the game's narrative. This war diary was written between 1991–93 by Zlata Filipovic, a young teenager at the time, who describes the transition between peace and the siege. Her first entries describe a normal childhood, practicing the piano, and the attacks on the city from March 1992 onwards. Zlata describes taking shelter, how

family members were injured, how food and water became scarce, and the strength of the community during the siege. Amongst other stories, this diary was a source of inspiration for the game's narrative. Zlata's perspective strengthened the designers' decision to incorporate children into the game – indeed, they even make them playable in a later version – and Zlata also features as one of the young playable characters in the game.⁶ Further narrative elements that echo the cultural memory of the Bosnian war are the atrocities linked to the conflict, most notably, ethnic and sexual violence. For example, in notes found in different locations within the game, there are references to neighbours killing neighbours. This violence between neighbours is explained through ethnic differences, expressed primarily through differences in language.

In sum, *TWoM's* game environment fictionalizes civilian suffering, but affords a historical framing of the Siege of Sarajevo by referencing the Bosnian war in its representations and narratives. Such inscriptions assert the historical framing of this game environment by relating it directly to 'historical discourses' of the past (see Erll 2008). However, as mentioned earlier, interpretations of these frames by players are not 'given' or assured; rather, they afford potential interpretations. This is why analysing gameplay, when Let's Players interact with the frames of civilian suffering in the game, is crucial.

Framing War Atrocities in Gameplay

Now that we have established how the game's environment affords a primary framing of specifically Bosnian cultural memory, it is important to consider if, and how, Let's Players make sense of what the game affords. To accomplish this, the case study analysed all of the Let's Players' reactions to the Girl in Peril event. The event unfolds in a location called the Supermarket. Players enter the supermarket, and as they walk inside the dialogue between the soldier and the young woman automatically starts (see Figure 9.3). As the dialogue continues, the soldier slowly becomes violent. Players can also optionally peer through a keyhole and see the soldier abusing the young woman. In any case, players cannot ignore the event. Once aware of the rape scenario unfolding, players have the option to intervene. When choosing to intervene, there is a high risk of death, because the soldier is armed with an automatic weapon and, since the game does not allow reboots, dying has permanent consequences.

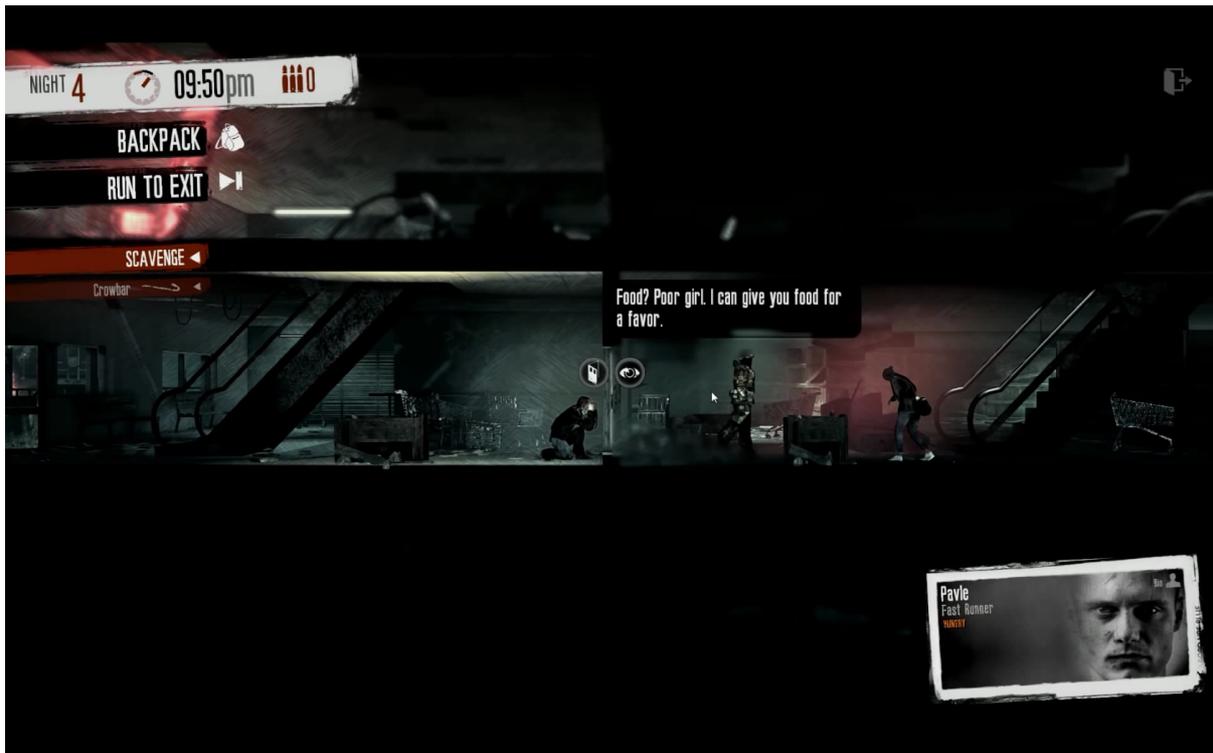


Fig. 9.3 A Let's Player's character witnessing the 'Girl in Peril' scenario unfolding

Procedurally, the game invites the player to feel compassion towards the female victim and is designed to incite intervention. When the player revisits the location the following night, an older female non-playable-character (NPC) appears. If the player intervened, the woman will say the girl got her groceries and that it is a good thing somebody saved her. If the player did not intervene, the female NPC will tell the player that somebody should have done something and stopped the soldier. Another form of feedback is provided through the mental state of playable characters. The majority of playable characters will get a mental boost when the player intervenes, or get sad or depressed when the player does not. Some characters, like Katia, can commit suicide as a consequence of not intervening. The message is: we should feel pity for the young woman and come to her aid. Another illustration of this moral subjectivity is found when players do not aid the victim. Let's Players weigh the risk of permanent death against the moral obligation to help a female victim in need.

There are different factors that determine the likelihood of a player intervening: how many characters a player has left, the physical and mental state of the remaining characters, and whether the player has chosen to bring weapons. Interestingly, in nine out of 13 videos (69 per cent) players opted to intervene, despite the odds being against a successful intervention. Of these videos, only one person died trying to save the young woman. This is one of the key

conventions of play, which invites players to play the hero. The prevalence of this convention is revealed in how Let's Players frame their experience on their YouTube channels: the videos of the nine Let's Players who intervened suggest heroism in titles, such as 'Saving the Girl', and 'Being the Hero'.

The four non-intervening Let's Players address their decisions in the first person, explicitly commenting on why they did not intervene during their performance. One says 'This makes me feel terrible. I'm such a piece of shit', for example, while another explains:

Damn weirdo is probably trying to rape some woman: If only I had a gun, I would try to take him on...Ah damn that boy's a bastard [as the soldier kicks the young woman].
 Damn if I only had a gun I would shoot you in the head my friend. I will shoot you in the head...That is messed up.

It is important to note here that players do this because they are performing before an imagined audience. Anticipating possible reactions of the YouTube audience, players situate their actions and immediately state why they did not intervene in the scenario. Here, Let's Players perform as victims of the situation: if the situation was different, they would have responded differently. These reactions make those Let's Players who do not intervene moral subjects, even though their actions in the game are immoral. Only one performer mentions the scenario in his framing on YouTube, and explicitly states why he did not intervene in the video description. The other Let's Players opt for more vague descriptions, such as 'S*** GETS REAL!' or 'The Supermarket'.

Whilst Let's Players perform as moral subjects witnessing atrocities by either applying the heroic conventions of play by intervening, or by stating why they did not, explicit references to the Bosnian war are missing. Let's Players do not pick up on the cultural references to the Siege of Sarajevo. The reasons for this are threefold: (1) the globalized narrative leaves cultural references to the war too implicit, (2) players generate different interpretations of their gameplay experience because they play with YouTube in mind, and/or (3) Let's Players might not know about the Yugoslav war, the Bosnian war, or the siege of Sarajevo. The designers' decision to refer only implicitly to actual events in order to create a universal gameplay experience renders the actual violence of the Bosnian war more distant. This flattening of cultural references renders them so subtle that players who do not have specific knowledge of the conflict do not pick up on them. The Bosnian war and the Siege of Sarajevo are not as well-known globally as, for example, the Second World War. Another reason why Let's Players do

not explicitly pick up on the Bosnian references is because they transform this frame with their own: Let's Players perform with the intent to publish this content and, as a consequence, their performance and its framing is informed by the primary framing of the YouTube environment.

Performing Cultural Memory for Self-Marketing

The transformation by Let's Players of the frames afforded by the game is best seen in the way they personalize their performance – the video and meta-data. This is amplified by the fact that, whilst gameplay content resonates with Bosnian cultural war memory, historical references are indirect and obscured. Rather than focusing on the suffering and atrocities that occurred in Bosnia-Herzegovina, the content is used to further the Let's Player's own interests. The market logic of the platform contributes to the flattening of cultural memory because it encourages an emphasis on high turnover and attractively presented content.

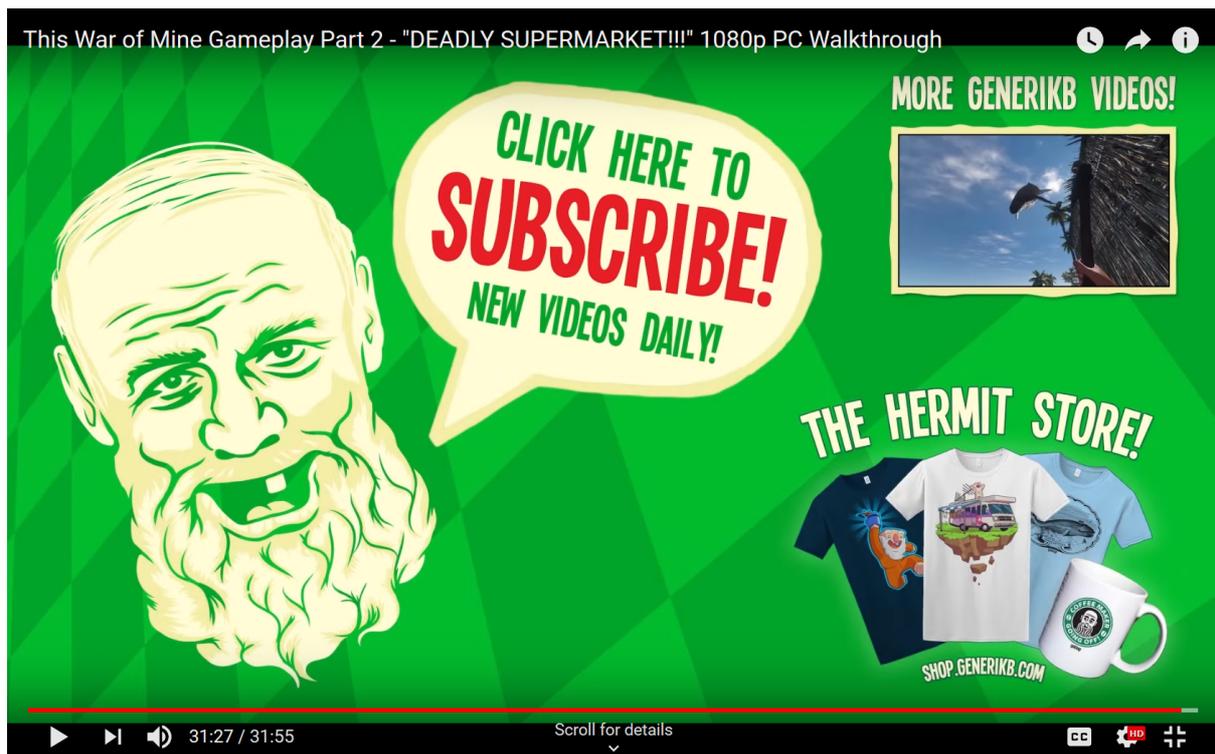


Fig. 9.4 Screenshot of a personalized closing shot of a YouTube video on *TWoM*

Six of the 13 videos examined in this study also link to other digital platforms such as Twitter and Facebook, thus drawing in audiences from different places. A loyal viewer base generates income that can be increased by engaging audiences who then subscribe and watch as many videos as possible.⁷ These six videos have also personalized their content by adding different

things to the recorded gameplay. Some players added captions, music and/or personalized opening and closing shots to the *TWoM* video recordings. For instance, four videos added personalized closing shots intended to engage and monetize viewers. Two videos refer to their own merchandise store, where shirts, mugs and other fan items can be bought. Figure 9.4 illustrates an example of a personalized closing shot. Each contains links, either to watch more content, to leave a comment, to subscribe to the channel, or to buy merchandise. These forms of personalization are an exercise in self-branding and self-promotion.

In conjunction with the specific calls to subscribe made in the descriptions, the videos themselves and the Let's Players' performances are geared towards gaining more likes, views, commenters and subscribers. This behaviour is stimulated by the platform. For example, the YouTube Creator Academy advises how to grow a fan base by creating a regular flow of content, with relevant titles, descriptions and calls to subscribe (YouTube Creator Academy 2017). Thus, whilst playing *TWoM*, Let's Players are thinking about the content they are producing, and how their performance will resonate with their audiences. As Hector Postigo (2016: 340) notes, Let's Players often refer to playing the game as 'making gameplay'. Let's Players are not only skilled gamers, but first and foremost content producers. In creating Let's Play videos, the meaning of the activity of gameplay shifts from playing to producing content in order to generate revenue.

The actualization of this logic is seen in the actual gameplay performance, which involves selectively picking levels that the Let's Player thinks will generate a high number of views, and in calls to 'click on the subscribe button'. The close relationship between platform governance and how producers create their content was also revealed by a 2017 change in YouTube's advertising policy, causing the demonetization of many YouTube channels. Advertisements are algorithmically generated, and the new policy allowed advertisers to appeal against content they felt inappropriate to their brand, including the excessive use of profanity or violence (Tassi 2017). Ultimately, of course, most value is not created for Let's Players who make videos, but for the platforms that benefit from selling advertisements around this content.

By turning playing, watching and clicking into sources of revenue, the historical framing of the game is appropriated and transformed by Let's Players because they are producing content for the YouTube environment. The frame afforded by YouTube stimulates Let's Players to make engaging content, publish regularly and engage audiences. The actual setting of the game environment is not as important as the performance of the Let's Player. As a result, the primary framing afforded by the gameplay experience does not resonate with the Let's Players and thus, the cultural references to Bosnia are not engaged with.

Yet, despite failing to interpret the game's war references as resonating with the Bosnian war, Let's Players nonetheless aid in the circulation of (an albeit globalized) version of Bosnian cultural memory. As cultural memory travels across borders, its form changes. In the videos of these Let's Players, we witness two such transformations. The first occurs in the game environment, where designers appropriate Bosnian war memory to design a game experience fit for a global audience. The second transformation is the appropriation by Let's Players, who use the game environment as a setting in which to perform and produce meaningful content for YouTube. Thus, although the iconic references to Bosnia are not explicitly described by the Let's Players in the description or title of their videos, these references remain. Harnessed to individualistic projects of self gain, Bosnian cultural memory in this example is not circulated by individuals or institutions with expert knowledge, but by persons far removed from the historical context.

In the context of transnational memory, the global circulation of game content is part of the shifting ways that individuals remember. As cultural memory travels across digital platforms – from the game to YouTube – it takes on different forms. However, digital platforms also afford new modes of interaction, which in turn afford new modes of potential remembrance. As micro-celebrities have a global audience, this content has the potential to reach local audiences that see these videos and hence, recognize the cultural references made to the Bosnian war. Indeed, the power of Let's Players to engage their audiences even stimulates discourse and publics to emerge via the comment section of YouTube (de Smale 2019). In this sense, each Let's Play video of *TWoM* becomes a potential space for a meaningful interaction with the Bosnian war. Where the cultural memory of Bosnia becomes decontextualized, it can also become re-contextualized (de Cesari and Rigney 2014: 13). What this illustrates is that cultural memory, although it may change in form, can always be re-appropriated. In sum, the recorded videos of Let's Players are informal carriers of cultural memory, even though the Let's Players themselves are seemingly unaware of the fact that the game content is inspired by past events.

Conclusion: The Unintentional Circulation of Cultural Memory

The argument presented in this chapter examined how Let's Play videos of war games function as carriers of informal cultural war memory, even if the Let's Players themselves do not perceive these historical frames, or if they subvert them for their own interests. Let's Players differ from players who do not publish their content online, in that they are performers who fall somewhere between simply playing (reacting to gameplay) and producing (editing and framing game content). So why consider these videos as capable of carrying cultural memory, when their content is fictionalized and framed by players for whom their historical context does not resonate? These videos by Let's Players matter, because they aid in the circulation of cultural war memory. The potential of micro-celebrities to act as 'influencers' has long been understood by digital marketers (Kotler, Kartajaya and Setiawan 2010). Let's Players are part of a complex network of platforms, companies and communities in and through which economic, social and cultural value is exchanged and extracted (Boomer, Harwood and Garry 2018). It is undeniable that gameplay videos are immensely popular, with a global reach attracting millions of viewers.

Although not perceived as such by the Let's Players, the game environment of these videos still affords a historical framing that is related to the Bosnian war. Just as the gameplay experience depends on a player perceiving a game's historical framing, the viewing experience of gameplay content recorded by Let's Players depends on the historical 'perceive-ability' for the YouTube viewer. However, this depends on the specific viewer and their dispositions. In other words, these gameplay videos have an agency of their own – one that exceeds the gameplay experience. Let's Play videos produce effects of their own because they are embedded within a network of other actors. For instance, YouTube affords commenting as another form of interaction with these videos and within the larger network of cultural practices and expressions of a game such as *TWoM*. This gives rise to another meaningful practice for commemoration: commenting as a practice. In further research, I analyse the commenting practices of YouTube viewers in relation to gameplay videos and describe how the comment section offers a space for informal commemoration by post-Yugoslav individuals (de Smale 2019). In short, Let's Players matter because they help to circulate images and narratives of the past to a global gaming audience. What remains to be seen is whether watching gameplay content on YouTube also causes 'moments of connective memory' (Hoskins 2011) to emerge.

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Ludography

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Notes

¹ The war in Bosnia-Herzegovina was part of the larger series of conflicts that led to the dissolution of the Socialist Federal Republic of Yugoslavia, also termed Yugoslav civil war, Yugoslav war, Yugoslav wars, post-Yugoslav wars. To simplify, in this chapter I refer to the Bosnian war because the game draws heavily on this specific context.

² One example of Bosnian institutional cultural war memory is the Sarajevo War Tunnel Museum, a cultural heritage site memorialising Sarajevo's lifeline to the outside world during the siege.

³ The launch of the gaming channel coincided with YouTube Kids and YouTube Music, as two dedicated gateways to YouTube. The launch of YouTube Gaming was, at least in part, a reaction to Amazon's purchase of the live-streaming platform Twitch. In September 2018, however, YouTube announced it would end YouTube Gaming as a separate application. Instead, YouTube Gaming will be integrated in the platform itself (YouTube Official Blog 2018).

⁴ This is the most reliable figure, although other estimates suggest that this number is only around 20 per cent of the actual victims (Amnesty International 2017: 16).

⁵ The online source of the digital collection of the museum was shared with the author by one of the designers via personal e-mail communication.

⁶ Focus group interview with four members of 11 bit studios, September 2016.

⁷ It is beyond the scope of the chapter to analyse the affordances of the platform itself, but YouTube's search algorithm plays a central role in the platform's governance. For instance, it determines which new videos appear as suggested content, which in turn generates more views and therefore more opportunities for income (van Dijck 2013). See also de Smale (2019) on the role of YouTube in creating accidental communities of memory around game publics.

ARTICLE 3

Memory in the margins

The connecting and colliding of vernacular war memories

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Abstract

This article examines how war memory circulates, connects and collides on digital media platforms driven by digital publics that form around popular culture. Through a case study of vernacular memory discourses emerging around a game inspired by the Yugoslav war, the article investigates how the commenting practices of YouTube users provide insights into the feelings of belonging of conflict-affected subjects that go beyond ethnicity and exceed geographical boundaries. The comments of 331 videos were analysed, using an open source tool and sequential mixed-method content analysis. Media-based collectivities emerging on YouTube are influenced by the reactive and asynchronous dynamics of comments that stimulate the emergence of micro-narratives. Within this plurality of voices, connective moments focus on shared memories of trauma and displacement beyond ethnicity. However, clashing collective memories cause disputes that reify identification along ethnic lines. The article concludes that memory discourses emerging in the margins of YouTube represent the affective reactions of serendipitous encounters between users of audio-visual content.

Keywords

digital methods, game culture, imagined communities, memory, YouTube, Yugoslav war

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Introduction

The politics of war memory is nowhere more apparent than in the Balkan region, where the strategic targeting of civilians via ethnic cleansing during the Yugoslav war created collective traumas that are now used by successor states as ethno-national narratives of collective memory (Beronja and Vervaeke, 2016: 5).¹ These ethnically marked traumas resonate in the post-Yugoslav present. In Bosnia-Herzegovina (BiH) alone, the Organization for Security and Cooperation in Europe (OSCE) recorded 21 hate crimes based on ethno-religious identity in 2016 (OSCE, 2016). The politics of the everyday focus on mundane practices and their entanglement with power relations (Scott, 1989). Mundane practices can reify ethnic ‘groupness’ (Brubaker, 2004), but also offer potential sites of resistance. Everyday politics differ from openly declared contestations by virtue of their focus on mundane acts and communications. Today more than ever, these mundane acts of communication emerge on digital platforms via the content that post-war individuals watch, share and like. Of all digital platforms available, YouTube has acquired the status of a medium that curates transnational videos from across the globe, offering a space for different, sometimes polarized voices on disputed issues to emerge simultaneously. For example, on YouTube, Yugoslav memory discourses emerge via the comments made regarding Yugoslav music (Pogačar, 2015). In this respect, YouTube is a popular platform for circulating Yugoslav memory.

YouTube is a platform where formal and user-generated content meet (Burgess and Green, 2013[2007]), making it an important medium for commemoration and remembrance. Although commemoration on YouTube has garnered nationalistic interpretations of the past, YouTube also possesses a democratizing potential for collective remembrance because it allows users to experience the past outside official frames of reference (De Smale, 2019a, forthcoming; Knudsen and Stage, 2013; Makhortykh, 2017, 2018). YouTube allows for creative forms of remembrance through self-expression, participation and collaboration, such as the remixing of news representations of migrant suffering as a strategy to counter hegemonic Eurocentric imagery (Horsti, 2017), or Holocaust remembrance through YouTube videos such as ‘Dancing Auschwitz’, featuring a Jewish family dancing at various memorial sites (Gibson and Jones, 2012). Although considered controversial on occasion, user-generated videos are expressions of vernacular memories. The global reach of YouTube makes memory work as both transnational in character, and a multidirectional enterprise (Kapráns, 2016). Furthermore, its comment sections are the home of vernacular discourses. There are those who argue that YouTube’s features make it ‘a location for fun, not for political dialogue’ (Hess, 2009: 427).

However, this article departs from the view that vernacular discourses on YouTube are simply enactments of memory ‘from below’ – also known as bottom-up, personal narratives of everyday individuals. Accordingly, I suggest that studying everyday digital communication offers unique insights into vernacular memory discourses of post-war individuals that connect on shared interests.

Coinciding with the idea of the democratization of cultural memory are the complex connections between YouTube users, the technology that structures them, the economic model in which they are enveloped, and the institutional body that governs them (Van Dijck and Poell, 2013). These dynamics play out via different entanglements, such as YouTube’s governance of copyright protection (Hilderbrand, 2007), or features that allow for different levels of participation and engagement (Benson, 2016). These features, or affordances, invite specific usages. Affordances such as the ability to embed videos reconceptualize how post-war individuals remember, by enabling videos to be spread on dedicated websites to commemorate the local identities and memories of displaced persons, even if the physical village is no longer there (Halilovich, 2014).

Digital games can function as carriers of cultural memory (Kingsepp, 2007; Losh, 2006; Pötsch and Šisler, 2016), for instance by re-enacting violent pasts (Chapman, 2016; Kempshall, 2015). Games have the potential to be powerful representations of cultural memory because they are engaging, accessible and experienced by a wide audience (Chapman, 2016: 7). As historical war games such as *This War of Mine* (11 bit studios) continue to incorporate elements of what others have called ‘critical game design’ (Flanagan, 2009), they potentially facilitate critical inquiries of the past within the boundaries of the framed in-game experience (Pötsch, 2017). Games offer potential counternarratives that commemorate marginalized identities and pasts (Hammar, 2016) or ethically and emotionally contested memories of violent pasts (Šisler, 2016). This form of historical war game is therefore particularly important in wars such as the Yugoslav war, where collective memory is contested between post-Yugoslav states. This article adds to this growing body of work by focusing on moments of connective memory generated through encounters with game content that circulates on YouTube. Furthermore, it seeks to answer the question of what Yugoslav war memory discourses emerge from game publics on YouTube and what form they take.

The methodological reflections and empirical findings of this article are based on a case study of game publics mediating and discussing war memories in collectivities formed around YouTube videos of *This War of Mine* (11 bit studios, 2014). This war game is an atypical single-player survival game inspired by the siege of Sarajevo. This article elaborates how

media-based collectivities facilitate modes of belonging beyond ethnic categorization. Collectivities emerging around game-related content publishers are called *Let's Players*; platform-specific micro-celebrities. The discourses of these game publics centre around familial and childhood memories of trauma and displacement. On the one hand, the interplay between YouTube's commenting and monetizing structures facilitates informal commemoration in the promotion of textual and audio-visual content, whilst on the other, connective memory can collide and reaffirm a sense of belonging to ethnic groups. In short, post-war remembrance in popular culture illustrates the ongoing tension between everyday reification of, and resistance to, ethno-nationalist belonging.

Post-Yugoslav Belonging and Connective Memory Practices

Contrary to conventional belief, the sense of ethnic belonging of post-Yugoslav publics was not the cause, but rather a consequence of the Yugoslav war that followed the dissolution of the Socialist Republic of Yugoslavia. Under the threat of violence, neighbours often found themselves within the boundaries of a group with which they did not identify (Drakulic, 1993). The generative force of violence triggered the ethnicization of social identities and relations (Bergholz, 2016). Although repressed under former President Tito, the ethnic violence of the Second World War was not forgotten, and was strategically used by political elites to frame ethnic relations (Oberschall, 2000). Following the mass atrocities of the Yugoslav war, colliding collective memories of the events are told between post-Yugoslav states and between ethnic groups within those nations.

Dramatic events – such as losing loved ones, rape, starvation, mass-killings, or other forms of trauma – can harden ethnic ‘groupness’ (Brubaker, 2004: 41). Group-making is a social, cultural, and – more importantly – political project, as illustrated by Benedict Anderson's (2016[1983]) seminal work on nationalism. For Anderson, the nation is an imagined political community. The political function of the nation is the idea that individuals are divided into nations and that those nations have the right to self-determination. Socially, national belonging is part of a shared identity that exists between individuals. Groupness as a form of belonging is a contextually fluctuating conceptual variable (Brubaker, 2004: 38). However, in a post-Yugoslav context, it might be more fitting to speak of ethno-religious nationalist labels, tied to language and religion (Mojzes, 2016). For example, Bosniaks are categorized as Muslim; Bosnian Serbs and Serbians as Orthodox; and Bosnian Croats and Croatians are labelled as

Catholic. The crystallization of group belonging is what Rogers Brubaker (2004: 10) terms the reification of groupness. These processes of reification are found in everyday expressions. Ideas regarding identification along ethnic lines are also known as everyday primordialism – a concept used to describe how people understand themselves in immutable and fixed categories of ethnicity or nationality (Fearon and Laitin, 2000: 848). At the opposite end of the spectrum, however, everyday practices also have the potential to renegotiate belonging along ethnic lines. The politics of the everyday focus on the mundane practices and their entanglement with power relations (Scott, 1989). Everyday practices can reify, but also resist, existing ethno-politics. As Anna Johansson and Stellan Vinthagen (2016) illustrate, these practices are always situated and contextual. Everyday primordialism sensitizes the study of belonging by focusing on the use of the ethnic scripts employed by individuals in everyday communication.

Language is an identity marker that is used both politically and in everyday life to distinguish between ethnicities and nationalities. Important in the context of Yugoslav war discourse is the complex role of language in the Balkans and the effects of subsequent post-war state-building in the years thereafter. As Catherine Baker (2015: 239–240) summarizes, the dissolution of Yugoslavia had profound effects on language, namely: (1) the collapse of Serbo-Croatian as a shared language; as well as (2) the establishment of new official languages. One example is Kosovo recognizing Albanian as an official language; furthermore, Baker (2015) addresses (3) the use of ethno-political language reform in states such as Croatia as a tactic to recognize Croatian as a distinct language from Serbo-Croatian; and lastly, (4) changing perceptions of existing linguistic elements – for example, in the identification of Cyrillic scripts with Serbian language and culture. As a consequence, ethnicity is imbued with nationalism, which is palpable on both state and individual levels. These language politics find their way into national media discourse that delegitimizes the war memories of individuals from other ethnicities or Balkan states (Felberg and Šarić, 2013). More importantly, in everyday local interactions, language is used to identify words that are ‘typically’ Croat or Bosniak (Palmberger, 2016: 29). These language politics stray into the realm of popular culture as well, for instance when producers of Croatian dance music identify their music as something uniquely Croatian that could not have originated in socialist Yugoslavia (Baker, 2013: 318). Thus, language politics, ethno-national identification and global cultural flows are intimately connected.

Processes of reification or the resistance of everyday primordialism materialize on digital platforms through connective memory practices. Connective memory is the enactment of expressions between people across different platforms through different media forms. For Andrew Hoskins (2011), the concept of connective memory highlights:

the moment of connection as the moment of memory ... Memory is not in this way a product of individual or collective remembrances, but is instead generated through the flux of contacts between people and digital technologies and media. (p. 272)

Connective memories are: (1) moments of connection, (2) in ever-changing networks, and (3) they are situated locally in everyday life. This moment of connection can take myriad forms, be it joining a Facebook group, liking a post, or commenting on a video. Such moments of connection are communicative acts and, whilst some traces such as commenting leave explicit marks, other traces are nothing more than a sign left in the view count of a video. In this context, remembering the Yugoslav war by leaving a comment signifies a connective memory moment.

Moments of connective memory also visualize conflicting collective memories. In these moments, individuals encounter conflicting frames of knowledge regarding their shared past. One example of conflicting collective memories is the framing of the Srebrenica genocide on Wikipedia. In a comparative analysis between English, Dutch, Serbian, Bosnian and Serbo-Croatian Wikipedia pages on the massacre of over 8000 Bosniaks in July 1995, Richard Rogers and Emina Sendijarevic (2012) found that the Bosnian, Dutch and Serbian pages were framed by specific sets of editors contributing in their own language and using national references. On the English page, these different views came together and collided, and the remnants of this battle can be found in its intense editing history (Rogers and Sendijarevic, 2012). The ways in which events are remembered on Wikipedia's different language pages enact different modes of (conflicting) categorization. The consequence of the connective memory of highly disputed events is that conflicting perspectives collide. Connectivity as a central concept proposes 'that everything from oppression to resistance, creation to destruction takes place within the system and never outside it' (Karppi, cited in Lagerkvist, 2017: 49). Connectivity offers the coming together of individuals whose frames of remembrance differ. Around highly disputed political events, discourses tend to be polarized and extreme, which is why scholars question YouTube's potential for meaningful discourse in relation to the commemoration of controversial events such as genocide (Benzaquen, 2014). However, popular culture is quite different in this respect because these discourses revolve around media-related events, rather than polarized political events. The digital publics forming around these media events are accidental encounters and, as a consequence, the forms of commemoration that emerge are accidental in nature as well. By studying micro-politics in everyday life, we are able to analyse if a media-based collectivity allows for the appropriation, subversion, or transformation of the ethnic categories imposed.

Imagined Communities in Media-Based Collectivities

To understand post-Yugoslav belongings in game publics on YouTube, it is necessary to discuss how Anderson's (2016[1983]) intellectual work in digital research reconceptualizes the notion of communities, and the role of media as a facilitator of belonging. In scholarship that builds on Anderson's imagined community, the idea of the community or public has different meanings. As briefly discussed above, Anderson's original conceptualization revolved around a nation's publics, or the imagined political community. It encouraged a generation of historians to study the local expressions and assumptions of ordinary people in constructing their national identity (Colley, 2012[1997]; Hobsbawm, 2012[1990]), as found in everyday expressions and symbols (Billig, 2010[1995]). Similar to everyday primordialism, what these authors emphasize is the study of national belonging found in the vernacular. In research on mediatized societies, Anderson's theory of the imagined community focuses on a looser definition of the public.

Here, a public is not territorially bound, but networked, enabling people to connect globally (Appadurai, 1996; Castells, 2011). Digital publics are publics restructured by the internet and imagined communities emerge 'as a result of the intersection between people, technologies and practice' (boyd, 2014: 8). In this (re)conceptualization of publics, imagined communities are more passion-based than nation-based. Moreover, these publics form their groupness around a collective media interest (Livingstone, 2005: 9). Where research on feelings of belonging as expressed through digital media intersects with ethnicity is in its relation to that sense of belonging, as seen in the digital media use of diasporic networks (Wise and Velayutham, 2009). On social media platforms, ethnic minorities express groupness and contest hegemonies (Byrne, 2008), for example by watching YouTube videos reminiscent of their homeland (Leurs et al., 2016). Thus, media form publics with collective belongings around shared interests and, whilst digital platforms may enforce collective imaginings of the nation, they also offer opportunities for individuals to communicate beyond territorial boundaries in transnational networks.

Platforms such as YouTube not only help shape belonging because of their content – as, according to Anderson (2016[1983]), was originally facilitated by print media – but also provide the space for individuals to communicate. Media scholars Nick Couldry and Andreas Hepp (2016: 168–170) define media-based collectivities as 'any figuration of individuals that share a certain meaningful belonging that provides a basis for action and orientation-in-common'. For Couldry and Hepp, media content becomes the frame of reference around which

publics gather. In other words, a game such as *This War of Mine (TWOm)* becomes the frame of reference around which individuals gather; just as audiences gather for football matches, individuals gather around particular games. Whilst a more stable form is also defined as a ‘fan culture’ (Jenkins, 2006), collectivities can also be momentary – for instance, watching gameplay content of a particular game when it is released, or when a friend posts a video of his gameplay content on YouTube. In short, media-based collectivities can be more established fan cultures, but also loosely connected around specific (media) events in a particular time and context, in which the level of involvement depends on the individual case and community.

Platform Affordances Structuring Media-Based Collectivities

The dynamics of media-based collectivities are dependent on a given platform’s interface, which affords a specific technical infrastructure and social usage, and in turn shapes the platform’s environment (Gibson, 2011[1979]). The emphasis on YouTube as a platform helps to reveal the complexities of these affordances as an interplay between commercial and user-generated content, between community management and advertisement, and between intervention and neutrality regarding content (Gillespie, 2010: 349). YouTube does not have scheduled output as seen in traditional broadcasting, but content is mediated by search engines and ranking algorithms (Van Dijck, 2013: 111). What a user sees is a product of all these platform complexities. Video posters, particularly those that post content for commercial purposes, navigate between community management and advertisement interests in managing and curating their own content (De Smale, 2019a, forthcoming).

Video producers grow their audience through optimizing practices such as tagging, adding hashtags, choosing a description and a personalized thumbnail. As game scholars are increasingly noting, watching game content on YouTube is a practice central to digital game culture (Glas, 2015; Nguyen, 2016). These forms of consumption are interactive, with YouTube offering dedicated spaces where players and viewers can interact with one another. Within this sphere, media-based collectivities emerge around specific games, such as *TWOm*. Other points of entry are specific users who follow the work of specific *Let’s Players* such as *PewDiePie*, who are micro-celebrities within the game genre (De Smale, 2019a, forthcoming). On YouTube, the comment section offers a communicative space for collectivities to interact. YouTube comments are a form of communication in the margins – easy to glance over, quick to reject and easy to be appalled by, given their (often negative) nature.

Commenting is an active engagement with a video, but requires a higher level of participation from the user than merely watching a video. Whilst no account is needed to watch

videos, a user needs a YouTube or Gmail account to rate videos and comments (although not comment themselves). An additional level of participation is needed to post comments, which requires users with an account to create a YouTube channel. To produce these texts, YouTube requires a certain commitment as an ‘active publisher’, suggesting that commenting and video posting are two sides of an interactional process (Benson, 2016: 41). In other words, audio-visual content on YouTube cannot be seen as separate from the texts that accompany it. YouTube comments are public, short, reactive and asynchronous (Reagle, 2015: 2). They can be short, filled with emoticons, abbreviations, different languages, or several paragraphs in length. Comments are always in response to something, but do not have to be engaging. In the case of YouTube, the comments may be directed towards something observed in the video, be it its description, title, or the content itself. It may be directed towards the user producing and narrating the video, as is often the case in gameplay videos, where *Let’s Players* narrate their own gameplay experience. A comment can also be a reaction to another commenter. Lastly, comments are asynchronous, meaning that reactions to comments may be instant, but can also be days, weeks, or months apart. Inactive discussions may flare up again because of new comments posted months later. As a consequence, the comments turn into threads of communication, in which different topics collide, converge, disappear and re-emerge.

Examining the nexus between ethnic belonging, memory and media-based collectivities illustrates how belonging can be hardened by traumatic memories and reified through everyday expressions and language that reproduce groupness along the lines of ethnicity. Collectivities active on digital media platforms construct networks of belonging based on shared interests in popular culture. Connective memory practices emerge on YouTube, but are always informed by the dynamic of commenting and YouTube’s interface. Moments of connective memory are therefore informed by the ever-changing network of loosely connected users that comment on content or persons, bringing together memories that converge and collide. The ephemeral and diffuse nature of these collectivities, however, makes it difficult to collect and analyse them. How best to study such an emergent and diverse public?

Sequential Mixed-Method Data Analysis

For a systemic filtering of a large set of comment data, the method chosen in this article is a sequential mixed-method content analysis. The sequence begins with quantitative research, performed via the scraping, filtering and evaluation of data and ends in a qualitative content

analysis (Creswell, 2014). This article breaks down the approach taken into five steps: scraping data; filtering data through keyword search; evaluating data through variables; grouping data through coding; and finally, analysing clusters of data through qualitative content analysis.

In order to obtain a sample of YouTube comments in the sphere of *TWoM*, an open source data scraping tool called *DMI YouTube Scraper* was used (Rieder, 2015). To obtain a dataset of videos specifically on *TWoM*, a general query of the game was used, both with and without quote marks: This War of Mine OR ‘This War of Mine.’ Being aware of the personalization effects of YouTube’s search engine (Rogers, 2017: 80), this query was run with different search parameters available in the tool (relevance, rating, view count and title). Combined, these searches resulted in a consolidated sample dataset of 537 videos scraped up until December 2017. The study focuses on English comments for two reasons: first, since English is the *lingua franca* of the global gaming community, the search was limited to Anglophone comments; second, Anglophone comments connect local experiences to global audiences, providing insights into Yugoslav war memory discourses across multiple geographical locations and languages. Therefore, videos that were not described or narrated in English were excluded from the sample set. Videos with less than 10 comments were also excluded because of time constraints and lack of discussion. This first phase of scraping and filtering resulted in a final sample set of 61,542 comments derived from 331 videos. The second step was to filter out comments related to the Yugoslav war. A keyword dictionary was created to filter relevant comments, resulting in a dataset of 721 comments. This keyword dictionary consisted of 127 variations of words generated from general terms related to war and family, as well as words specific to Yugoslav war memory.

The third step was to evaluate 721 comments on their specificity in relation to war, and the personal tone of the comment. This step was actioned by a researcher and a research assistant. The “personal tone” variable concerned the extent to which the comment was impersonal or personal, and the “war specificity” variable concerned how specific the comment concerned war-related content. The variables were scored on a 4-point scale (impersonal tone, slightly personal, personal, very personal; and unspecific, slightly specific, specific, very specific in relation to war). The result was a final dataset that consisted of 183 comments that scored high on personal tone and/or war specificity.

#	Code	Criteria	Quote example
0	Recognition of other conflicts	<ol style="list-style-type: none"> 1. Expository, descriptive, narrative, or argumentative comment 2. Refers to conflict in general or recognises and relates other conflicts to the game. 	<p><i>Looks like war in Donetsk to me. From what I saw there before fleeing.</i></p>
1	Outsider recognition Yugoslav war	<ol style="list-style-type: none"> 1. Expository comment 2. General recognition that relates the game to the Yugoslav war. 	<p><i>This is based off the Bosnian war.</i></p>
2	Insider recognition Yugoslav war	<ol style="list-style-type: none"> 1. Expository comment 2. Specific recognition of the Yugoslav war with specific local, geographic, or historic knowledge. 	<p><i>Yes, definitely inspired by the siege of Sarajevo. The loading screen between days shows parliament building in Sarajevo (former STV - Savezno Izvrsno Vijece) and there are graffiti saying "Jebo politiku" (fuck politics) and "Smrt nacionalizmu" (death to nationalism) on the buildings.</i></p>
3	Disagreeing with representation of Yugoslav war	<ol style="list-style-type: none"> 1. Argumentative comment 2. Negative, critical, or disagreeing opinion about the representation of the Yugoslav war in the game. 	<p><i>The metanarrative of this game is one that demonizes Serbs and hails the Bosniak Muslim SS supporters that inhabited Sarajevo and the US-backed peace(but in reality war)keeping forces in the 90s as heroes</i></p>
4	Positive about representation of Yugoslav war	<ol style="list-style-type: none"> 1. Argumentative comment 2. Positive opinion about the representation of the Yugoslav war in the game. 	<p><i>So, Im a Serb, this game is truly something to behold. Your inspiration, your ability to show us immersion of war from those misfortune souls of war. Im glad tho, this game shows only that and not politics. Altho clearly inspired by Yugoslav Civil War.</i></p>
5	Sharing Yugoslav war memory	<ol style="list-style-type: none"> 1. Narrative or descriptive comment 2. Personal expression that shares personal, family, childhood, traumatic, or mediated memories of events, experiences, or emotions related to the Yugoslav war. 	<p><i>+John I tried it out! Its actually a pretty good game, but the atmosphere is reminding me of the stories my mother used to tell me! When she tried to cross a bridge holding me(baby) in her hands, while sniper fire killed soldiers</i></p>
6	Discussion about events of Yugoslav war	<ol style="list-style-type: none"> 1. Argumentative comment 2. Discussion of conflicting opinions about causes, actors, consequences, or events related to the Yugoslav war. 	<p><i>What they don't tell you in those brainwashing documentaries that you watched is that those civilian "mortar strikes" at the Markale Massacres were actually Muslim Neo-Nazi Suicide bombers that killed their kin in order to help the US gain sympathy from the west and justify NATO's bombing campaign against the Serbs.</i></p>

Tab. 1 Inductive coding scheme.

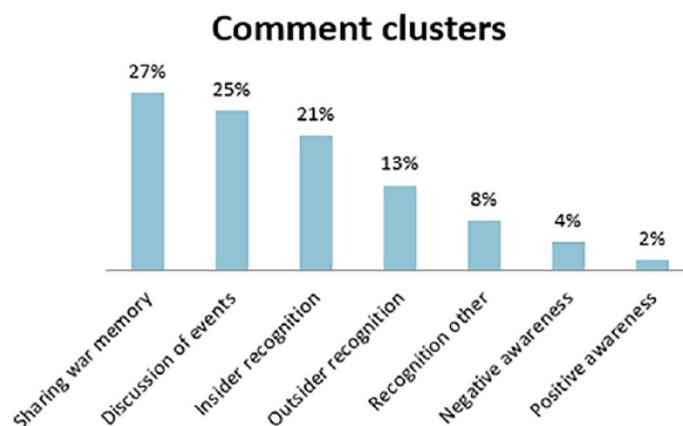


Fig. 1 Size of clusters in percentage.

The fourth step was to group comments in thematic clusters. These groups were clustered using emergent coding (Stemler, 2001). Two researchers independently developed a list of inductive categories by reviewing all comments. These categories were compared and consolidated to create one coding scheme with key criteria, as seen in Table 1. Criteria were differentiated according to (1) text type as well as (2) main subject. Researchers coded comments independently with a substantial agreement of 0.61 according to the intercoder reliability of Cohen's (1968) Kappa, using the rating by Landis and Koch (1977). Disagreements about interpretation were discussed between the researchers and comments were assigned the most appropriate code. Figure 1 shows the distribution of code clusters in percentages and Table 1 describes them in more detail. Cluster 0 was excluded, because it focused on conflicts other than the Yugoslav war, such as the Syrian war or events happening in Eastern Ukraine. Cluster 5 and 6, the largest clusters, were comments of individuals sharing their personal experiences of the Yugoslav war. Cluster 5 concerned individual experiences, whereas cluster 6 comprised discussions emerging around individual or collective memories of events. The last step was a qualitative analysis of the comments of the two largest clusters, focused on a close reading of the content, describing the content, the individuals mentioned, the perspective of the commenter, as well as the sentiment of the comment. This qualitative step allowed the researchers to analyse war memory discourses on YouTube connected with *TWoM*. Some comments were isolated, but more often a comment was a reaction to a discussion, or even the cause of a discussion. A final qualitative analysis of the two largest clusters is discussed in the proceeding section.

Connecting and Colliding Memories

Game publics connect through shared experiences of traumatic pasts. Whilst these moments of connection evoke informal, even accidental commemoration, other emergent discourses are a clear case of post-Yugoslav memory politics inviting discussion and argument between commenters. However, here one must also recognize the other, more marginal discussions that emerge. Although comments were clustered, the majority of voices in the game publics analysed are plural and diffuse, ranging from discussions on specific ways to survive in the game, debates on current events, to intense arguments on the political power of the West in the Balkans. Also, the voices that came together in this communicative space were not only from the Balkan region. The study found references to other wars, as well as the voices of peacekeeping veterans stationed in the Balkans. What this illustrates is the ephemeral and ever-changing nature of digital publics. Similar to a kaleidoscope, these collectivities are ever-changing and diverse. The following analysis provides a glimpse of their various meanings.

Connecting Memories of Trauma and Displacement

Childhood and family memories are the two major themes within the cluster of commenters sharing Yugoslav war memories. The majority of commenters in these themes relied on their experiences as young children or those of their direct kin. Commenters sharing personal memories drew on their own experiences, describing how it felt to lose a relative or be subjected to daily air raids (see Figure 2). Family memories tended to focus on the experiences of parents or grandparents. Other voices concerned the memories of militants stationed in the war, encounters with Yugoslav refugees and remembering the images and news of that time. Delineating childhood and family memories, commenters share a common hesitance towards playing the game, albeit enjoying the YouTube content nonetheless. The overarching content across these themes are feelings of loss, displacement, and insecurity.

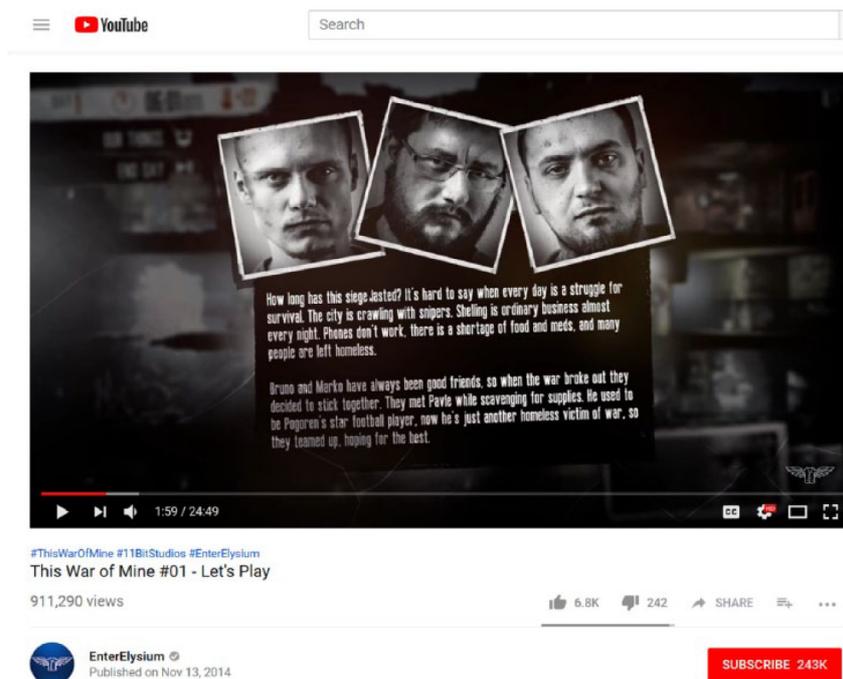


Fig. 2 Narrative setting of opening scene in *This War of Mine* (EnterElysium, 2014).

Childhood Memories of Trauma and Displacement

Focusing on the theme of childhood memories, the commenters are not negative about the game, although some have hesitations because of the memories it triggers. Because playing games can potentially offer embodied experiences of the past – as seen in historical re-enactments – it is not difficult to imagine why some players are hesitant. In another study, this time on Bosnian youth remembering traumatic pasts through playing *This War of Mine*, empathy acted as a trigger for postmemory (De Smale, 2019b, forthcoming).² Yet, as illustrated in the comments below, watching game-related content affects these users deeply. Commenting on a YouTube video or responding to another commenter evokes affective reactions. On the one hand, commenters react to the producer of the video, the *Let's Player*, whilst on the other hand, comments can be a more general reaction to the video watched.

Commenter 1 I'm from Bosnia and I had [was] 5 [years of age] when the war started. I didn't live in Sarajevo, but in another town which was razed to ground level by the Serb forces. My family had to flee and leave everything behind ... Some of our neighbours who decided to stay before the shelling started didn't survive even for a month. Some of them were slaughtered in their houses because they believed the soldiers would spare the civilians ... I just wish that this never happens to anyone, and this trailer almost made me cry,

even if [now] I'm a full grown [adult]. There should be more games like this, that don't glorify war, but actually present the evil essence of it: Murder, rape, destruction and suffering of all living things (even animals were slaughtered en masse for food, plants and trees were chopped and burned for cold winter nights ...). I will definitely try to play this game, but I am really afraid of what memories it may return.

Exemplified in this quote by commenter 1, some feel averse to watching any more of the game, or even playing the game because of their personal experiences in the Yugoslav war because watching recalls painful memories and emotions described in great detail. However, their passion for gaming makes players curious to experience how the game will make them feel. Feelings of loss illustrate that the trauma of war is still part of the everyday lived reality and in the minds of these viewers. Seen in the quote by commenter 2, traumatic experiences and feelings of insecurity are most visible in those childhood memories that focused on the actual experience of being in war:

Commenter 2 I have spent my childhood in Bosnia during that war (age 12). This is so emotional for me. Kind of scared to start playing ad [and] evoke some memories that I'd like to forget :)³

Commenter 3 I really love this game. Reminds me a lot of the hard times that me and [my] 2 brothers went through. I was 5 years old when the war come and I am the youngest child in the family. My dad went to the hills and left us with my mom because the military were looking for men during the oppression. My mom didn't know where to go so we take refuge in a church near to our house, but then the militia took over the church and it wasn't safe anymore. Then my aunt found us and took us to an abandoned prison which was her workplace, we stayed there for shelter. Two brave women fed us under pain and suffering. I would like to thank my mom for raising us with so much love and grace, even when we were surrounded by violence, gunshots and military oppression. I love you, mom! Thanks for teaching us to always be positive in life and to always carry a smile on our face even when things are difficult.

A recurring theme is displacement – something also seen in the family memories. Commenter 3 describes the actual experience of having to leave everything behind under the immediate threat of violence or even death is a memory that leaves a profound impact on commenters. The commenters sharing their childhood memories mention their age or that they were children during the war. Feelings of loss and boredom of waiting all day when you cannot go outside to play are some of the affective experiences the game tries to represent. What these childhood memories have in common is that these individuals were children or young teenagers during the Yugoslav war. Whilst these individuals were not actively fighting in the war, they faced the consequences. The comments tell us that this generation remembers through the stories and images with which they grew up, and that watching game content or a *Let's Player* triggers those memories.

Familial Memories and Sarcasm

The second and largest theme of the cluster is family memories. The main individuals mentioned in these narratives are direct kin – siblings, mothers and fathers – and to a lesser extent more distant relatives, such as uncles, aunts and grandparents. For this cluster, an intergenerational perspective is relevant, as these are the memories of the post-war generation (Hirsch, 2008). These individuals came of age in the ruins left by the war. For some commenters, this means growing up in a country torn apart by war, whilst for others, this means growing up in a foreign country far away from their homeland. Across these comments are also narratives of displaced families, as seen in the quote by commenter 4:

Commenter 4 ... I live 22 km from Sarajevo. And my father was in the war. If they lost the line of defence, Sarajevo would fall in the hands of the Serbs. And my father was always telling me how it was hard during the war especially when you have to feed a child. I remember I wouldn't have seen him for months. It's something that shouldn't be forgotten and thanks to the developers of this game [it will not be forgotten]. It's an amazing game :)

In the comments, war memories describing the role of the father tend to focus on the paternal role of provider and of combatant. Users sharing memories of their mothers focus on their role as caregivers and guardians. Whereas the paternal role is described as active, either through engagement in combat or finding necessities to survive, the maternal role is described as more reactive and focused on securing safety for the family. The maternal role focuses on keeping

children out of harm's way, either by staying in one place, or by seeking refuge when faced with immediate threats. Commenters describe the emotional state of longing – such as an absent father or a deceased family member. In addition to memories of direct kin, experiences of more distant family members are shared:

Commenter 5 reminds me of my grandparents, who fled from istria when yugoslavia came in. Venetians in their homeland, they abandoned everything and when they stepped in italy they were welcomed by spits and insults. Love this country.

Commenter 6 Yeah, bitches ... another game with something that is related to the Bosnian War ... But that fucking war cost my grandmas life ...

As illustrated in the quotes by commenter 5 and 6, another relevant aspect is the use of sarcasm when sharing war memories. Sarcasm materializes in text, but also through the use of emoticons, exemplifying another intergenerational aspect of war memory. Sarcasm or irony as forms of black humour are illustrative of everyday resistance (Scott, 1989). Such expressions found their way into descriptions of the current state of affairs in post-Yugoslav states – both politically and economically. This resonates with how Bosnian youth use irony and black humour to describe their current state of affairs (Majstorović and Turjačanin, 2013: 90). In other words, the use of irony is a coping mechanism that is used to deal with the atrocities that are so embedded in the everyday lives of these individuals growing up after the war. It materializes, for instance when commenters share their family memories of feeling like an outcast, unwelcome and unsafe in the land of refuge with the threat of losing loved ones.

YouTube's Accidental Communities of Commemoration

Exemplified in the discourses emerging around childhood and family memories is how videos of this game are used as a memory object – as a way in which to remember traumatic pasts. In post-Yugoslav states such as BiH or Croatia, national news media are strictly regulated (Baker, 2018). On YouTube, however, individuals across the globe, regardless of their ethnicity or nationality, can watch commemorative videos of politically charged events such as the Srebrenica memorial day. For mourners of the Yugoslav war, YouTube serves as a global 'accidental community of memory' (Huttunen, 2016: 257). In this respect, YouTube offers a different form of media freedom for post-war societies in which national media such as radio, television programmes and news have limited freedom. Affective memories and experiences

of missing family are shared, and make visible a plurality of victims, illustrating the role of digital popular culture in mourning and the sharing of grief.

The ability of YouTube users to comment on a posted video provides a space for viewers to communicate traumatic experiences of the Yugoslav war. Whilst Yugoslav celebrities and cultural icons are understood as galvanizers of cultural memory, YouTube celebrities also play a key role in the circulation of memory. An important addition is that the governance of copyright is different in the game industry. Stricter governance of music copyrights leads to the removal of YouTube videos, which in turn removes traces of the collectivities and discourses emerging in the digital publics that surround Yugoslav music (Pogačar, 2015). Conversely, self-made *Let's Players* and game companies whose games are featured thrive on spreading game content regardless of copyright issues (De Smale, 2019a, forthcoming). The tactics used to invite viewers to comment is vital in this respect. In video descriptions as well as in their videos, *Let's Players* invite viewers to interact with them. Commenting is one of the forms that this interaction takes. As 'loose collections of informal cultural memory' (De Smale, 2019a, forthcoming) these celebrities engage millions of fans of all ages, although, as a relatively young phenomenon, watching these videos is particularly popular with a younger audience. In a post-Yugoslav context, this is interesting because its emergence coincides with the coming of age of the post-war generation. Each video acts as a digital place in which to commemorate and grieve, with the possibility of meeting others who share similar losses that go beyond ethnicity. This space becomes a place able to communicate war memories beyond the discursive frames of ethno-politics. The loose character of collectivities enables informal commemoration. Instead of having one collective narrative, these forms of remembrance are a constellation of micro-narratives, voices and micro-support networks on trauma and displacement. Yet, whilst these micro-narratives have coherence in that they focus on childhood and family memories, the post-war controversies are much more diverse in nature.

Colliding Memories of Post-War Controversies

Whereas the previous empirical section focused on connecting narratives of war memories, this section focuses on the discussions emerging as a consequence of colliding perspectives. The connecting memories discussed earlier were more coherent in that they focused on childhood and family trauma, such as the loss of loved ones and displacement. Conversely, the colliding memories discussed more in-depth below tend to focus on war events that are perceived differently by individuals across post-Yugoslav states. More importantly, the discussion had a broader range, which made it difficult to distil core themes. Instead, it is much more productive

to talk about the micro-narratives that emerged. In these micro-narratives, commenters expressed conflicting opinions on the causes, consequences, or actors involved in, and affected by, the Yugoslav war. Alternative facts, which differ across post-Yugoslav nations and ethnicities, materialize in the discussion of war crimes – for instance, in the recognition of Serbian victims in the Belgrade bombing vis-à-vis the perspective of Serb and Serbian individuals as perpetrators. As another example, when discussing responsibility for the Markale massacres in Sarajevo, blaming the army of Republika Srpska is considered a valid opinion for one commenter, but is considered as propaganda by other Serb commenters. The types of conversations ranged from a single reply, to an incoherent discussion with multiple conversations simultaneously, or a heated argument that suddenly reignited six months later. Below I will address how the way in which YouTube structures comments is key to understanding how micro-narratives emerge instead of several large discussions. By closely analysing one discussion and the dynamics emerging, I argue that these micro-narratives, although seemingly random at first, are productive discourses in the study of Yugoslav war memory as reflections of current ethno-nationalist politics and tensions felt by individuals in post-Yugoslav states.



Fig. 3 Personalised LP introduction before discussing gameplay (*Life of Boris*, 2016).

Below I present an in-depth analysis of the most debated comment of this dataset, called ‘Yugoslavia feels :(’. This particular comment thread received 82 replies from 16 discussants. The comment is a play on the video title, as seen in Figure 3. This channel is branded as ‘Slavic’, with Slavic related Anglophone commentary on games. The channel attracts a large audience with over 1.7 million subscribers, attracting a global as well as regional audience.

Language as Ethnic Identifier

As seen in Figure 4, the first reaction on the original comment is an expression of sympathy and solidarity. Deconstructing how ‘Sarajevo’ is written in different Balkan states, commenters try to ethnically categorize each other. For the Balkan region, language is a complex political matter. The official language of Yugoslavia was Serbo-Croatian. After the dissolution of Yugoslavia, different states adopted different versions of the language. For example, Bosnian, Serbian and Croatian are the official languages spoken in the respective states, which are written variations of Serbo-Croatian but have variations in dialect as well as Cyrillic, Latin and Arabic variations in writing (Bugarski, 2001). Reactions by commenters 7, 8, 9 and 10 on the various spellings of the word ‘Sarajevo’ illustrate the importance of language as a marker of identity:

- Commenter 7* @Jan Ahhh but you are tricked, true south Slavs like myself never say Capajevo, we say Capaevo 4
- Commenter 8* +Bob Bulgaria*
- Commenter 9* Might be, Macedonia uses Saraevo too :)
- Commenter 10* bosnian ‘ere, I say Sarajevo with a short e, but people usually say Sarajevo with a long e wherever you are in Bosnia.

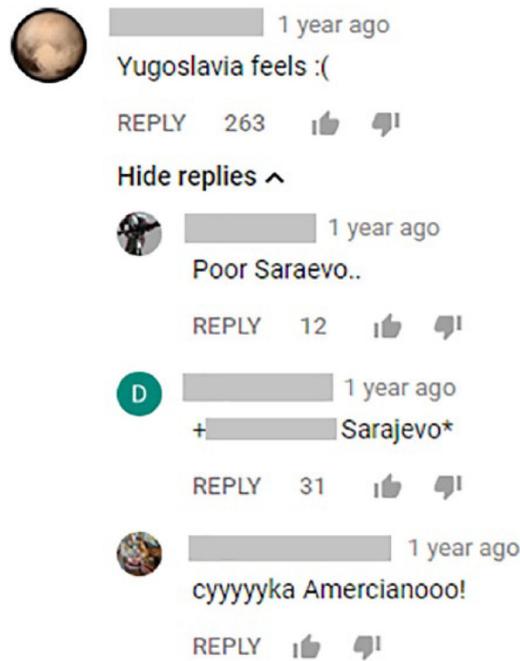


Fig. 4 Screenshot of discussion threads within comments.

The discussion above is illustrative of the everyday practices of ethnic identification after violent conflict, so familiar to the Balkan states. In ethnically diverse urban areas such as the Bosnian city of Mostar, Monica Palmberger (2016: 30) describes how identification through language is used in everyday life to discern ethnicity. Subtle variations in language mark differences between ethnic groups (Jenkins, 2008[1997]). In the discussion above, linguistic differences in type and spelling evoke a debate about the commenter's ethno-national origins. Whilst the commenters do not reach a conclusion on the commenter's origins in relation to the word, this is not the issue at hand. What is important here, is how this discussion reifies ethnic belonging by determining the Other in relation to the Self. Once ethnicities are established, the discussion takes a more ethno-nationalist turn:

Commenter 11 +Dirk yes u are right im from kosovo

Commenter 12 You mean Serbia

Commenter 12 Kosovo IS Serbian, say what YOU want but YOU are living on Serbian ground. Albania IS an artificial country, the land that shiptars occupied and call Albania belongs to Serbia and Greece. [emphasis added]

Commenter 13 You guys starting another war? Balkans will never have real peace :(

Commenter 12 We can't have peace with Turkish leftovers here. Every place has their own dumpster, sadly we got albania...

Natural Moderation of Hate Speech

Both examples described above illustrate how these narratives continue to cause disputes in everyday life. Whilst one is concerned with language, the other is a collision of collective memory. Both, however, are expressions of everyday primordialism, connected through a shared interest in popular culture. However, within these controversies, a natural mediation occurs in the form of other commenters:

Commenter 13 +Commenter12 Hmmm ... But we can't really change things like these [the current status of Kosovo]. This is how these types of ethnic wars start. With ignorance and hate and it only weakens the region

Commenter 13 +Commenter12 See? You are again starting the same argument. Don't generalize like that, not every Albanian is a terrorists and not every Albanian lives in Kosovo. Arguing like this makes you looks like some aggressive nationalist which isn't good either. If you want to argue, argue in a way that actually arrives to a conclusion and doesn't just attack the person you are arguing with. Fine I get that you are angry ... but what else are we supposed to get out of this? I give up hope for peace. You have perfectly demonstrated what I meant when I said that there is enough of this useless fighting. The modern generation should fix what the older generation messed up – this goes for both the Albanians and the Serbians (and every other ethnic group in the Balkans) and we all should change if anything should ever change.

The quotes of commenter 13 – the original comment poster – are illustrative of the moderating role that commenters assume. Commenter 13 moderates the heated dispute between the Albanian and the Serbian commenter. In a refusal to agree with ethnic differentiation, commenter 13 emphasizes shared history and groupness beyond ethnicity. Referencing this shared identity is one way to dissipate groupness along lines of ethnic categorization. Although Yugo-nostalgia – conceptualized as a nostalgic yearning for the past through an imaginary of unity beyond ethnicity (Volčič, 2007: 34) – is ambivalent, in discussions it served as a script of a shared past that goes beyond blood ties. Although the discussion above is illustrative of

the heated discussions that arise in the margins of a war game, these discussions should not be universally dismissed as inappropriate hate speech or rants (Lange, 2014). In the margins of each video is a plethora of micro-narratives that go beyond trolling and hate speech. It illustrates the desire of these individuals, who have spent the last decades in the wreckage of war, to move on and to start living together again.

Micro-Narratives Through YouTube Logic

The diversity of commenters and the diverse mix of discussions in YouTube comments make it hard to find a coherent narrative of collective memory. One of the reasons for this kaleidoscope of different discussions emerging in one thread is the YouTube interface, which forces users to comment within a comment, making it possible to reply within a reply, and reply within that reply (see Figure 5). YouTube has attempted to fortify their commenting system in order to make it more resistant to abuse (Reagle, 2015: 7–9). That only channel owners can comment provides safeguards against abusive discussions – flagging comments is another. The structuring principle to visualize the comment with the highest number of reactions at the top of the list is an incentive that places highly controversial and disputed topics higher than other, more moderate comments (Figure 5). What is shown in YouTube’s default setting is only the first layer of comments. Replies are only visible numerically and need to be unfolded in order to be read. Furthermore, a viewer cannot search within the comment section, making YouTube – as a communicative space – different to, for example, a forum. As a consequence, instead of one collective discourse, different micro-narratives emerge, in which individuals react to textual or audio-visual content.

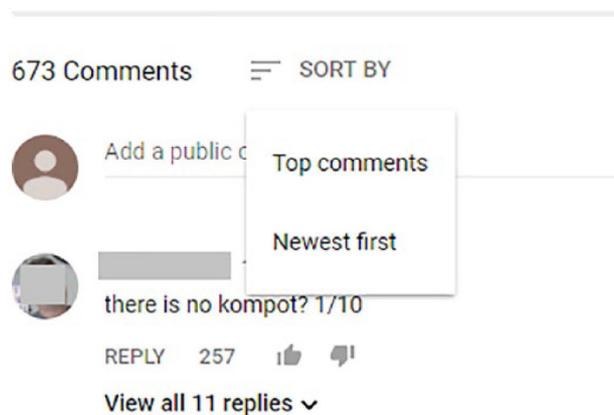


Fig. 5 Screenshot of discussion comment sorting.

The public nature of comments makes them open to contributions by everyone. However, the visibility of the comment is subject to YouTube's algorithmic logic as a connective force. Comment date, number of likes/dislikes and number of comments are all factored into the potential visibility of the discussion. Video owners also benefit from extensive discussions as they have a stake in engaging viewers and growing their fanbase. For a video poster, the number of comments, likes and dislikes are engagement metrics that give insights into what viewers like and dislike, and can thus be used to grow their audiences (YouTube Creators Academy, 2018). In short, both criteria – how comments are structured and how they are visualized – inform the dynamics of the discussions emerging on the lower half of every YouTube page.

Serendipity in Connecting and Colliding War Memories

When we combine the empirical findings of both clusters – sharing Yugoslav war memory and discussion of war events – the idea of accidental communities and the discussions that emerge can be interrogated further through the concept of serendipity. Serendipity, not to be confused with coincidence, requires one to go with the flow of what is encountered. It 'is the wisdom of recognizing and then moving with the energetic flow of the unexpected' (Lederach, 2005: 115). For peace researcher John Paul Lederach (2005), serendipity is an important aspect of peace building which requires a creative mind and is inherently tied to aesthetics and artistic practice. It is within collective serendipitous encounters that creative minds are triggered. Emerging in these game publics are serendipitous encounters facilitated by YouTube and the video producer.

Since the commenters in this analysis come together because of a creative and informal practice, it provides them with the opportunity to interact outside of the ethno-political framework that exists in the memory of the Yugoslav war. The reason behind their gathering is primarily because of a shared interest in games and not because of their differences. Although social categorization and the labelling of others as ethnically different emerges in the collision of conflicting collective memories of events, the moderation by commenters makes it a space for meaningful interaction that exceeds the frames of ethno-religious groupness.

In sum, Yugoslav memory discourses found in the colliding narratives of game publics visualize a tension between the reification of, and resistance to, ethno-nationalist identification. Everyday reification processes crystallize groupness along lines of ethnicity and follow ethno-political scripts that use collective memory to harden those boundaries. Conversely, by connecting war memories post-Yugoslav individuals find shared experiences in their childhoods and familial memories. These are the memories of being in a war, of hiding in

cellars, and the pain of missing a family member. Stories of displacement and survival resonate with the content of the game videos. In the age of deep mediatization, media-based collectivities aid in creating imagined communities and feelings of belonging between subjects across territorial and ethnic boundaries. In this case study, videos of a war game offer a communicative space for connective war memories. How those spaces materialize, however, is dependent on serendipitous encounters between individuals.

Conclusion: A Culture of Post-War Connectivity

The findings of this study suggest that meaningful memory discourses emerge around war-themed popular culture. This view complies with other researchers who argue that YouTube potentially enriches remembrance by offering an experience unavailable via traditional forms of commemoration (Gibson and Jones, 2012; Makhortykh, 2017). In addition, acts of remembrance in a media-based collectivity differ in their accidental and informal nature, supporting commemoration from a multitude of viewpoints. In the case of this Yugoslav-war inspired game, a public collective forms first and foremost because of a shared interest in games. On the one hand, Yugoslav war memory discourses emerging in game publics illustrate how ethnic belonging is reified through subtle language variations that trigger ethnic labelling by post-Yugoslav individuals. On the other hand, small acts of resisting ethno-nationalist identification are noticeable in the involvement of, and moderation by, other commenters in heated discussions on the Yugoslav war. Although a YouTube video offers a starting point for conversation and expression, comments have their own social dynamic. The reactive and asynchronous character of comments creates micro-narratives that emerge as reactions to other comments. The publicness of YouTube comments allows other users, who might be ‘just passing by’, to get involved in the discussions, thus creating serendipitous encounters and dialogues.

Since YouTube comments are not indexed and searchable for users, scraping its content is an act of preserving vernacular connective memory discourses in a particular time and place. For practitioners and researchers studying the potential of social media and post-war reconciliation, popular culture is one entry into studying potential spaces for positive interaction. It requires an effort to move away from the top-down approach of studying social movements, or local communities. This case study illustrates that a passion-based approach to studying groupness does not necessarily start with an ethno-political framework. Rather,

studying memory practices bottom-up allows us to see how (post)memories of war and conflict are lived in the everyday. Further research could study the roles played by entertainment, popular culture and digital communication in the lived experiences of post-war individuals – particularly youth. In the platform society (Van Dijck et al., 2018), monitoring the political discussions and opinions of citizens online is acknowledged to be an important tool in the governance of nation states. However, discussions emerging around popular culture are different enactments of these same publics, not simply organized around politics or ideology. Monitoring discussions in media-based collectivities provides insights into the vernacular discourses of citizens and their meanings in post-war regions.

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Notes

1. In the context of this article, ‘the Yugoslav war’ refers to the war following the break-up of the Socialist Federal Republic of Yugoslavia. Although beginnings are contested and highly disputed, in this context the Yugoslav war refers to the period 1987–1999, from the rise of Serbian nationalism and Slobodan Milošević up until the NATO bombing of Belgrade in 1999. Other terms used to refer to these events are the Yugoslav wars; the post-Yugoslav wars; the war in the former Yugoslavia; or, more problematically, the Balkan war(s). The politics of framing the Yugoslav war as ‘Balkan’ are aptly illustrated by Maria Todorova (2009: 186), who argues that framing the war as a Balkan tragedy generalizes the region by neglecting the fact that some countries, such as Slovenia, were a part of Yugoslavia whilst not geographically belonging to the Balkans, whereas other countries in the Balkan were not part of the violent destruction of Yugoslavia. More importantly, the generalization of ‘the Balkan war’ rehashes old

and dangerous stereotypes of primordial Balkan violence and the rhetorics of ancient hatreds between ethnic groups.

2. In the work of Marianne Hirsch (2008), the concept of postmemory refers to the ways in which war traumas are transmitted through family, aesthetic objects and narratives to subsequent generation(s). Postmemory is not an actual trauma, but a reworking of traumatic pasts in the present. Post-war youth playing historical war games related to their past remember experiences of the war through empathetic gameplay (De Smale, 2019b, forthcoming).
3. Names have been anonymized, but comments were left original where possible. This means that all grammatical errors in the comments are original. Additional clarifications were added in square brackets only when content was difficult to follow otherwise.

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ARTICLE 4

Mnemonic Gameplay

Bosnian Youth 'Playing the Past'

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Abstract

Players imagine the past through gameplay, making digital games meaningful cultural objects for remembrance. Through a case study, I address how Bosnian youth engage with their violent past by playing a Yugoslav War inspired game called *This War of Mine* (11 bit studios, 2014). For individuals with personal memories of the conflict, playing evoked memories of the past through intertextual connections to the war, whilst younger participants imagined the war through playing. Key elements for these imaginings are those game elements that evoke feelings of empathy and afford complicity. Whilst family stories informed the gameplay experience of players, selective silence on an institutional and familial level created forms of forgetting, making players hesitant towards mnemonic reflection. Overall, playing the past stimulates a curiosity about the past and a desire to understand and affectively experience their parents' experiences of the war.

Keywords: Digital Games; Youth; Empathy; Complicity; Bosnia-Herzegovina; Postmemory

Introduction

Bosnians born before, during and after the war play games on their smartphones, at home, or in dedicated internet cafés and gaming centres in cities across the country. Between the ruins left by the war, gaming centres are both a place for playing and for socialising. For lives filled with leisure activities that feature many different media forms, how and what we remember is now mediated through literature, graphic novels, music and digital games. Using these media, individuals remember sometimes difficult pasts via stories told about themselves and their relation to others (e.g., Erll, 2011). The role played by these media within popular culture is particularly relevant, not only because of its scale and reach, through mnemonic reflexivity on an individual or collective level, but also because these media forms lead to the global circulation of images of the past (Erll, 2011: 137). Global narratives and representations circulating in different forms of popular culture are appropriated and interpreted by individuals in a local context (De Cesari and Rigney, 2014). Historical games, albeit fictionalised, are an important global cultural form via which individuals experience the past (e.g., Chapman, 2016; Kansteiner, 2017; Pötzsch and Šisler, 2016).

Through a case study of twelve Bosnian participants playing the Yugoslav War inspired game *This War of Mine* (11 bit studios, 2014), how and what Bosnian players remember by playing digital games is explored. How conflict is remembered by individuals through digital games can serve to indicate more generally how the past is transmitted and interpreted through digital popular culture. The transmission of memory by postwar generations, rather than constituting actual memory, is more a reworking of the past in the present – conceptualised by memory scholar Marianne Hirsch (2012) as postmemory. Of particular value to this article is how games potentially foster both empathy and complicity (Smethurst and Craps, 2015). Empathy engages the imagination and stimulates affective imaginings of the past. The relationship between memory, witnessing and empathy is longstanding (Craps, 2013), with scholars exploring not only the possibilities and the limits of empathy in relation to history (LaCapra, [2001] 2016), but also empathy in relation to different media forms such as film (Landsberg, 2004). More recently, empathy has become of interest to game scholars researching the social and educational value of games (e.g., Belman and Flanagan, 2010), or in how to design games for empathetic experiences (Kors et al., 2016). More recently, scholars have explored how historical games can be used to study complicity, which can emerge through character development and events that result as a consequence of a player's actions (Smethurst and Craps, 2015). The situated histories and experiences of players necessarily tension the

intimate connection between player and game (Lammes and De Smale, 2018). Thus, remembrance via games cannot be seen as separate from the desires and hesitations communicated as a result of everyday life in a postwar society.

Cultural Memory and Mnemonic Gameplay

The empirical data for this article were collected through fieldwork in Bosnia-Herzegovina, conducted between March and May 2018. The starting point for this qualitative study were two gaming centres; one Sarajevo, and one in Banja Luka. The sample of participants was initially obtained through contact information provided by the gaming centre and subsequently by other participants; a tactic also known as snowball sampling (Noy, 2008). Choosing two sites allowed for a wider mapping of the memories and issues in the present, whilst still taking into consideration similarities between the experiences of players. This resulted in twelve participants from Sarajevo (42%), Zenica (8%) and Banja Luka (50%), who were asked to play the game *This War of Mine (TWOm)*, a single-player survival game developed in 2014 by the Warsaw-based game development company 11 bit studios. Background information of each participant was collected through a survey before each interview. The interviews, conducted in Bosnian and English, were semi-structured. Following their gameplay sessions, players were interviewed on games and game culture in general, specific questions related to *TWOm* and their experience, moral action, empathy and their (family) war memories. This technique is comparable to the use of other media, such as photographs, as a means by which to elucidate and add context to interviews. The use of these media evoke mnemonic responses and a range of strong emotions (Mannik, 2011: 77). All the interviews were transcribed, translated, analysed and coded using narrative analysis (Elliot, 2005). The interviewees were aged between eighteen and thirty-six years of age. Four participants (33%) were born after the war, whereas six (50%) were born during, and two (17%) were born before the war. Consequently, participants can be split into those with personal memories of the war and those with intergenerational memories passed down through the family. Two individuals had personal memories of the war, and the larger group of individuals born during or after the war learned about the past through stories shared between family and friends.

Empathy and Complicity in Games

Game environments are potential historical simulations in which players navigate goals by performing actions. The single-player survival game *TWoM* simulates the experience of surviving as a civilian in a besieged city. For the developers, the goal was to design a game that emulates the *experience* and *emotions* of being a civilian in a war zone (De Smale, Kors and Sandoval, 2017). Thus, witnessing atrocities and experiencing hunger, sickness and depression all become part of the game environment. Although the game is fictionalised, the game makes convincing intertextual connections to the Yugoslav War. The most convincing references are (1) representational, through the use of iconic imagery of the Siege of Sarajevo, such as the burning parliament building, warnings for sniper fire seen in the city and the objects used by Sarajevans to survive; (2) narratological, by taking inspiration from *Zlata's Diary* (Filipovic, 2006) to create and shape the game's narrative setting, with rich background stories of playable characters whose development within the game depend on a player's actions (see Fig. 1); (3) procedural, through special events and levels that relate to specific war atrocities of the Yugoslav War, such as Sniper Alley or sexual violence; and lastly (4) performatively, because the players' actions in the game directly affect the survival and mental well-being of their characters (see De Smale, 2019 [forthcoming]).^{viii}



Fig. 1 Screenshot of characters' struggle for survival, battling hunger, depression, sickness and exhaustion (11 bit studios, 2014).

The dynamic aspects of a game provide potential historical problem spaces through which the player must navigate. ‘Problem spaces are the visual, spatial and aural game worlds with challenges that the player must overcome’ (McCall, 2012: 11). These problem spaces can take different forms, such as limits on resources or actions, obstacles a player must overcome and encounters with antagonists. For Jeremiah McCall (2012: 12), these problem spaces offer players opportunities to experience a historical framing which, rather than being pre-determined, is full of possibilities. Engaging with objects intertextually and connecting to their history – by picking up a note or building a home-made stove – is what makes games meaningful for memory-making. For a subset of historical war games such as *TWoM*, problem spaces are created to evoke both empathy and complicity through playing. The potential of digital games to afford empathy and complicity through their design is a key area of investigation if we are to understand how Bosnian youth experience intergenerational memory.

Different kinds of empathy – cognitive, emotional, vehicular embodiment, non-empathy – are afforded in game environments and co-exist on a continuum, dependant on the agency attributed to, and the mode of engagement of, the player. Trauma scholar Dominick LaCapra ([2001] 2016) defines empathy as ‘an affective rapport that involves yet also limits identification’ (399). In other words, empathising is not the same as identification. For Tobi Smethurst and Stef Craps (2015: 275–276) the nature and extent of empathy felt by players depends on the amount of control players have in the game environment. Similar to types of empathy found in other media forms, game scholars tend to draw on cognitive and emotional empathy. Emotional empathy is the instinctual reaction to the feelings of others. Cognitive empathy requires active reflection of ‘putting yourself into another person’s shoes’, and this form of empathising requires active participation, requiring a person to reflect on the experience of another individual and to imagine what it would be like if you were in that person’s situation (see Belman and Flanagan, 2010).

However, as Smethurst and Craps (2015) lament, the development of emotional and cognitive empathy does not necessarily require the active involvement of players. Cognitive and emotional empathy can arise when players are not required to take action, such as in cut-scenes, character dialogue, or other gameplay elements that do not require the player’s full engagement. What sets games apart from other media forms is the capacity of players to take action, which allows players to empathise through the choices they make. Building on the work of James Newman, Smethurst and Craps (2015: 277) therefore add ‘vehicular embodiment’ to games’ empathy spectrum. Vehicular embodiment is a form of empathy through which players empathise with playable characters’ capabilities and characteristics through the continuous

feedback loop of player action and changes in the game environment. The focus here is not on a character's identity, but its potential for action – for instance, the ability of a character to run faster than other playable characters. Dependent on player action for the development of events, this form of empathy requires the full engagement of the players, who assess what character to use in what situation based on their in-game performances. In other words, as players assess characters by how they feel, what matters is what playable characters can do, not who they are. In this instrumentalised view of empathy, moments of full engagement can also follow a contradictory path along which at some point, empathy ceases to exist all together. Non-empathy is the detachment of a player from the (historical) narratives within a game, for instance when a player focuses on the more goal-oriented aspects of the game (Smethurst and Craps, 2015). In this instance, understanding a game's rule system is prioritised over ethical reflection, making the moral and historical framings of the game less relevant. The player can experience these different types of empathy at different times during a single gameplay. In short, multiple forms of empathy– cognitive, emotional, vehicular embodiment, non-empathy – can co-exist in a player's experience of historical gameplay.

A second concept relevant to any analysis of postwar youth 'playing the past' is how games afford complicity. Games potentially afford complicity because player actions have consequences for the development of playable characters. As Smethurst and Craps (2015) point out, 'due to the unique ways in which players engage with them, games have the capability to make the player feel as though they are complicit' (277). The sense that players are responsible for what happens in the game fosters a sense of complicity. The exact way in which complicity becomes manifest in a given game differs, but in most cases players have (at least some) agency in determining the development of a game via the decisions they make whilst playing (Smethurst and Craps, 2015). As a consequence, if something happens in a game as a consequence of a player's actions – such as a playable character suffering from depression and committing suicide – the character's actions can be related to the player's failure to perform specific actions. As a result, the ability to make players feel complicit in the events that occur in a game may create a gameplay experience with negative emotions and discomfort through the sudden realisation that a player is complicit in the narrative development of a game (Jørgensen, 2016). Responsibility for the game's outcome and the survival of characters lies in the hands of players.

However, digital games can only afford potential framings of the past (De Smale, 2019 [forthcoming]). How players perceive the historical gameplay experience depends on the emotions, feelings, choice of action and the cognition of reflection that occur (see Kattenbelt

and Raessens, 2003: 421). As a result, the mnemonic experience of a game can only be studied as an active process, and one of the ways to do this is through player research. How the past is perceived through gameplay is very much a question of context. A player brings his or her own situated history into the gameplay experience. As such, a spatial narrative is created as a combination of a player's tactics – bringing in one's own situated history and context in gameplay – and the game environment itself, within which the game developers have specific ideas of what they want players to do (Lammes and De Smale, 2018). For postwar youths 'playing the past', these aspects have the potential to create affective empathetic experiences through which the past is remembered. In other words, players potentially re-appropriate games developed for global audiences by providing context through their gameplay. Additionally, the personal experiences of players may in turn inform the decisions they make in a game, and hence, how historical references materialise and develop. In a very real sense, these games are cultural experiences in which players potentially (re)imagine past wars.

Situated (Intergenerational) Remembrance

How postwar youth relate to their pasts through digital games depends on whether they were born before, during, or after the war in question. The personal memories of individuals who experienced the Yugoslav War are negotiated by the social structures that surround them and thus help them to interpret and remember the past (Halbwachs, 1980). The generation born after the Yugoslav War did not witness the conflict first hand, but instead deals with its consequences and affective forces. These postwar individuals have war memories transmitted to them via family narratives and mediated through various media forms. Marianne Hirsch (2012) developed the concept of postmemory in order to describe how the generation that follows a war deals with the consequences of its fragmented and affective memory. Acts of postmemorialisation by the generation immediately after a war are not based on direct memory, but rather are mediated through imagination, projection and cultural production (Hirsch, 2012: 5). In order to understand the various ways in which postmemory is transmitted, Hirsch (2012: 38–39) differentiates between mediations passed down through the family sphere, and those transmitted via other cultural forms. Familial postmemory is understood as the vertical transmission of postmemory mediated through stories, objects and expressions passed down through the family. Affiliative postmemory focusses instead on the horizontal, peer-to-peer transmission of memory via various cultural forms (literature, music, art). It is precisely these forms of affiliative postmemory that are transnational in a contemporary globalised digital context (De Cesari and Rigney, 2014; Erll, 2011). In this article, I extend Hirsch's concept to

encompass the study of digital games as one of the cultural forms through which affiliative postmemory is transmitted.

The article expands Hirsch's conceptualisation of materiality to include the social field of the digital age, in which contemporary cultural forms, such as games, now inform how postwar youth remember. Hirsch (2012) sees digital cultural forms as inherently limited, because – in her view – they necessarily lack materiality. When discussing how affiliative postmemory is transmitted through cultural forms, Hirsch describes that digital materials 'lack the smells, scale and tactile materiality not only of the "actual", but also of the analog "originals"' (241). However, as I hope to demonstrate, digital representations gain other materialities that cause similar affective responses, such as empathy. In particular, games in which players have the agency to engage and act in (war) environments can create rich experiences relevant to the study of postmemory. These experiences are both tactile and material, as players engage with their senses and receive physical feedback from the consoles they are using.

In these tactile engagements of past simulations, the experience of play cannot be seen as separate from the state of public and private remembrance in everyday life. The national context of how and what postwar youth remember in present-day Bosnia-Herzegovina draws attention to the interrelated nature of national memory politics and strategic modes of forgetting. This is important, because how post-Yugoslav youth narrate the past in relation to their experiences fundamentally affects their construction of a sense of self (Palmberger, 2010) and may strengthen or mediate their self-identification along the lines of ethnicity (Brubaker, 2004). A common narrative shared between post-Yugoslav states is the development of ethnonational identities. National memory is used in nation-building and the creation of an ethnonational identity. Bosnia-Herzegovina is unique in this sense because it is confronted with three official memory narratives and ethnonational identity constructions within the same state (Moll, 2013: 912). The Dayton Peace Agreement in 1995 consolidated differentiation between individuals along ethnic lines by defining Bosniaks, Serbs and Croats as 'three constituent peoples' central to the Bosnian constitution and political life, legitimising conflicting and selective narratives of public remembrance based on ethnicity as a consequence. In Bosnia-Herzegovina, besides narratives of 'institutional forgetting' of ethnonational political structures – which find their way into the education system as well as public modes of remembrance – there is 'intimate forgetting' by individuals, collectives and families who want to move beyond the atrocities and losses of the war (see Connerton, 2008: 69–70). Whilst silence may operate

as a vehicle for identification beyond ethnicity, the silencing of past atrocities may also solidify symbolic boundaries along ethnic lines (Mijić, 2018).

To recap, digital games are media of cultural memory, informed not only by the global scale of the industry, but also by the user practices that emerge within game culture. Although fictionalised, games that intertextually reference past wars can nonetheless afford mnemonic experiences to postwar youth, not least because gameplay depends on the player's ability to contextualise the experience. Exploring empathy and complicity both as perpetrators and/or victims is relevant to a postwar youth culture coming to terms with the past and being confronted with the effects of war whilst growing up.

Postwar Youth Playing the Past

Before mapping the modes of remembrance enacted by Bosnian players, I want to focus on the differences and similarities in perceptions of the participants I interviewed. I conducted research in different cities with participants from different ethnic backgrounds. Of the twelve participants, six (50%) identified as Serb, four (33%) identified as Bosniak and two (17%) declined to answer. When asked if the war has shaped their views of others with a different ethnic background, the majority thought the war was either not at all influential 33%, or only slightly influential 33%. The remaining participants thought the war affected their views of others more significantly: 17% considered the war was somewhat influential, 8% considered it very influential, and 8% considered it extremely influential. These results clearly demonstrate that different individuals perceive the impact of the war very differently. Zooming in on participants who do not think the war shaped their view of others, the ages ranged from eighteen to twenty-six. These are individuals who have no first-hand memories of the war and more importantly, rarely spoke about the war with friends and family. Participants from Sarajevo focused on shared suffering and solidarity amongst citizens in the war, whereas participants from Banja Luka emphasised the necessity to survive. Another major difference in the conversations I had with the participants concerned the issue of blame. The participants from Sarajevo were clear that, whilst each 'side' was to blame for violence during the war, some were more to blame than others. Yet participants from Banja Luka spread the blame more evenly, stating nobody was innocent. What they share in common is an understanding that talking about the past is difficult, since each ethnic group learns a different version of the past. Keeping in mind the age variation of the participants, the distinction between participants with

first-hand or intergenerational war memories is relevant. For participants born during or after the war, the game served as an instrument to imagine the emotions and events of the war, whilst for players with personal experience of the war, playing evoked childhood memories.

Non-Empathy and the Limits of Empathy

The participants' gameplay revealed a dynamic between empathy and non-empathy, illustrating how their remembrance, or indeed the distance they place between themselves and the war, is part of the memory politics of present-day Bosnia-Herzegovina. These politics play out both on the personal level (via an inability to speak, or through denial), and at the institutional level (via national politics and the education system). The participants with strong personal links to the war – either because of stories told to them about when they were babies, or because of familial war memories – had strong affective reactions to their gameplay. The desires they expressed about what attracted them to play focused on a need to better understand their own history – for example, wanting to understand why neighbours committed horrible atrocities against other neighbours. Another motivation was to better understand their parents' experiences of the war, thus gaining a historical understanding that goes deeper than simply knowing what happened. The potential for historical feeling, action and reflection in *TWoM* are made possible through empathy and complicity but depend on a player's own positioning towards the past. 'The free play of imagination positions the player not only in (relation to) the possible world which is represented in the games, but also empathically to the world of his own experience' (Kattenbelt and Raessens, 2003: 422). In the interviews, this becomes apparent in the differentiation between participants who were interested in the past and those who were not. For the former, a subset of participants was motivated to explore the past through gameplay because they wanted to understand how the war felt and reflect on why it happened. By engaging with morally difficult situations, players are able to feel some of the hardships felt by, and thus empathise with the war memories of, their parents. These imaginings are important, not least because some parents prefer not to talk about the war:

Participant 2 I was just a baby when the war happened, so I don't have some clear memories of what was happening. I just know the stories that my parents told to other people when I was there. They never told me about the war: 'we had to hide there or go there', because they want to save me from

whatever happened. But you hear stories from other sources or when they are talking to someone else so ...

For some families, the wounds may be too fresh to talk about what happened—a silence typical of those I experienced during my interviews. The interviewees often replied that their parents remained silent so as not to burden them with stories of the war.

The other group of participants, however, showed a lack of interest in the relationship between playing *TWoM* and the war. When asked why, these participants expressed that they wanted to disconnect from everyday life via gaming, rather than connect it to their heritage. As one participant stated when asked if the game made him think about how people lived during the war:

Participant 7 A little bit. I don't like to think about that too much, how people lived during the war. I know from my mom that experience a little bit and my grandma, and grandpa but I don't like to put myself in their situation too much. When I play, I do a little bit, I think what I would do in that situation. What would my friend do, what would they do, how will they act, will he go and raid at night or will he stay in safe house. Would I go, would I volunteer and go on a road at night to raid when someone can shoot me for stealing some parts for something

Family spheres contributed to the desire to disconnect. Even though selective stories have been passed on, these silences represent a specific form of forgetting. They are 'charged silences', because they transmit emotions into the lives of the younger generation and create a 'gap to be filled by imagination and emotion' (Filippucci, 2012: 171). The imaginative experience offered by affiliative postmemorialisation is also seen in other participants who showed an increased interest in wanting to know more about the past after playing. The non-empathy shown towards the game for postwar individuals with families who are still coming to terms with the war is understandable. In line with other scholars, I refrain from interpreting these silences as pathological (Palmberger, 2010). Rather, I encountered different hesitations for different reasons, and hence this interpretation could be an injustice towards my encounters in the field.

Not Playing to Remember: Strategic Silence and Postwar Youth

The participants remember the war with different desires and hesitations, yet all are part of a contemporary postwar Bosnia-Herzegovina in which different versions of what happened circulate in both the private and the public spheres. The everyday reality is that opportunities for dialogue about the past between individuals with different ethnic backgrounds are limited. Ongoing and ever-present tensions do not allude to a secure future and therefore, it is important to remind ourselves that an engagement with postmemory is not about historical or representational accuracy, but rather requires a postmemorial engagement with the past in the present. As Geoffrey Maguire (2017) argues, postmemorial engagement cannot be seen as separate from contemporary interpretations of the past's meaning. For Bosnia, this has three explanations: the strategic framings of events; strategic silence between groups; and social insecurity.

First, as mentioned previously, versions of the war differ depending on who you ask. For example, a Serb and a Bosniak in Sarajevo will have a different version of events than a Serb and a Bosniak in Banja Luka. A key element of this framing is the educational system. Bosnia-Herzegovina is divided into two autonomous entities: Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS). RS uses a curriculum issued by the RS Ministry of Education and Culture, whilst FBiH is an entity shared by Croat and Bosniak representatives and the type of curriculum is dependent on the canton. For instance, the majority of Croat cantons use a curriculum developed by the Mostar Institute for School Affairs (Croat), and vis-à-vis, the majority of Bosniak cantons use the curriculum developed by the FBiH Ministry of Education. This means that it is not only ethnicity that determines the type of education given, but also geographical location. Thus, the two sites of my inquiry – Sarajevo (FBiH, Sarajevo Canton) and Banja Luka (RS) – each have a different version of the past.

A further political aspect of the present situation is the inability to talk about the war between different ethnic groups. As one participant described:

Participant 9 It is an avoided topic because here in Banja Luka is half of the, let say 3/4 of the city is Serbian and 1/4 is Muslim. There are Muslim kids in school and in order to be [participant pauses] correct to both of the ethnicities we just avoid the topic. War is just ... war happened. That is what we learn in school. We learn about war from parents' stories, other people, we don't really talk about it.

This collective silence in everyday life has to do with the sensitivity of the unresolved issues. This is felt by people who had to leave their city because of their ethnicity and find themselves not welcome anymore in these towns. For example, my translator was anxious of travelling to Banja Luka because her parents were forcibly displaced from the city during the early years of the war.

The final political use of postmemory is related to the current political situation in Bosnia-Herzegovina. At the time of my interviews, preliminary campaigning for the general elections started. Many participants showed indignation towards politics, yet simultaneously they were very aware of the fragile political situation of their country. The participants from Banja Luka in particular were afraid of another war and perceived the current status of the country as unstable:

Participant 7 There is always a fear. Bosnia is between east and west, there is always a fear

The enduring impasse of the post-Dayton ethnic politics that perpetuates separation based on ethnicity is the main culprit. The civic protests that occurred in 2014 were a result of the shared sentiments of citizens who were disillusioned with the current system. In the protests, alternative visions based on participatory politics and socialist-era imaginaries were presented, suggesting an alternative political organisation and social system for Bosnia (Kurtović and Hromadžić, 2017). However, these efforts have, as yet, had little impact on the politics of the region.

Feeling and Reflecting on the Past Through Empathy and Complicity

The frequency with which individuals who were born during or after the war talk about the past with family and friends informs how much they know. The majority of these participants either spoke sometimes (33%), or rarely (33%) about the war. The following analysis maps the ways in which players empathise with characters, feel complicit in their well-being and reflect on their own history. *TWoM* fosters empathy via player interaction with different elements. As mentioned in the theoretical section, empathy can take several different forms – those that rely on static elements (representation, narrative), and those that rely on dynamic elements (events, feedback), which depend on a player's actions. For example, static moments that do not require active player input are notes found to describe the events happening in different locations visited by the player. There are also non-playable characters who describe atrocities that

occurred in the locations visited by the player. For instance, when players visit a shelled school, a survivor of the atrocity shares his knowledge of the event:

I heard they had classes when the shelling started. Poor kids...

Echoing events that happened during the Siege of Sarajevo, these scripted notes and dialogue are designed to create emotional empathy. However, there are other elements in the game that are explicitly designed to make the player reflect on the events that occurred. These elements range from small player actions and direct feedback, to actions that set in motion chains of events that massively impact how the game and characters develop. Stimulating cognitive empathy, these small actions occur, for instance, when neighbourhood children ask the player for help (see Fig. 2). Small actions like helping others in need positively affect the mental state of playable characters and are designed to invite ethical gameplay.



Fig. 2 Screenshot of neighbourhood children asking for help.

TWoM is designed to stimulate players to care about their characters and their well-being. All of the player's decisions in the game lead to the game's ultimate goal – to survive with at least one character. However, *how* these characters survive also matters. By making moral choices – helping neighbours or other survivors, or not stealing – and via the consequences of those choices, the player is made to feel complicit in the well-being of characters in the game. The player receives feedback in the form of character dialogue, which can be positive or negative depending on the player's actions – for example, visual and narrative feedback in the form of

diaries and photos, when characters die because of such actions. Fig. 3 shows an example in which a playable character called Katia starved to death because the player failed to keep her alive. Noteworthy here is that the player not only sees the result (Katia dying), but also the circumstances (lack of food), thus making the player complicit in her death. Combined, these aspects are designed to foster empathy, and to make the player care about the characters and their survival.



Fig. 3 Screenshot describing Katia's death.

When analysing the affective responses of Bosnian youths playing *TWoM*, participants do not have to feel complicit in the well-being of characters in order to relate the game to the past, but they do have to empathise with characters to feel complicit in the events that unfold. Eight out of the ten participants born during or after the war remembered particular familial stories through gameplay. Mostly, these were stories of everyday life during the war, such as searching for food and water, making alcohol from potatoes, or bartering for food. Two of these individuals (20%) felt complicit in the well-being of other individuals. Interestingly, these individuals knew more about the war, and had explicit survival stories passed down to them by their families – a father being wounded in the war and almost dying, and one participant almost dying as a baby because of a lack of suitable medication. Both of these story types – everyday life and survival stories – resonate with narratives that develop in the game.

Yet not all participants reacted empathetically towards characters in the game. Five individuals played the game with a completely different mindset: gameplay mode. Echoing non-empathy, these players saw the characters simply as resources and thus did not humanise

them. Although these players did not empathise with the characters, in conversation some participants did reflect on what they would do if they were faced with these situations in real life. Through vehicular embodiment, they do not empathise with the game's characters, but rather see them purely as instruments via which to progress in the game. For the six remaining participants, the game offered moments of cognitive empathy by reflecting on the choices made and the consequences for the playable characters. The participant below refers to an event where he had to choose to survive by stealing food from other civilians, or letting his characters starve:

Participant 11 There was that elderly couple, in that situation where you have to choose either your friend's life or theirs. I had this choice of taking half of the supplies, so I don't feel bad for them or my friends. I am not sure if that is the right choice, but I think there is no right choice.

Another noteworthy aspect is that it is extremely difficult – indeed, almost impossible – to survive the game without acting immorally; a dynamic that requires players to switch roles between victim and perpetrator. There is no right choice when civilians need to survive; the civilian characters are all victims, including the playable characters, and thus, in order to survive, players have to switch role and become a perpetrator. Other participants also cited the tension that exists in the grey area between victim and perpetrator, and motivated their decisions along similar lines.

For ten of the twelve individuals, *TWoM* offered the potential for reflection upon the game and their own history. Participants thought about the emotions and events that happened during the Yugoslav War, comparing the gameplay experience to how they imagined the war to be – a form of cognitive empathy requiring reflection. In digital games, there are moments in which the player has time to reflect, for example in the empty moments when waiting for a new scene to load. It is precisely because of affordances such as loading screens that reflection and imagination of the past are invited (Lammes and De Smale, 2018). These moments materialise in relation to the stories transmitted by family members:

Participant 2 In the game there is actually a game mechanic where you put these water collectors on the roof where they [the characters] collect water and then they have to purify it to get clean water and ... I specifically remember mom

telling me that there was water ... I don't know what they were called, water spring, yes water springs, really close to our home, probably 900 meters, not even a kilometre of walking distance, no problem. But I remember [...] she couldn't sleep because she was both physically and mentally preparing herself for the trip, for a rather short trip but she knew it was full of [...] snipers, grenades, enemy soldiers and anything that can get you but ... she ... we needed water, they needed water ... that is something my characters in the game experience. I'm always struggling when I send them out for water and food, I'm under constant pressure, are they going to make it back, will something happen. That's a really similar situation to what my mom told me.

In this example, a participant describes how getting water in the game reminds him of stories he heard from his mother and her experience of getting water during the war under the constant threat of violence. Getting water in the game becomes an experience in which the emotions felt and decisions made, make him perform the familial postmemory of his past.

Playing the Past

Two of the interviewees' families were displaced abroad because of the conflict – one to Croatia, and one to Serbia. The remaining families stayed in Bosnia-Herzegovina, their fathers fighting on the front line – either for the Army of the Republic of Bosnia and Herzegovina, or for the Army of Republika Srpska – whilst their mothers stayed in their respective cities or villages. When participants were asked about the influence of the war on their sense of self, participants answered that the war had either been slightly influential (17%), somewhat influential (50%), or extremely influential (8%) in shaping who they are.

For the two participants with personal memories of the war, memories materialised through intertextual connections via representations, the overall narrative, and special events and levels. The presence of choice in how to survive presented participants with the opportunity to reflect on their past. Whilst players can nourish their characters through fresh produce and canned food, resources become scarcer as the siege continues. Fig. 1 is an example of characters being in poor mental and physical condition. Characters can experience sickness, depression, hunger and even starvation to the point that they perish. Encountering these representational and narratological aspects of the game's problem space, one participant remembered a lack of food in rural Bosnia:

Participant 6 I remember the hunger. When I got a fish, a can of fish, I got fish from [somewhere in the] war. I didn't eat a few days and I just open [the can]. I eat alone, I hide somewhere, I drink oil, OMG [laughter] and I eat fish, all fish [...]

By playing, participant 6 remembered the hunger he experienced when he was just a small boy. Whilst the game's characters are an important element via which participants remembered their history, iconic references to the war also sparked mnemonic gameplay.

Within *TWoM*, a player's actions are controlled through special events that happen in different locations of the game. The designers include survival challenges, not only to make the game entertaining, but also to create an affective experience of civilian suffering during war time. Here, inspiration is drawn directly from the Siege of Sarajevo. A location called Sniper Junction is inspired by Sniper Alley, a street in Sarajevo that split the city in half during the war. If civilians in Sarajevo wanted to cross, they had to run because snipers on the hillside would shoot at civilians during the war. The oldest participant amongst my interviewees, a young teen during the war, remembers this well:

Participant 1 Especially the level, what's it called, snipers junkyard or snipers. [Interviewer asks: Sniper junction?] Yeah, something like that, and the way they run waiting for the snipers to shoot. Because I was actually a kid with his friends, we were running, there is a huge shopping mall called *SCC* on *Marijin Dvor* and there were like UN convoys where you had to go behind them in order to cross, and we were like running and my friend got shot and I was like scared for death. There is also a video on that on YouTube. Sniper shot him and they were pulling him up. That level really like, was almost the same. We were hearing gun fires, we were running and it shoots again and shot him and another girl and it was like chaos [participant laughs].

Participant 1 remembered running across Sniper Alley, behind the UN convoy in order to avoid sniper fire. The memory of running is evoked through a similar game element where characters run to cross the street safely. Participant 1 and 6 both experienced affective responses within specific aspects of the game because they possess first-hand memories of the war. Growing up in different places, they each have different memories of the war, and remember through

different representations and actions related to their personal memories. Through affective gameplay moments, intimate and personal war memories emerged in our conversations.

In sum, the postmemorial gameplay of Bosnian youth sparks a dynamic between different modes of empathy and their positioning of the past is part of the memory politics of present-day Bosnia-Herzegovina. These politics happen both on a personal level, via an inability to speak and denial, and on a state level, via national politics and the country's education system. Elements of the game that require player action stimulate empathy and complicity, and invite reflection on past experiences. The fact that players have agency to act – with varying degrees of freedom – in the game environment (from singular actions, to actions that cause a chain of events) makes these virtual environments interesting media forms for the transmission of intergenerational memory. Within these historically loaded problem-solving spaces, the past is simulated in a game environment through a series of moral dilemmas, such as limited resources or obstacles to survival that a player must overcome.

Conclusion

In this article I have explored how and why a group of postwar youths 'play the past' through digital games. Historical games provide a valuable resource for memory research, because the global culture that accompanies cultural memories transforms and circulates them, which are appropriated and interpreted locally. Through a case study of *TWoM*, I have traced how players relate their personal gameplay experience to the Yugoslav War. As Smethurst and Craps (2015) illustrate, digital games engage players and encourage them to deal with the past through empathy and complicity. Furthermore, extending Hirsch's (2012) theory of postmemory to digital objects, games are one example through which individuals imagine past wars.

The empirical results illustrate how postmemory is, on the one hand, mediated through family narratives, and through cultural expressions of memory on the other. Individuals remember through intertextual connections with the Yugoslav War, recognised through their own memories of the past. Additionally, we saw how players switched between different forms of empathy. *TWoM* stimulates empathy and complicity through text, images and character development. Participants reflected on the morality of their actions in the game, thus also exploring issues of guilt and perpetratorship in the Yugoslav War. Players do not have to feel complicit or empathise with characters in order to remember the past, but they do have to empathise with characters to feel complicit in events within the game.

Lastly, participants communicated their gameplay experience in relation to the desires, hesitations and narratives of their everyday lives. On the one hand, participants expressed the need to experience the emotions felt by their families during the war – the desire to know what the war meant to their families, how and why certain choices were made. On the other hand, interviewees were hesitant to dig deeper into past events – perhaps not uncommon for the first generation after a war. Especially if the war is not a topic of discussion in the home, the playful engagement with postmemorial gameplay may offer an opportunity to express emotions and experience moments of reflection. These reflections and the accompanying dissonance towards reflection are in many ways a mirror of Bosnia’s active struggle of what and how to commemorate.

Notes

^{viii} *Zlata’s Diary* is a war diary written by Zlata Filipovic in 1991–1993, a young teenager at the time, who describes her account of the siege of Sarajevo.

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PART III – APPENDIX

Appendix A: Research Documents Article 4

Survey Questions

1. Age

.....

2. Gender

.....

3. City of residence

.....

4. Current highest level of study

primary school

high school

bachelor

master

PhD

5. Current employment status

Employed full time (40 or more hours per week)

Employed part time (up to 39 hours per week)

Unemployed and currently looking for work

Unemployed and not currently looking for work

Student

Retired

Homemaker

Self-employed

Unable to work

6. What is your nationality?

- Bosnian
- other/second, namely.....

7. What ethnicity do you identify with?

- Bosniak
- Croat
- Roma
- Serb
- other, namely.....

8. How important are playing games for you?

- not at all important
- slightly important
- neutral
- moderately important
- extremely important

9. How important is the game community for you?

- not at all important
- slightly important
- neutral
- moderately important
- extremely important

10. On average, how many hours a week do you play games?

- less than 1 hour
- between 1-10 hours
- between 11-20 hours
- between 30-40 hours
- more than 40

13. Have you heard about This War of Mine before this study?

yes

no

14. Have you played This War of Mine before this study?

yes

no

15. Where were you between 1992 and 1995?

.....
.....
.....
.....

16. Where were your parents between 1992 and 1995?

.....
.....
.....
.....

17. How often do you talk about the war with friends and family?

never

rarely

sometimes

often

always

18. How influential has the war been in shaping who you are?

not at all influential

slightly influential

somewhat influential

APPENDIX A

- very influential
- extremely influential

19. How influential has the war been in shaping your view of others?

- not at all influential
- slightly influential
- somewhat influential
- very influential
- extremely influential

Individual Semi-structured Interview Questions

1. Warm-up questions

- Please tell me about your life, start at the beginning (born, raised, school, work, now)
- What do you like about games?
- What positive or negative impact has gaming had in your life?
- What did you think about This War of Mine? (game, gameplay, graphics)

2. Community

- [If participant is willing, we will look at our Steam profiles during warm-up questions]
- How do you learn about a game such as TWoM? What Media/people?
- What is your opinion about the Bosnian game community?
- What role does the game community play in your life?
- Could you describe a typical interaction with other players?
- How do you connect with other players?
- What does community mean for you?
- How do you feel about gamers who are not [ingroup]?
 - Could you describe an event where you encountered other gamers?

3. War memory

- What did you think about the story about war in the game?
- Could you describe an event that stood out for you?
- How does the game reflect your own experience with war?
- Positive/negative impact on your war memories?

4. Emotions (empathy)

- What did you think about your game characters in the game?
 - How did you feel about your characters well-being [ingroup]?/ Did they suffer?
- Could you describe an event in the game where you felt these emotions?
- How do these feelings relate your own experience with the Bosnian war?
- How did the game make you think about your own identity?
- How does it make you feel about other [ingroup] (Serbs, Bosniaks, Croats) during the Bosnian war?

- How does it make you feel about other [outgroup] (Serbs, Bosniaks, Croats) during the Bosnian war?

5. Moral action (interreactivity)

- What were the consequences of these actions (Others suffering)?
 - How did it make you feel committing these actions?
- How do these actions make you think about the actions of [ingroup] (Serbs, Bosniaks, Croats) during the Bosnian war?
- How do these actions make you think about the actions of [outgroup] (Serbs, Bosniaks, Croats) during the Bosnian war?
- How did this game positively or negatively impact your opinion about other [outgroup]?

Semi-Structured Focus Group Questions

1. The social role of gaming Recurring answers about the social importance of gaming
 - How important is the social aspect of gaming?
 - How important is the social aspect within Bosnia-Herzegovina?
 - What do you think could stimulate more social interactions between Bosnian gamers?

2. Bosnian Game Community and recurring answers about the the Bosnian game community (Counterstrike 1.6)
 - What made the Bosnian game community so alive back then?
 - What do you think of the current status of the Bosnian game community?
 - How do you see the future of the Bosnian game community?

3. Diversity in Games Community Recurring answers about the toxicity of games community
 - What do you think about the diversity of the games community?
 - How inclusive is the games community for women?
 - What do you think about nationalism in the Balkan games community?
 - What do you think about gamers from the Balkan who argue about the Yugoslav War?

4. Inequality in the global games industry and for Bosnia-Herzegovina specifically
 - How would you compare the Bosnian game industry compared to other Western countries?
 - What do you think about Bosnia's access to games, technology and Internet?
 - What does Bosnia-Herzegovina need in order to improve their position in the games industry?

Informed Consent Form

Utrecht University
Faculty of Humanities
Media and Culture Studies Department
Muntstraat 2a
3512 EV Utrecht
Netherlands

Location:.....

Date:.....-.....-.....

Dear participant,

You are being given the opportunity to participate in a research project conducted by Utrecht University. The objective of this study is to research war memory in playing games and Bosnian game culture. The target group of the study are individuals from Bosnia-Herzegovina who like playing games. If you decide to participate in the project, please sign this form. You will be given a copy of this form to keep. If you have any questions at any time during the study, you may contact researcher Stephanie de Smale via her e-mail s.desmale@uu.nl, Bosnian number +387 61 653 807, or Dutch number +31 628 994 994, or contact her supervisor Jolle Demmers via e-mail j.demmers@uu.nl, or telephone +31 302 536 443.

Description of the study

1. This empirical research is executed by Stephanie de Smale as part of the project 'Graduate Programme Games Research', funded by the Netherlands Organisation for Scientific Research. The objective of this study is to research war memory in playing games and Bosnian game culture. The study is being done to learn how individuals in post-conflict societies reflect on and remember their war experience after playing and with other players in game communities. This information can help reconciliation efforts of post-conflict societies.
2. Participation in this research is voluntary. You are invited to participate because you are an individual from Bosnia-Herzegovina and have an interest in playing games. You will be interviewed about your gaming experience, how this experience relates to your own life, and your views on Bosnian game culture.
3. The interview will be recorded with audio. Anonymized data files will be stored in a secure online data repository up to 10 years. The anonymized information will be used

for research by the researcher in this study (de Smale). Other researchers may have limited access to the files on request.

4. If you withdraw from the study, you do not have to state why. Please do inform the researcher about your decision. All data already collected up until that moment will be used for current and future research.

I have been given information about this research study and have had the opportunity to ask questions and to have my questions answered to my satisfaction. I freely give my consent to participate in this research project.

.....

Signature participant

Appendix B: Semi-Structured Focus Group Questions Article 1

Interview Protocol

1. Vision for the game

- Tell me about how you came up for the vision for this war of mine? (and **intent**, i.e. persuasive intent or message)

2. Design process

Participants are asked to draw the development process from their perspective. Participants are free to use all colors and to draw, write, use bubbles, boxes, whatever works.

- What are the key things in their daily development process, who was in the development?
- What other factors affected the design process (perhaps external were part of the process).
- Lets talk about your drawings. Could you please walk me through your drawing and explain it to me?

3. Moral choices

- Discuss game images and what each represents
- Can you walk me through each of the images and what moral event it represents?

4. Merging design and moral choices

- So in the first part we talked about the vision being x, x, x and x. If you were to group these into themes how would you group them?
- What name would you give these groupings?

5. Concluding remarks

- Is there anything I did not ask, that you would like to share?
- Is there anything that surprised you or you did not expect about our discussion?
- Do you have any questions you would like to ask us?

Appendix C: Curriculum Vitae

Stephanie de Smale holds a bachelor in communication (Hogeschool van Arnhem en Nijmegen), a cum laude master degree in new media and digital culture (Utrecht University), and a cum laude master degree in media and performance studies (Utrecht University). In her humanities/computer science PhD research at Utrecht University, which intersects digital media and memory studies, she studied the translation and circulation of war memory in digital popular culture. Stephanie is the founder of *Junctions: Interdisciplinary Graduate Journal of the Humanities*, for which she was editor-in-chief (2015–2017). She was a member of the University Council (2017–2019) at Utrecht University.

Stephanie's work revolves around digital media cultures in relation to issues of security, conflict and governance, with a particular focus on the social and political implications of digital media use. She has conducted fieldwork in Bosnia-Herzegovina and a research stay at Humboldt University in Berlin, Germany. Stephanie has published with Bloomsbury and Amsterdam University Press and in journals such as *Open Library of Humanities*, *Games and Culture*, and *Media, War & Conflict*.

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