

1

Introduction: Studying War and Games

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This volume engages with the nexus between war, games and play from various disciplinary standpoints, bringing together perspectives from game studies, media studies, memory studies, history, sociology, political science, literary theory, and more. The chapters assembled here are inspired by work presented in earlier collections that have addressed similar themes and that still stand as seminal publications in the field – Nina Huntemann and Matthew Thomas Payne’s *Joystick Soldiers* (2010), Gerald Voorhees, Joshua Call and Katie Whitlock’s *Guns, Grenades and Grunts* (2012), and Pat Harrigan and Matthew Kirschenbaum’s *Zones of Control* (2016). To build on these important contributions, our anthology pays particular attention to areas of inquiry that, so far, have not been sufficiently explored. We focus on both digital and analogue games; critically assess the interplay and contingent relations between the military, militarism, players and politics; investigate the potential of war games as media of history and cultural memory; and look at predominantly European titles and themes.

Our inquiries are underpinned by the conviction that games and play matter – that how we represent and playfully re-enact past and present wars has implications for how we see these wars, how we perceive our own role in them, how we remember them – and how we might react to future military engagements. We subscribe to Matthew Thomas Payne’s (2016: 11, 4) view that ‘the act of gaming is always inextricably connected to extant material forces’, and that a ‘complex but co-evolving dialectic’ connects the physical world and virtual realm of play.

The chapters in this volume adopt three distinct but interrelated vantage points. Firstly, attention is directed to connections between militarism and a subject of play who actively negotiates and selectively submits to

what Payne (2016: 14) has termed a ‘ludic war experience’. Secondly, we move on to studies investigating implications of war games for collective commemoration and memory politics. As Adam Chapman, Anna Foka and Jonathan Westin (2017: 360) explain in their introduction to historical game studies as an academic field, it is widely accepted today that games ‘can indeed be, or relate to, history’. Finally, the chapters in the third part of the book interrogate game form from designer- as well as ‘text’-centric perspectives, pointing to formal frames that predispose experiences and practices of play in either hegemonic or critical directions.

Games, War and the Military

There are many compelling reasons to study the relationship between war and games, not the least of which is the military’s own extensive use of videogame technologies as a tool for everything from recruitment, through strategizing, planning and training for combat, to the treatment of injured and traumatized veterans. According to Patrick Crogan (2011: 2–18), current entertainment games are the by-product of military research and development carried out in the US in the early 1960s. Yet of course the military’s interest in games stretches back much further, beyond the nineteenth-century *Kriegsspiel* to the ancient world – extending, as scholars have noted, ‘from Sun Tzu to Xbox’ (Halter 2006), or ‘from gladiators to gigabytes’ (van Creveld 2013). Since the late twentieth century, as videogames have grown into a multi-billion dollar industry, eclipsing even Hollywood box office revenue, the military’s use of games has been virtually synonymous with its use of electronic games and related digital technologies. As Corey Mead (2013: 5–6) observes, the contemporary military is deploying videogames on ‘a broad, institution-wide scale ... using them at every organizational level for a broad array of purposes’.

In this context it is hardly surprising that, for example, when the European arms manufacturer MBDA introduced a new land combat missile system in 2018, one selling-point was that its controls were ‘designed to look and feel like video game controllers, which makes it easy for young soldiers who have grown up playing video games to learn how to use the system and employ it effectively in combat’ (Judson 2018). Similarly, the US military’s new Synthetic Training Environment (STE), planned to be operational by 2025, is envisaged as being ‘like a multiplayer online game’, in which ‘teams of soldiers with goggles and special gloves carry out missions in megacities stretching for miles, filled with thousands of opponents and non-combatants’ (Hambling 2018), and indeed Army planners announced at the outset that they would ‘use the commercial gaming industry to accelerate the development of STE’ (Hames and Roth 2019).

A symbiotic relationship between the armed forces and the games industry has been consolidated since the 1990s. Commercial games and technologies have been taken up and repurposed by the military (*Marine Doom* is a famous early example),¹ or promoted to the military by games companies (as, for instance, Microsoft did with its Kinect device: see Cavalli 2012). Equally, the military, particularly in the US, has invested heavily in applied games technology research, and in purpose-made game development. The establishment, at the turn of the twenty-first century, of the University of Southern California's Institute for Creative Technologies, with a \$45 million grant from the US Army (renewed to the tune of \$100 million in 2004), stands as the most visible institutional embodiment of this close cooperation; while the online recruitment game *America's Army*, development of which began at around the same time, is the emblematic example of how officially funded military projects have both drawn on and fed into popular gaming culture (Allen 2017: 122–5).

Robertson Allen argues convincingly that the 'corporatization of the military and the militarization of corporations' are the 'underlying engines' driving a 'pervasive mobilization of the culture industry and the cognitive capacities of its laborers as vehicles of war' (2017: 161). From this perspective, today's videogame-based 'militainment' (Stahl 2010) is just the latest manifestation of what Herbert Schiller was already referring to in the late 1960s as the 'military-industrial-communications complex' (Schiller 1969: 54)² – and what later scholars have dubbed the 'military-entertainment complex' (Leonard 2004, Andersen 2006), the 'media-military complex' (Andersen and Mirrlees 2014), or the 'military-industrial-media-entertainment network' (Der Derian 2001).

Yet it seems likely that another key driver is the changing character of war itself. The close cooperation between the military and the games industry since the 1990s coincided with a marked change in how Western militaries waged war: beginning from the 'smart missiles' and 'precision munitions' of the 1990–1 Gulf War, through to the 'surgical' drone-strike years of President Barack Obama's tenure, commentators have repeatedly been struck by the resemblance between actual war (at least as it is represented in the media) and its simulation in electronic games (Knightley 2000: 483, Cole et al. 2010, Grayson 2014). Many attempts to capture what is new about contemporary conflict – variously describing it as 'mediatized' (Cottle 2006), 'diffused' (Hoskins and O'Loughlin 2010) or 'digital' (Merrin 2019) – give an important place to the media, alongside the military's own increasingly sophisticated technologies. Much less consideration, however, tends to be given to the political changes that have formed the context in which these wars are waged. James Der Derian, for example, despite the suggestive potential of his concept of 'virtuous war' to account for the high-tech spectacle of 1990s 'humanitarian military intervention', puts technology, rather than politics, at the heart of his analysis, maintaining

that ‘a revolution in networked forms of digital media has transformed the way advanced societies conduct war’, and insisting that information technology is not ‘a neutral tool of human agency’, but rather ‘determines our way of being’ (Der Derian 2003: 447, 449). Such techno-fetishism, and indeed media-centrism, seems too limiting, given the seismic shifts in both international relations and domestic politics since the end of the Cold War.

Socio-political, economic and cultural contexts have a decisive influence on how particular technologies (including digital entertainment technologies), develop, and which of their affordances and potentials are realized at any given moment in time. The extensive use of advanced simulation technologies to create hyper-realist, and at the same time highly ‘selective’ (Pötzsch 2017), representations of battlefields as arenas for heroic competition between equally equipped combatants without unintended consequences appears unsurprising at the current moment in history. In the post-Cold War era, Western elites have found it difficult to construct the sorts of overarching political frameworks through which, in the past, they were able to offer their societies some sense of purpose and direction, and to make sense of war as a meaningful undertaking (Hammond 2007). Sanitized wars fought in the clean and orderly virtual spaces of digital games appear well suited to a moment when Western societies no longer see entirely clearly what they are fighting for or against, but can at least believe in a technological virtuosity, and therefore ethical superiority, which ensures that an ‘undeserved’ death will almost never appear on screen.

Militarism and the Gaming Subject

Many of these themes are taken up in part one of this volume, which focuses on the gaming subject – understood here both in terms of actual players and in terms of the subject-positions offered by game mechanics and narratives. Given the long-standing relationships between the industry and the military indicated above, it is entirely plausible to view military-themed videogames as serving some sort of propaganda function in contemporary popular culture.

Yet this does not necessarily mean that they are ideologically effective or straightforward: such games offer a more complex mode of address, and elicit more varied player responses, than the term ‘propaganda’ might be assumed to imply.

Philip Hammond’s chapter, which considers the ideological meanings of military-themed videogames and their relationship to real-world militarism, suggests that there is a discrepancy between the idea that games are encouraging a militaristic outlook, and the evident uncertainty and disorientation of Western militaries in the post-Cold War era. One clear indication of this, Hammond

notes, is the reaction to Islamic State's propaganda, widely understood as uniquely powerful because it appropriated and repurposed Western popular cultural artefacts, including games such as *Call of Duty* (Infinity Ward 2003) and *Grand Theft Auto* (Rockstar Games 1997). The nervous reaction, and the difficulties that the US and European governments had in constructing a convincing counter-narrative in response, are indicative of an ideological weakness that is only accentuated by the perceived similarities between war and videogames. While war-themed games are often marketed on the basis of their 'authentic' resemblance to actual war, since the 1990s the latter has – as noted above – often been compared to a videogame. In this context, the relationship may help to sell games as authentic and realistic, but it simultaneously highlights the sense that contemporary warfare is in some sense inauthentic.

Hammond observes that arguments about the ideological influence of videogames are underpinned by an assumption, partly inherited from earlier debates about media effects, of players' vulnerability to persuasive propaganda messages. This assumption also informs many critical, anti-war games that purposely disempower the player in various ways, in deliberate contrast to the satisfying fantasy of power and control that war-themed games are thought to offer. Such assumptions not only underestimate player agency, they also tend to misread the sorts of appeal that many contemporary war games are making. As Kevin McSorley argues in his chapter, the cultural and political resonance of war games is not well understood if seen as a straightforward top-down promotion of militaristic values.

Rather, McSorley contends, the videogame is the 'signature medium' of our present era because it addresses and positions players as resilient neoliberal subjects. Taking as his starting point Jesper Juul's (2013: 28) characterization of videogames as 'the singular art form that sets us up for failure and allows us to experience and experiment with failure', McSorley draws out the connections between this understanding of the medium's specificity and the current reconfiguration of political subjectivity in terms of 'resilience'. As a central principle of contemporary governance, resilience-thinking rejects modernist ideas about the human subject and the world in which s/he acts: rather than being amenable to human intervention and control, a complex world presents continuous dangers, demanding resilient subjects who are able to adapt to risk, rather than resisting or seeking to exert control over their circumstances (see further Chandler 2014). Engaging with recent work on affective design and the embodied phenomenology of gameplay, McSorley examines the 'mutually reinforcing resonances' between wargames and 'resilient' subjectivity, across the dimensions of political affect, political agency and the political imaginary.

A different perspective on the relationship between games and politics is offered in the chapter by Emil Lundedal Hammar and Jamie Woodcock. Their contribution examines the political economy of videogames production, and the effect that this has in setting the parameters of how

military-themed games invite consumers to interact with them. Drawing on Berthold Molden's (2016) concept of 'mnemonic hegemony', Hammar and Woodcock trace the structural factors shaping how war and history are represented in, and remembered through videogames. These factors include the relationships of exploitation that underpin the global games industry, the recruitment patterns and labour conditions that shape and discipline its workforce, and the demands of profitability that inform development choices – as well as the close connections between the industry and the military-industrial complex alluded to above. These influences sometimes operate in subtle and perhaps unexpected ways: for instance through companies working with military consultants in designing games and paying arms manufactures for rights to depict weapons; or through what Hammar and Woodcock call the 'baked-in ideological assumptions of videogames technologies', which mean, for example, that graphics software toolsets have been developed in ways that are designed to be useful for representing gunmetal textures. As they argue, the capitalist logic materially structuring the games industry also extends to those outside it, such as academics designing industry-oriented university courses in game design. As Hammar and Woodcock acknowledge, though, while mainstream games can invite hegemonic understandings of war, actual player responses cannot be assumed. Games, like other media texts, they argue (following Stuart Hall 1981: 239), are better understood as arenas for potential resistance as well as the manufacturing of consent.

This is made apparent in Kristine Jørgensen's contribution, which is one of three chapters in this volume analyzing the unusual war-themed game *This War of Mine* (11 bit studios 2014). Unlike more conventional games about conflict, *This War of Mine* puts the player in control of a group of civilians trying to survive in a warzone, and enforces a number of difficult ethical choices. Indeed, it is generally understood as an anti-war game, yet as Jørgensen shows, this does not necessarily mean that players welcome or engage with its perceived message. Her chapter also contributes to wider debates about methodology in games studies, arguing for the importance of incorporating multiple player perspectives rather than relying on the perceptions of a single-player/researcher. Reporting the results from part of her larger research project on *Games and Transgressive Aesthetics*, Jørgensen shows how recruiting even a small number of players as 'co-researchers' can add significant breadth and complexity to our understanding of the game. Variations in individual play-styles and preferences meant that, while players were certainly aware of how *This War of Mine* was intended to work, and perceived the ideas about conflict that it was attempting to communicate, they reacted in quite different ways. An appreciation of the game as engaging and rewarding could sit alongside feelings of discomfort, and these could lead to players feeling manipulated. Others rejected the game as 'ineffective' in communicating an anti-war message, for instance

because it was seen as ‘trying too hard’ or even as becoming ‘unintentionally funny’. In sum, players appear as not slavishly bound by game texts and procedures, but actively negotiate and potentially subvert the meanings intended by designers and production companies.

Playing War, History and Memory

Many of today’s most commercially successful war-themed games play out in what are framed as authentic real-world settings inspired by historical events. Consequently, the role of games in mediating history and cultural memory has become a well-established research area in the discipline of game studies (see for example Chapman 2016, Chapman, Foka, and Westin 2017, Hammar 2017, Kempshall 2015, Kapell and Elliott 2013, Whalen and Taylor 2008). This is a theme that runs throughout the present volume, but it is a particular focus in part two of the book. Given our subject matter of war, this also involves examining how games deal with difficult and sensitive aspects of history, where there is always a risk of being seen as trivializing or inappropriate.

This is broached directly in Adam Chapman’s contribution, which examines how fantasy elements in games can, perhaps counter-intuitively, enable them to tackle serious and contentious historical events. While many games have a Second World War setting, they usually shy away from depicting the Holocaust, effectively suppressing this crucial aspect of the war (Chapman and Linderoth 2015). Games in the war-themed fantasy series *Wolfenstein* (MachineGames 2014, 2015, 2017), however – one of Chapman’s two case studies – explicitly invoke the Holocaust through their themes and imagery, and are able to do so precisely because of the distancing that their status as fantasy entails. Chapman makes an argument about historiography – seeing it as always inherently ‘fictive’, since facts do not speak for themselves, and history has to be told – and about the fantasy genre, which, he contends, should be taken seriously as a site of meaning-making about history. His other case study, of the Nazi zombie mode in the *Call of Duty* series (Treyarch 2008, 2010, 2012, 2015, 2018), exemplifies this. As Chapman argues, the figure of the Nazi zombie, which proliferates and overwhelms the player, expresses contemporary anxieties about the historical process: a sense that it is beyond human agency or control. Indeed, Chapman shows that games are particularly well suited to exploring ideas about historical change, since they concern the interplay between structure, agency, and contingency (no doubt a key reason why military strategizing has long involved gaming).

Somewhat similarly, Piotr Sterczewski’s chapter on Polish historical tabletop games argues that games can be understood as ‘memory devices’

that can work to model, maintain and modify popular understandings of the past. This is a particularly contentious topic in contemporary Poland, where what Sterczewski identifies as a ‘new wave’ of history-themed games is part of a national ‘memory boom’. Historical memory, particularly of the Second World War and the Cold War era, has become highly politicized in recent years, and the (currently ruling) conservative Law and Justice Party has an official commitment to engaging with the ‘politics of history’. Sterczewski returns to Molden’s (2016) concept of mnemonic hegemony discussed in Hammar and Woodcock’s chapter, and supplements it with Ernesto Laclau and Chantal Mouffe’s work on theorizing hegemony and discourse, in order to examine in detail how historical discourses are stabilized, negotiated, and contested through games. He does this through comparative case studies of three games. *First to Fight* (Kwapiński and Sieńko 2014) positions a unified and heroic Polish nation as part of the Western war effort – and omits the country’s significant involvement in fighting on the Eastern Front alongside the Soviet Union. Similarly, *Outcast Heroes* (Kwapiński and Sieńko 2013) recuperates the cultural memory of post-war Polish anti-communist guerrilla groups, the history of which had been neglected during the Cold War era. In contrast, *Revolution 1905* (Lipski and Radojčić 2016) deals with the Polish experience of workers’ revolt against imperial Russian rule, offering a counter perspective on Polish history that is usually ignored in the genre. The example shows the potential of games to contest hegemonic versions of the national past and their mobilization in current political debates.

The ways in which historical war-themed games can filter or distort popular understanding of the past is also the focus of Chris Kempshall’s chapter, which is concerned with the depiction of the First World War in videogames, paying particular attention to *Battlefield 1* (EA DICE 2016). There is a hierarchy of ‘principal nations’ in First World War games, and tacit conventions about which nations can be represented and how. Kempshall explores the various factors that lead to this, including how game developers understand the preferences of their target markets: in *Battlefield 1* the US appears to play a far more central role in the conflict than France, for example. In other instances, it is an orientation toward national history that seems to shape the version of the past that is offered, as in the BBC’s educational game for schools, *Trench Warfare* (BBC 2001), which portrays the war as having been essentially between the British and the Germans. A preference for national history means, he argues, that representations of the war often tend to downplay or ignore the importance of the conflict’s transnational character, involving alliances rather than single nations. Kempshall also draws out how later history determines the representation of earlier events, and in particular shows how the Second World War casts a shadow over understandings of the earlier conflict, so that the Germany of the First World War, in particular, is often seen through the filter of the later Nazi era.

The tensions in war-themed games between history and contemporary demands of commercial success and entertainment value is approached from a different angle in Stephanie de Smale's chapter, which looks at the phenomenon of Let's Players. These 'micro-celebrities' can attract a huge following (and attendant income) on YouTube and other platforms for their walkthroughs of and commentaries on videogames. But in order to maximize their chances of achieving such success, Let's Players typically have to attend to the platform's market logic, creating a distinctive personal 'brand' within which gameplay content can be performed and framed in ways that increase its chances of attracting and retaining a following. Complementing the discussion in Jørgensen's chapter, de Smale analyses the ways that Let's Players mediate *This War of Mine*, and, in turn, the cultural memory of the Bosnian War from which the game draws inspiration. She argues that while games can be significant carriers of cultural memory, the circulation of memory about historical conflicts within the commercialized networks of digital popular culture can produce some incongruous results. In the case of *This War of Mine*, the game has many references to the events and iconography of the Bosnian conflict, but Let's Players not only often miss them, they effectively destabilize or disrupt the intended design of the game since they are appropriating it for the purposes of online performance.

Wargames/Peacegames

As we have indicated, several chapters raise questions about how war-themed games work, about the ways that an antagonistic (as opposed to agonistic) mode of thinking about conflict is designed in and enacted in gameplay, and about how things might be done differently. These issues are the main focus of part three, which opens with Dimitra Nikolaidou's chapter on the historical development of roleplaying games (RPGs) from templates derived from early war simulation games. Tracing the emergence of RPGs, from the creation of *Dungeons and Dragons* in the mid-1970s through to today's Massive Multiplayer Online RolePlaying Games, she examines narratives, rules, and artwork to show how RPGs continue a legacy of military wargaming in the importance they assign to combat and violent struggle. Strikingly, this is so despite the stated intentions and values of the games' creators, particularly in the case of tabletop RPGs. Gary Gygax, for instance, the creator of *Dungeons and Dragons*, was interested in wargaming as a hobby but was avowedly anti-war; and other influential RPGs – *World of Darkness* and *GURPS* (Generic Universal RolePlaying System) – were intended not to prioritize combat. As Nikolaidou observes, *World of Darkness* was explicitly offered as an alternative to the combat-centric gameplay of *Dungeons and Dragons*, while *GURPS* was a 'universal'

system precisely because it was able to work for any game setting. Digital RPGs, in turn, have often tended to reprise themes and narratives from earlier tabletop games, so that combat has become the ‘lynchpin of digital roleplaying narratives’ – particularly in those that have achieved commercial success.

The following two chapters explore the relationships between games and war from a practice-based perspective. Vít Šisler’s chapter reflects his experience not only as a games scholar, but also as lead designer of the award-winning game *Attentat 1942* (Charles University, Czech Academy of Sciences 2017).³ The game puts the player in the role of the grandchild (in the present) of the main character (in the past) in a story about the assassination of Reinhard Heydrich, the high-ranking Nazi and Gestapo chief who played a key role in the Holocaust and also governed the occupied Czech territories. The game progresses through dialogue trees that reveal the often contradictory stories of fictionalized witnesses, thereby preventing the emergence of a univocal master narrative and sensitizing players to the contingency of the past. This indirect approach allows for a complex and serious game that interrogates the nature of historical memory by connecting personal stories with larger historical narratives about a contested and controversial episode in the Czech national past. In fact, these historical debates were an important aspect of the process of game development, since the team included historians with different views about what events should be represented and how (see further Šisler 2016). Šisler explains the process through which the developers sought to negotiate such controversies, and to work with the constraints and affordances of the videogame medium, formulating a number of overall design principles to enable them to construct an engaging multi-perspectival narrative game grounded in historical research.

While *Attentat 1942* challenges the conventions of mainstream war-themed games in many ways, Joakim Arnøy’s chapter describes a ‘game-based learning exercise’, *Mission Z: One Last Chance*, that exploits participants’ expectations of conventional combat-centric games in order to provoke critical reflection on the modes of thinking that typically characterize real-world conflict situations. *Mission Z* divides participants into teams representing the vanguard of their nations, sent to settle on a new planet. Each team has a separate mission, not known to the others, but although all missions can be collaboratively achieved and there are no instructions to compete, experience has shown that teams invariably do engage in competition and interpret the scenario as a zero-sum game. They are prompted to do so by various mechanisms, such as time limits, information overload and music, within an overall design that deliberately encourages a ludic attitude. Arnøy writes, like Šisler, from the experience of developing a game in an educational context – in this case, the non-formal education approach of European youth work. The objective with *Mission Z*

is to encourage participants to reflect critically on common ways of thinking about conflict, and about the various influences – including games – that might shape their thought and behaviour in real life, even to the extent of pressuring them to act against their own values.

The critical negotiation of wargame conventions is also at the centre of Holger Pötzsch's chapter, which examines two war-themed titles that set out to challenge our expectations of the genre. Pötzsch returns to *This War of Mine* (including the game's 2016 expansion pack *The Little Ones* (11 bit studios 2016), which features children as non-playable characters); and also examines *Spec Ops: The Line* (Yager Development 2012), a title from a German developer, that gradually reverses the roles of hero and villain and disrupts immersion by directly addressing players as political subjects. He investigates and explains how formal game features systematically invite particular understandings and play practices – including critical ones. Drawing on Viktor Shklovsky's concept of *ostranenie*, Bertolt Brecht's *V-effect*, and Augusto Boal's notion of the *spect-actor*, all of which aim to theorize the uses of estrangement and distancing in works of art, Pötzsch shows that each of their frameworks foregrounds different concerns before applying them to game analysis. While Shklovsky's term stays within the compass of formalist aesthetics and explains how the games under scrutiny de-familiarize the genre's habitualized ways of seeing war, Brecht's concept enables an understanding of what happens when game form directly addresses players as not only ludic but also political subjects, and tries to foster engagement and reflection beyond the act of play. Finally, Boal's approach is used to understand how games can reverse authorial dynamics by providing players with an active role, and can enable interventions not only through potentially subversive acts of play and counter-play, but also through code-based practices such as modding or hacking. Cautioning against using such theories to simply reinstate the traditional opposition between high art and low culture, Pötzsch argues that we should instead draw a more careful distinction between the hegemonic and counter-hegemonic meaning potentials of games – potentials that do not determine players but always depend on specific contexts of reception and play to be either actualized or subverted.

Finally, the volume concludes with an afterword by Matthew Thomas Payne. Payne's work has been a key source of inspiration for us as coordinators of the War/Game research network from which this book has emerged, and he has been a 'critical friend' of the project, so we are delighted to be able to include him as a contributor. Taking its cue from William S. Burroughs's characterization of contemporary reality as a 'war universe', Payne's chapter interrogates possible implications of the war/game nexus, offering some thoughtful reflections and provocations on the experience of 'militarized play' and the challenge of imagining something different.

Notes

- 1 The game was a mod of *Doom II* (id Software 1994). See further Riddell 1997.
- 2 Schiller was alluding to President Dwight D. Eisenhower's famous farewell speech from 1961, in which he coined the term 'military-industrial complex' and warned against the 'acquisition of unwarranted influence' by this conglomerate of 'misplaced power'. The full speech is available at: www.eisenhower.archives.gov/all_about_ike/speeches/farewell_address.pdf (accessed 21 March 2019).
- 3 *Attentat 1942* was Czech Game of the Year 2017, and in 2018 won Most Amazing Game at the A MAZE festival in Germany, Best Learning Game at Games for Change in the US, and the UK Independent Game Developers' Association's Educational Game award, as well as being nominated for Excellence in Narrative the Independent Games Festival in the US and achieving second place at the Game Development World Championship in Finland in the same year.

References

- Allen, R. (2017) *America's Digital Army: Games at Work and War*. Lincoln, NE: University of Nebraska Press.
- Andersen, A. (2006) *A Century of Media, A Century of War*. New York, NY: Peter Lang.
- Andersen, R. and T. Mirrlees (2014) Introduction: Media, Technology, and the Culture of Militarism: Watching, Playing and Resisting the War Society, *Democratic Communiqué*, 26(2): 1–21.
- Cavalli, E. (2012) Microsoft Promotes Kinect as a Tool for the Military, *Digital Trends*, 18 December, www.digitaltrends.com/cool-tech/microsoft-promotes-kinect-as-a-tool-for-the-military/ (accessed 21 March 2019).
- Chandler, D. (2014) *Resilience: The Governance of Complexity*. London: Routledge.
- Chapman, A. (2016) *Digital Games as History: How Videogames Represent the Past and Offer Access to Historical Practice*. New York, NY: Routledge.
- Chapman, A., A. Foka, and J. Westin (2017) Introduction: What Is Historical Game Studies? *Rethinking History*, 21(3): 358–71.
- Chapman, A. and J. Linderoth (2015) Exploring the Limits of Play: A Case Study of Representations of Nazism in Games, in T. E. Mortensen, J. Linderoth and A. M. L. Brown (eds) *The Dark Side of Game Play: Controversial Issues in Playful Environments*. London: Routledge.
- Cole, C., M. Dobbins, and A. Hailwood (2010) *Convenient Killing: Armed Drones and the 'Playstation' Mentality*. Oxford: Fellowship of Reconciliation, <https://dronewarsuk.files.wordpress.com/2010/10/conv-killing-final.pdf> (accessed 21 March 2019).
- Cottle, S. (2006) *Mediatized Conflict*. Maidenhead: Open University Press.

- Crogan, P. (2011) *Gameplay Mode: War, Simulation and Technoculture*. Minneapolis, MN: University of Minnesota Press.
- Der Derian, J. (2001) *Virtuous War: Mapping the Military-Industrial-Media-Entertainment Network*. Boulder, CO: Westview Press.
- Der Derian, J. (2003) The Question of Information Technology in International Relations, *Millennium: Journal of International Studies*, 32(3); 441–56.
- Grayson, K. (2014) Drones and Video Games, *E-International Relations*, 25 February, www.e-ir.info/2014/02/25/drones-and-video-games/ (accessed 21 March 2019).
- Hall, S. (1981) Notes on Deconstructing ‘The Popular’, in R. Samuel (ed.) *People’s History and Socialist Theory*. London: Routledge and Kegan Paul.
- Halter, E. (2006) *From Sun Tzu to Xbox: War and Video Games*. New York, NY: Thunder’s Mouth Press.
- Hambling, D. (2018) Frontline Tech: Military Simulators – Expensive Video Games or the Future of Training? *Forces Network*, 11 December, www.forces.net/news/frontline-tech-military-simulators-expensive-video-games-or-future-training (accessed 21 March 2019).
- Hames, J. M. and M. C. Roth (2019) Virtual Battlefield Represents Future of Training, *US Army*, 14 January, www.army.mil/article/216068/training_for_the_future (accessed 21 March 2019).
- Hammar, E. L. (2017) Counter-Hegemonic Commemorative Play: Marginalized Pasts and the Politics of Memory in the Digital Game *Assassin’s Creed: Freedom Cry*, *Rethinking History*, 21(3): 372–95.
- Hammond, P. (2007) *Media, War and Postmodernity*. London: Routledge.
- Harrigan, P. and M. G. Kirschenbaum, eds. (2016) *Zones of Control: Perspectives on Wargaming*. Cambridge, MA: MIT Press.
- Huntemann, N. B. and M. T. Payne, eds (2010) *Joystick Soldiers: The Politics of Play in Military Video Games*. London: Routledge.
- Hoskins, A. And B. O’Loughlin (2010) *War And Media: The Emergence Of Diffused War*. Cambridge: Polity.
- Judson, J. (2018) MBDA Pitches New Land Combat Missile System to Middle East Customers, *Defense News*, 10 May, www.defensenews.com/digital-show-dailies/sofex/2018/05/10/mbda-pitches-new-land-combat-missile-system-to-middle-east-customers/ (accessed 21 March 2019).
- Juul, J. (2013) *The Art of Failure: An Essay on the Pain of Playing Video Games*. Cambridge, MA: MIT Press.
- Kapell, M. W. and A. B. R. Elliott, eds (2013) *Playing with the Past: Digital Games and the Simulation of History*. London: Bloomsbury.
- Kempshall, C. (2015) *The First World War in Computer Games*. Basingstoke: Palgrave.
- Knightley, P. (2000) *The First Casualty: The War Correspondent as Hero and Myth-Maker from the Crimea to Kosovo* (revised edition). London: Prion Books.
- Leonard, D. (2004) Unsettling the Military Entertainment Complex: Video Games and a Pedagogy of Peace, *SIMILE: Studies In Media & Information Literacy Education*, 4(4), DOI: 10.3138/sim.4.4.004.
- Mead, C. (2013) *War Play: Video Games and the Future of Armed Conflict*. New York, NY: Houghton Mifflin Harcourt.
- Merrin, W. (2019) *Digital War: A Critical Introduction*. London: Routledge.

- Molden, B. (2016) Resistant Pasts Versus Mnemonic Hegemony: On the Power Relations of Collective Memory, *Memory Studies*, 9(2): 125–42.
- Payne, M. T. (2016) *Playing War: Military Video Games after 9/11*. New York, NY: New York University Press.
- Pötzsch, H. (2017) Selective Realism: Filtering Experiences of War and Violence in First- and Third-Person Shooters, *Games & Culture*, 12(2): 156–78.
- Riddell, R. (1997) Doom Goes to War, *Wired*, 1 April, www.wired.com/1997/04/ff-doom/ (accessed 21 March 2019).
- Schiller, H. I. (1969) *Mass Communication and American Empire*. Boston, MA: Beacon Press.
- Šisler, V. (2016) Contested Memories of War in *Czechoslovakia 38–89: Assassination: Designing a Serious Game on Contemporary History*, *Game Studies*, 16(2), <http://gamestudies.org/1602/articles/sisler> (accessed 21 March 2019).
- Stahl, R. (2010) *Militainment, Inc.: War, Media, and Popular Culture*. London: Routledge.
- van Creveld, M. (2013) *Wargames: From Gladiators to Gigabytes*. Cambridge: Cambridge University Press.
- Voorhees, G. A., J. Call and K. Whitlock, eds (2012) *Guns, Grenades and Grunts: First-Person Shooter Games*. New York, NY: Bloomsbury.
- Whalen, Z. and L. N. Taylor, eds (2008) *Playing the Past: History and Nostalgia in Video Games*. Nashville, TN: Vanderbilt University Press.

Ludography

- 11 bit studios (2014) *This War of Mine*. 11 bit studios.
- 11 bit studios (2016) *This War of Mine: The Little Ones*. 11 bit studios.
- BBC (2001) *Trench Warfare*. British Broadcasting Corporation.
- Charles University, Czech Academy of Sciences (2017) *Attentat 1942*. Charles University, Czech Academy of Sciences.
- EA DICE (2016) *Battlefield 1*. Electronic Arts.
- id Software (1994) *Doom II*. GT Interactive.
- Infinity Ward (2003) *Call of Duty*. Activision.
- Kwapiński, A. and M. Sieńko (2013) *Bohaterowie Wyklęci (Outcast Heroes)*. Fundacja Niepodległości.
- Kwapiński, A. and M. Sieńko (2014) *First to Fight*. Wydawnictwo Fabryka Gier Historycznych, Fundacja Niepodległości.
- Lipksi, P and V. Radojičić (2016) *Rewolucja 1905 (Revolution 1905)*. Wydawnictwo Krytyki Politycznej.
- MachineGames (2014) *Wolfenstein: The New Order*. Bethesda Softworks.
- MachineGames (2015) *Wolfenstein: The Old Blood*. Bethesda Softworks.
- MachineGames (2017) *Wolfenstein II: The New Colossus*. Bethesda Softworks.
- Rockstar Games (1997) *Grand Theft Auto*. Rockstar Games.
- Treyarch (2008, 2010, 2012, 2015, 2018) *Call of Duty Zombies Mode* [series]. Activision.
- US Army (2002) *America's Army*. US Army.
- Yager Development (2012) *Spec Ops: The Line*. 2K Games.