

CONSUMING CONFLICT

Militainment, Desire and Virtual Reality in Contemporary Art

Guy Lobwein

Bachelor of Fine Arts (Honours)

Submitted in fulfillment of the requirements for the degree of

Master of Philosophy

School of Creative Practice

Creative Industries Faculty

Queensland University of Technology

2020

Keywords

Militainment, Desire, Auto-ethnography, Virtual Reality, Contemporary Art

Abstract

This practice-led research project uses *virtual reality* (VR) technology through a contemporary art practice to creatively and critically investigate my desire to engage with military-themed entertainment (*militainment*). Although VR technology has been present in contemporary art for decades, its relationship to discourses of militainment and histories of armed conflict remains under-explored in a creative practice research context. This project utilises experimental and *auto-ethnographic* methods to explore my own affective relationship with this militainment; combining my instinctive habits of art-making with the technical processes of VR development, to generate new creative responses to these discourses. By deriving and reinterpreting content from military-themed films and video games, the research ultimately creates VR installations that provide audiences new perspectives on the pervasive social influence of military screen-culture.

The outcomes of this practice-led research are framed in relation to theoretical discussions of desire, spectacularity, *détournement*, the neo-baroque, and VR; exploring how the intersection of these varied discourses reflect on screen representations of military combat and its consumption. As research led by a contemporary art practice, the project crucially considers the practices of other contemporary artists as key to its explication. These preceding practices include Joseph DeLappe, Baden Pailthorpe and Harun Farocki. Through a discussion of these practices and theoretical perspectives, the methodology and artworks formed throughout this project creatively investigate my position as an artist and consumer within the military-entertainment complex. The project consists of a body of artworks (60%) which form the creative and critical content of the research, and reflective exegetical component (40%) that contextualises and analyses the creative outputs of the practice.

Table of Contents

Abstract.....	3
Table of Contents.....	4
List of Figures.....	5
Supplementary Material.....	6
Statement of Original Authorship.....	7
Acknowledgements.....	8
Introduction.....	9
Chapter 1.....	13
Methodology.....	13
Practice-led research.....	13
Auto-ethnography.....	15
Interpretive Paradigm.....	16
Debord and Détournement.....	16
Jouissance, the Mirror Stage and the Ego.....	19
Chapter 2.....	22
Contextual Review.....	22
Militainment in Contemporary Society.....	22
Joseph DeLappe.....	27
Consequence, Drill and Indoctrination.....	29
Baden Pailthorpe.....	32
Computer Game and Neo-Baroque Aesthetics of the Mixed-Space.....	35
Harun Farocki.....	39
Chapter 3.....	41
Creative Works.....	41
Battle at Gallipoli and Militainment-Me.....	41
Karelian International Art Residency and VR in Digital Cultural Heritage.....	46
Virtual Karelia.....	52
Stolen Valour.....	55
Patton.....	61
Mission Accomplished.....	66
Installation and Exhibition.....	70
Conclusion.....	73
Glossary.....	76
Reference List.....	78
Bibliography.....	81

List of Figures

- Figure 1:* Lobwein, Guy. (2019) *Patton* [Virtual reality installation, Oculus Rift headset]. Interior render.
- Figure 2:* Coppola, F. North, E (Writers). Schaffner, F. J. (Director). McCarthy, F. (Producer). (1970). *Patton* [Motion picture]. United States: 20th Century Fox.
- Figure 3:* Electronic Arts. (2019). *Bad Company 2* [In-game screenshot]. Retrieved from <https://www.battlefield.com/games/battlefield-bad-company-2>
- Figure 4:* Sega. (1994). *Desert Tank* [Sega model 2]. Computer Game, 3D animation.
- Figure 5:* Siegismund, F. (2009) *For the new ES2 system there is a suitable training course in the basic training of America's Army 3* [Für das neue ES2-System gibt es einen passenden Trainingskurs in der Grundausbildung von America's Army 3]. America's Army 3 im Test - You're in the Army now... again. Retrieved from <https://www.gamestar.de/artikel/americas-army-3-im-test-youre-in-the-army-now-again,1957119.html>
- Figure 6:* DeLappe, J. (2006-2011). *'dead-in-iraq'* [Multi-channel video, game based performative intervention, 1:2 Col.].
- Figure 7:* Pailthorpe, B. (2014). *MQ-9 Reaper I* [3D animation, digital video installation]. Screen Render.
- Figure 8:* Farocki, H. (2009-2010). *Serious Games I-IV* [Series of four video installations]. New York: MOMA. Photograph by Muzikar, J. Retrieved from <https://www.moma.org/collection/works/143767>
- Figure 9:* Lobwein, Guy. (2018) *Battle at Gallipoli* [Pen and ink on paper, digital colouring]. Detail.
- Figure 10:* Lobwein, Guy. (2018) *Militainment-Me* [Virtual reality installation, Oculus Rift headset]. Interior render.
- Figure 11:* Lobwein, Guy. (2018) *A Walk to Jones Park* [Virtual reality installation, Oculus Rift headset]. Melbourne, VIC: RMIT Gallery.
- Figure 12:* Lobwein, Guy. (2018) *Militainment-Me* [Virtual reality installation, Oculus Rift headset]. Interior render.
- Figure 13:* Lobwein, Guy (2018). Vartiolampi Historical Site. [Photograph].
- Figure 14:* Lobwein, Guy (2018). *Izba in construction* [Pen on paper].
- Figure 15:* Lobwein, Guy (2018). *Izba* [screen-capture, 3D model].
- Figure 16:* Lobwein, Guy. (2018) *Virtual Karelia* [Virtual reality experience, Oculus Rift headset]. Interior.
- Figure 17:* Sachs, Tom. (2003) *Nutsy's* [multi-medium interactive installation, cardboard, Mini-Z racers]. Berlin: Deutsche Guggenheim.

- Figure 18*: Lobwein, Guy. (2018) *Virtual Karelia* [Exhibition, multi-media installation]. Brisbane, Qld: QUT Frank Moran Gallery.
- Figure 19*: Lobwein, Guy. (2018) *Stolen Valour II* [HD video, 3D animation, infinite loop]. Brisbane, Qld: QUT Frank Moran Gallery.
- Figure 20*: Rosenthal, J. (1945). *Raising the Flag on Iwo Jima*. the Associated Press. Retrieved from https://en.wikipedia.org/wiki/Raising_the_Flag_on_Iwo_Jima.
- Figure 21*: Lobwein, Guy. (2018) *Stolen Valour I* [HD video, 3D animation, infinite loop]. Brisbane, Qld: QUT Frank Moran Gallery.
- Figure 22*: Garrarufa. (2010). *Minas_Tirith_2.21_fc2map* [multiplayer map]. Retrieved from <https://www.moddb.com/addons/minas-tirith-far-cry-2>
- Figure 23*: Lobwein, Guy. (2019). *Patton* [Virtual reality installation, Oculus Rift headset]. Interior render.
- Figure 24*: Associated Press. (2003). *President W. Bush declared an end of major combat in Iraq as he speaks aboard the aircraft carrier USS Abraham Lincoln off the California coast on May 2, 2003*. Retrieved from <https://www.bostonglobe.com/news/nation/2018/04/14/bush-was-haunted-his-own-mission-accomplished/E73SdlkXxBfUGsbyXv7ISI/story.html>
- Figure 25*: Lobwein, Guy. (2019). *Mission Accomplished* [Virtual reality installation, Oculus Rift headset]. Interior render.
- Figure 26*: Lobwein, Guy. (2019). *Stolen Valour I-III* [Three-channel installation, HD video, infinite loop]. Brisbane: Metro Arts.
- Figure 27*: Lobwein, Guy. (2019). *Patton*. [Virtual reality installation, Oculus Rift headset]. Installation view. Brisbane: Metro Arts.

Supplementary Material

The ePrint version of this exegesis does not include the supplementary material. A USB device with the selected works is included with the printed version of this exegesis or can be requested from the author. These selected works can also be found at www.guylobwein.com.

Works discussed in exegesis:

Virtual Karelia, 2018.

Virtual reality experience, Oculus Rift headset. Brisbane, Metro Arts.

Stolen Valour, I-III, 2019.

Three-channel installation, HD video, infinite loop. Brisbane, Metro Arts.

Mission Accomplished, 2019.

Virtual reality installation, Oculus Rift headset. Brisbane, Metro Arts.

Patton, 2019.

Virtual reality installation, Oculus Rift headset. Brisbane, Metro Arts.

Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature:

QUT Verified Signature

Date:

10/02/2020

Acknowledgements

This research project could not have been completed without the support, time and patience of a number of people.

First, I thank my supervisors, Dr Daniel McKewen (principle) and Charles Robb (associate), for providing guidance and ongoing support for my emerging practice. Thank you for your combined wisdom and experience, as without it, this project would not have been possible. You both have helped me personally mature as an artist, and as a researcher. My gratitude cannot be expressed enough.

To my immediate family, Mark, Debbie and Jemma, thank you all for continuously supporting my practice. Without your encouragement, I would never have dared to try.

To the numerous support staff at QUT, thank you for your generous support and assistance. As well, to the staff of the Karelian International Art Residency, thank you for providing such a rewarding and meaningful experience. My thanks go to, but are not limited to, Prof Andrew McNamara, Dr Mark Pennings, Dr Rachael Haynes, Dr Courtney Pedersen, Jessica Carmody, Aden Sargeant, Ian Copson, Asa Broomhall, Trendt Boe, Daniel Nel, David Pyle, Scott Klupfel, Gavin Sade, Leonie Chinn, Varavara Feklistova and Irina Spazheva.

Finally, to my friends and housemates. Without your spirit, assistance and constant antics, I could have never completed what I set out to accomplish. Thank you all for keeping my morale so high.

Introduction

The consumption of military-themed entertainment (*militainment*¹), such as war and conflict-based films, literature and games, along with my constant habit of drawing, has always absorbed a large part of my recreational time. As I have developed as a contemporary artist, my practice has subsequently come to explore motifs of combat in history. With the more recent proliferation of consumer-grade *virtual reality* (VR) technology, my practice has been afforded new opportunities to affectively respond to these representations of conflict and has prompted me to question why I watch, play and am entertained by recreations of such horrific experiences (Klein, 2004). As Grau discusses in *Virtual Art: From Illusion to Immersion*, VR technology has been used in creative practices for decades, yet there has been little practice-led research that specifically examines and intersects the relationships between contemporary art, VR, its history as a militaristic technology, neo-baroque spatiality and a desire to consume this militainment (2003). This is informed by significant research by cultural theorists such as Roger Stahl and James Der Derian, who link contemporary entertainment to the military-industrial complex (2006; 2009). Through examining and experimenting with VR in my art practice, this project attempts to creatively respond to, and critically interrupt my own desire to consume militainment; in turn generating new creative spaces of reflection pertaining to our collective perspectives of conflict past and present.

These creative responses to representations of conflict ultimately stem from my own underlying internal paradox; that I am entertained by war, but I simultaneously understand its repercussions as immoral, brutal, and inhumane – the very antithesis of entertaining (Hazell and Williams, 2012). While I began to become aware of this paradoxical relationship as part of my Honours research, this idea has largely remained in the background of my understanding of my creative practice. As a young artist, I always aspired to an idea of practice similar to what I saw in the Modernist tradition of the artists I admired. Expressionist artists such as Otto Dix, George Grosz and Ernst Kirchner, and even contemporary Australian practitioners like George Gittoes had, for my younger self, defined what a body of artwork should resemble when focussed on war and conflict. However, these artists all have first-hand experience of physical places of conflict and military operations; something I have no experience of (Cork, 1994). This vast difference of

¹ Militainment as defined by Roger Stahl in “Have You Played the War on Terror?” *Critical Studies in Media Communication*, 23(2), 112-130.

experience, combined with my internal paradox about conflict-as-entertainment begs the question: how and why do I create artworks about war when my only experience of combat is drawn from militainment?

As mentioned above, this project stems from my previous Honours research into how representations of conflict can be creatively investigated within art practice. At that stage of my research, this kind of exploration into the historical conflicts of other cultures, meant I considered my research methodology as a largely *ethnographic*² exercise (Rutten, 2016, pp. 296). However, in this Masters project, given the above discussion of my own contradictory experience of militainment, I now see the need for my research to adopt an *auto-ethnographic*³ methodology (Holman Jones, Adams, and Ellis, 2013). This shift in my thinking has marked a crucial change in how I consider my practice, shifting from the Modernist approach to which I aspired, to a more contemporary approach to practice that allows space for contradiction. Through auto-ethnography I have discovered new ways of prompting questions that are not only more relevant to the context of contemporary conflict, but that critically respond to the instinctual consumption that had always been fundamental to my art-making.

Unlike my previous ethnographic approach to examining histories of conflict, what auto-ethnography affords me is a critical position from which I can examine my obsession with the content that often glamorises war – what Roger Stahl designates as militainment (2006). From militaristic video games to war-themed Hollywood blockbusters, I have always devoured depictions of conflict, but they have always remained behind the experientially-comforting barrier of a flat screen. However, my position within this context is not unique, and as theorists including Peter Mantello have pointed out, there is an entwinement of late capitalism and military-complexes which make young men the predominate targets for militainment advertising (2017). This is further amplified by the ANZAC legends discussed by historians including Joan Beaumont, that I feel have been embedded into my own Australian identity through the relentless stories, marches and commemorations that I was taught to embrace from an early age (2013). Due

² Ethnography is a qualitative methodology that studies culture similar to anthropology: Rutten, K. (2016). *Art, ethnography and practice-led research*. *Critical Arts*, 30(3), pp. 295–306.

³ Auto-ethnography is derived from ethnography as it uses a qualitative research method but instead looks at the self to create cultural understanding: Holman Jones, S., Adams, T., and Ellis, C. (2013). *Handbook of auto-ethnography*, pp. 10.

to this, my consumption of this militainment, combined with my already deep fascination with stories of combat from written war histories, romanticised and glorified war, remained uncontaminated from the actual physical horrors of experiences of conflict. But, in some recognition of the morally paradoxical nature of this consumption, I was also constantly imagining the scenarios I saw, and even more crucially, desired to be a part of the experiences depicted to understand how I would respond to conflict.

For this reason, I recognised that VR, recently commercialised after 40 years of development, offered a key opportunity to experientially respond to these questions (Burdea and Coiffet, 2003). VR is unique in that it offers my practice a medium to re-enact military violence to an immersive degree that was previously unavailable to me. Further, as a contemporary artist, VR is a medium through which I can creatively and critically explore this paradoxical desire. As Carola Moujan argues, through the digital mimicry of sight, sound, and space, as well as its combination of digital images and physical sensory presence, VR can act as a mediating *in-between-space* (Moujan, 2011). My use of VR operates at an intersection, where my creative interrogation of appropriated 2D-militainment images can be critically experienced through digital worlds that utilise self-portraiture and video game aesthetics. In this way, my practice-led research utilises the medium of VR effectively as an expression of an auto-ethnographic methodology. It allows me to address the moral paradox that I now see populated my previous artwork by literally creating and then occupying a virtual recreation of spaces of conflict. It also makes broader connections to the spectacle of combat which occupies a similarly contested moral space within contemporary society (Robinson, 2012). This idea of intersecting spaces, both virtual, physical and conceptual is something that will be discussed further below.

In summary, this contradiction between militainment's virtual space (pop cultural representations of conflict) and real spaces of combat (actual lived-experiences of conflict) is a tension that has recurred throughout my practice and is central to this project. In support of my creative examination of this question, the project also considers various theoretical intersections that exist between militainment and VR's ability to transform 2D images into 3D traversable space in order to contextually understand my position as artist and consumer within these differently conflicted spaces (Ioannides, Magnenat-Thalmann and Papagiannakis, 2017). Practically, the project has produced a body of artworks that connects the formal and experiential motifs that recur in these

spaces in relation to the surrounding artistic and theoretical discourses I will discuss further below. The exegesis provides further examination of these connections which have been formed throughout this practice-led research. It reflects on and documents the artworks to situate my practice within a framework that contextualises its outcomes (Barret and Bolt, 2007). The document begins with an overview of the theoretical and artistic territory relevant to these ideas, both in Chapter One's discussion of my interpretive paradigms as well as Chapter Two's Contextual Review. Chapter Three reflects on and analyses the creative outcomes of the practice before the project's discussion is concluded. While the exegesis is necessarily structured in a linear fashion, this does not reflect the creative practice's more symbiotic way of operating, which is a cyclical and reflexive process. Here, few distinctions between conceptual, formal, and contextual developments of the practice are made 'in the moment' and are instead understood in reflective modes such as the preparation of this document. My understanding of this reflexive process is in-line with the notion of practice-led research methodology, in which the development of the creative outcomes can be understood in reference to the theoretical knowledge that underpins the practice (Barret and Bolt, 2007). Therefore, the details of this methodology will be discussed first in the below discussion.

Chapter 1

Methodology

The research methodology of this project can be broken into two parts; the *practice-led methodology* and the *interpretive paradigm*. The practice-led methodology defines the processes, perspectives and methods of making, while the interpretive paradigm refers to the project's overarching conceptual theories and creative fields. Importantly, the two parts inform each other to build an overarching theoretical framework through which the practice can be understood (Gray, 2004). I will discuss first the practice-led methodology in relation to auto-ethnography and then define the conceptual fields that inform these processes.

Practice-led research

As processes in the creative industries often disconnect with other traditional quantitative models of research, justifying the instinctual hunches of studio practice as research is done through qualitative methodologies (Barret and Bolt 2007, p. 36). Outlined by academics such as Carole Gray, Estelle Barrett and Barbara Bolt, a 'practice-led' methodology is designed to combat this disconnection through emphasising enquiry, response and reflection as a mode of critical creative research (2004; 2007, p 37). The researcher utilising this methodology focuses on experimentation through creative practice in which the outcomes are not only the work as product, but also the "...understanding of both studio enquiry *and* its outcomes as process" (Barrett and Bolt, 2007, p. 135). Unlike many traditional methodologies, artistic practice investigates emotional and subjective themes that rely heavily on the author's internal perspectives, as the artist takes the role of "...practitioner-researcher" (Gray, 2004, p. 21). I consider this critical to exploring my paradoxical relationship with conflict, as well as indicative of the processes and methods with which I choose to interrogate my consumption of militainment.

Through creatively investigating militainment through contemporary art practice, the data of this research project includes the processes and methods of investigation. As Barbara Bolt argues, the knowledge a project produces are not necessarily only the artwork outcome as data, but also the "...materials, methods, tools and ideas of practice" (Barret and Bolt, 2007 p. 31). This is

reinforced by Roger Dean and Hazel Smith in *Practice-led Research, Research-led Practice in the Creative Arts* (2009), who state,

[i]n using the term practice-led research, we [as editors] are referring both to the work of art as form of research and to the creation of the work as generating research insights which might then be documented theorised and generalised (Smith and Dean, 2009, p. 7).

In terms of my own research, it is the creative development pipeline of the body of work (the design, 3D modelling, programming, etc. of how the VR works), as well as my aforementioned drawing practice that are treated as the studio practice methods. As Barrett and Bolt articulate (2007, p. 30), this methodology involves experimentation with materials, in conjunction with self-reflection on creative outputs formed through writing and peer and supervisory critique. Through these critical praxes, a "...dialogical relationship between making and writing..." (Barret and Bolt, 2007, p. 31) can be formed and imbedded throughout the final body of work and the exegesis that accompanies it.

In this regard, the writing component of this relationship, the exegesis, refers to both the theoretical texts that inform the work and the reflexive writing of the artist (Barret and Bolt, 2007). As this research relies on my emotional and instinctual response to militainment through an auto-ethnographic methodology, this exegesis exists to critically reflect on my artistic methods and examine my practice in relation to theoretical and contextual fields (Barret and Bolt, 2007). While the theoretical field includes the previously introduced theorists Roger Stahl and Carola Moujan, the contextual field discusses the work of artists such as Baden Pailthorpe, Harun Farocki and Joseph DeLappe. Both these fields have helped me understand how my making processes and the resulting artworks can function as creative research and contemporary art installations. This correlates to Bolt and Barret's description of the purpose of this document, in which "...[t]he task of the creative exegesis is to extend on existing domains of knowledge through its reflection on those shocking realisations that occur in practice" (Barret and Bolt, 2007 p. 33). Therefore, as described through the theorists Barret, Bolt, Smith, Dean and Gray, this project utilises a practice-led methodology to investigate my paradoxical relationship with militainment through experimental, material and process-based studio enquiry (Barret and Bolt, 2007; Gray, 2004; Smith and Dean, 2009). In addition, the accompanying exegesis will examine

the process, methods and artworks as outcomes through their intersecting theoretical and contextual fields, as well as formalising my understanding of VR art production and auto-ethnography as studio practice (Barret and bolt, 2007).

Auto-ethnography

As this project is informed by my own desire for militainment, the lens for the processes in this research will be auto-ethnographic in nature. In *Culture and Identity*, Jon Austin describes auto-ethnography as a process of reflection that interrogates significant experiences in our lives to see how we represent ourselves (Austin, 2005). This approach is particularly appropriate for examining my own desire to engage with representations of conflict as it allows my practice to reflect on my cultural consumption. Therefore, my project can use auto-ethnography to further understand my position in the world around and the cultural codes that have shaped my ways of thinking (Austin, 2005). This idea is reinforced through theorist Carolyn Ellis's description of auto-ethnography in the *Handbook of Auto-ethnography* (2013),

...autoethnography is not simply a way of knowing about the world; it has become a way of being in the world, one that requires living consciously, emotionally, and reflexively. It asks that we not only examine our lives but also consider how and why we think, act, and feel as we do. Auto-ethnography requires that we observe ourselves observing, that we interrogate what we think and believe, and that we challenge our own assumptions, asking over and over if we have penetrated as many layers of our own defenses, fears, and insecurities as our project requires (Holman Jones, Adams, and Ellis, 2013, p. 10).

I have always been entertained by military-themed video games, films and objects. Moving from fascination to desire, my knowledge on historic military exploits grew through researching the games and films I was influenced by. In my young adulthood, I found many of my peers did not share this same degree of interest in the topic, and often I kept my tenacious consumption behind closed doors, revealing it only through my artworks and sketches. I recognised that being obsessed by a topic that could be considered as barbaric and horrific comes with feelings of shame and guilt, and yet this did not curb my consumption. As a practice-led researcher, I'm investigating this personal moral paradox, its relation to the larger culture of militainment and my context as an artist. This directly correlates to practice-led research as auto-ethnography focuses

on reflexive modes of enquiry into the researcher's experiences (Holman Jones, Adams, and Ellis, 2013).

In this way, the project questions my paradoxical relationship with militainment through asking why I choose to engage with representations of combat, while being acutely aware of the horrors of war. Therefore, the methods of making are an intersection between this auto-ethnographic process of observing my interactions with militainment and the reflective processes involved in analysing the work (Holman Jones, Adams, and Ellis, 2013). Explored further in the Creative Works section of this exegesis, these methods of making become critical to the reflection and analysis of artworks; importantly drawing upon Bourriard's theory of *post-production* and *bricolage*. However, to contextualise how these methodologies relate to the methods in my work, I first must discuss the interpretive paradigm, beginning with Guy Debord's theory of *détournement* (Knabb, 2006).

Interpretive Paradigm

Debord and Détournement

Détournement was defined by the group the Situationist International as "...the reuse of pre-existing artistic elements in a new ensemble" (Knabb, 2006, p. 67). Importantly acknowledging that cultural and political landscapes have significantly changed since Debord's interrogation of societal spectacle in the 1960s, as well as several newer theories existing such as Bourriard's *post-production*, *détournement* is significant to this project because of its links to my experience as a consumer of militainment and the methods I use to interrogate it, as I will discuss below (Bonnett, 1999).

Throughout *the Society of the Spectacle* (1967) Debord discusses *détournement* within this aforementioned political upheaval embedded in post-war France. As an artistic process, *détournement* allows artists to go beyond the original elements that inspire an artwork and instead focus on the intersection of relationships (Debord, Wolman, 1956). Debord defines *détournement* as "...[t]he integration of present or past artistic production into a superior construction of a milieu" (Debord, 1981, p. 45). This description is most apt to my methods and processes of making, which derive from various sources of militainment to construct my own representation of these historic events. As an example, in my VR installation work titled *Patton* (2019; figure 1), I

sourced images and sounds from film and game to recreate the historic 1943 Battle of El Guettar. The majority of the battle had been created from collaged reference images from the 1970 film *Patton*, but as well as this I took scans of military uniforms from online re-enactment sites, sounds from video games and tank blueprints from technical manuals to recreate the 3D environment, assets and characters. This process is only possible in what Debord discusses as a society ruled by the image (Debord, 1967).

Debord's discussion of détournement come as part of his larger analysis of contemporary civilisation, stating that "...all that once was directly lived has now become mere representation" (Debord, 1967, p. 12). This society Debord describes is one where images and people are locked



Figure 1: Lobwein, Guy. (2019) *Patton* [Virtual reality installation, Oculus Rift headset]. Interior render.

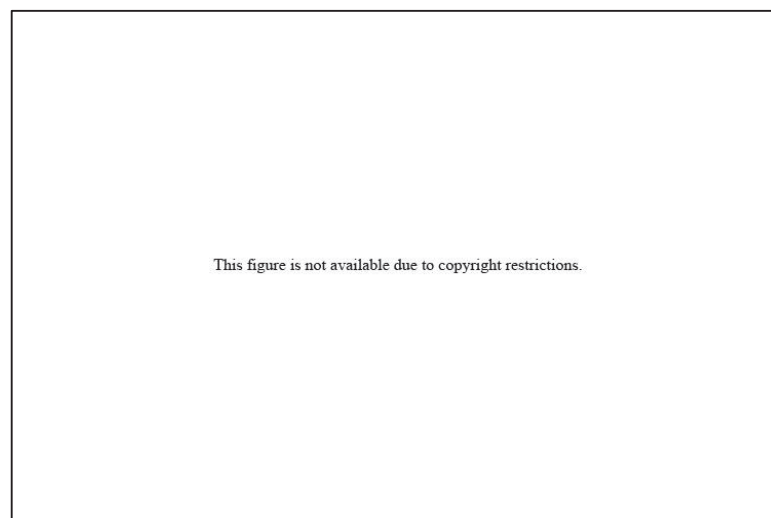


Figure 2: Coppola, F. North, E (Writers). Schaffner, F. J. (Director). McCarthy, F. (Producer). (1970). *Patton* [Motion picture]. United States: 20th Century Fox.

into a social relationship, in which mass cognitive thought is translated into a total objective force (Debord, 1967). This idea of the spectacle, as explained by Bonnett, is "...a vision of a new stage in capitalism, a stage where reification and commodification have insinuated themselves into every area of human conduct" (Bonnett, 1999, p. 25). This total objective force is one that is similar to what J.C. Herz (1997) describes as the 'military-entertainment-complex'. This complex permeates military images into the public sphere, consequently injecting military knowledge into everyday civilian life (Herz, 1997). This will be further discussed in Chapter Two; however, it is important to note here as it represents why Debord's ideas are crucial to my project. In understanding that I have become part of this persuasive spectacle of militainment, my art is systematically derived from my continuous interactions with the images produced from a society as described by Debord:

[u]nderstood in its totality, the spectacle is both the outcome and the goal of the dominant mode of production. It is not something added to the real world... it is the very heart of society's unreality. In all its specific manifestations – news propaganda, advertising or the actual consumption of entertainment – the spectacle epitomizes the prevailing model of social life (Debord, 1967, p. 13).

According to Bonnett, this commodification of all experience throughout society has resulted in pacification of political conflict, resulting in global inaction due to the dichotomy between reality and the image of the spectacle (1999). In this society, images are used to develop the media spectacle as an industry, with a focus on displaying content that appeals to the materialistic identity of the consumer (Debord, 1967). Therefore, in context to my auto-ethnographic art practice, the act of *détournement* within a society of spectacle reflects and exploits the commodified relationship between the image, experience and consumption. This relationship directly correlates with my experience as a consumer of militainment. In finding a desire to engage with militainment within a society described by Debord, I believe my consumption of its content could only have been further amplified. This process of *détournement* — extracting and manipulating images — is consequently fundamental to my practice as it allows me to combine the images of militainment into new artworks that contradict their original use. This use of *détournement* will be discussed further in Chapter Three, where as an example I will detail how my creative works extract data from found images to create virtual 3D spaces.

The act of détournement of the original images of militainment is central to my creative practice as I am creatively engaging with the contradictions found between the commodification of real combat within a society of spectacle. This interrogation through an auto-ethnographic exploration of my obsessive making-gaming tendencies drives towards a new understanding of the emotions and experiences embedded within these events that I understand as tragic. However, to understand the obsession that drives my practice, I first need to survey the psychoanalytic arena in which this desire sits. This is through a discussion of Lacan and his theory of *jouissance*.

Jouissance, the Mirror Stage and the Ego

While many theories of desire and pleasure have been informed by Freudian thought; for my project I consider Jacques Lacan's notion of *jouissance* as the most apt description of my tendencies (Boothby, 2014). I, however, am not a Lacanian scholar, nor is this project about analysing Lacanian desire in depth. *Jouissance* is commonly equated with ecstasy, as relating to both sexual and divine aspects of the word. In this way, *jouissance* can refer to a multitude of unmediated states of pleasure in the body. In this project, I will be focusing on *jouissance* through the lens provided by theorist Richard Boothby, in which I consider *Jouissance* as a subject's unconscious desire for pleasure through fantasy (Boothby, 2014). In *Death and Desire: Psychoanalytic Theory in Lacan's Return to Freud*, Richard Boothby states that Lacan believes that human desire "...is forever haunted by the dream of 'the thing,' the dream of re-finding a primordially lost object, of recovering an original source of utter plenitude" (Boothby, 2014, p. 31). In the case of my obsession with militainment, moments of *jouissance* are represented through my art-making processes in order to mediate on my paradoxical and frustrating relationship with its consumption.

My moments of *jouissance* can be described as the multiple points of fascination that occur in my typically digital paths of historic research. For example, I may engage with a film or video game that has as its focus a specific historical period, and this will prompt my further research into the real events. One moment of *jouissance* quite significant to this research was in the aforementioned film *Patton* (1970), in which a full recreation of the battle of El Guettar takes place (figure 1). After watching the film, I was immediately compelled to further research historical documentaries and books to seek out more detail about the actual event. But these

moments of *jouissance* are not just located within video games and films. I find that I am compulsively interested to find out about anything relating to military history, technology, topography and philosophy. To Lacan, the starting point of these moments of *jouissance* begins in his concept of the *mirror phase* (Boothby, 2014).

Built upon Freud's original unconscious theory of the *ego* and *id*, the *mirror phase* is derived from a primordial apprehension in infancy, when a subject realises itself through seeing its reflection, such as in a mirror (Boothby, 2014). On discovering itself through the mirror, the infant subject understands that its physical body sits within a reality of objects and images (Elliott, 2004). This then splits the subject into how they imagine themselves within this reality (the *ego*) and their physical experience within the world (the *id*). If this discovery happens early in the subject's infancy, Lacan proposes the subject can develop an *ego* of narcissism and alienation, one built on desire and pleasure in accordance with animalistic instincts that are found in primordial development; sexual desire, aggression and hate (Boothby, 2014). The child builds its' identity like a fortress and imagines itself as distinct from the 'other' (Elliott, 2004, p. 38). The desire of the *ego* can then play centre stage, influencing the direction of the identity of the subject. This creates dichotomic tension, in which the *ego* and *id* interplay within its conscious and unconscious topography (Boothby, 2014). In line with Lacan's thinking, it becomes clear to me how my own *ego* may have formed through my consumption of militainment.

From an extremely young age I have been addicted to the pleasure of consuming militainment. It could be said that I formed an *ego* in which the scenarios I was watching play out on the screen became the reality I desired to see myself within. Consequently, this became part of my *ego*. In thinking with Lacan, my *ego* grew over the years against my physical *id*, as I did not always mix my everyday life with the militainment that I loved. I often instead found alternative groups to enjoy my militainment with, keeping it separate from other sectors of my social life. This caused an alienation of these desires as I repressed these addictions, pushing the obsession into the private areas of my life. However, to break from my *ego* of consuming militainment would threaten what I believe makes up my personality as a whole. This paradoxical relationship of my desire for militainment against my understanding of its terrible and barbaric reality, is therefore what drives my practice, as art-making is my primary means of releasing the frustration in not

being able to embrace conflict. This discord between my unconscious ego and my id is a dichotomy that is linked to what Freud determines as the *death drive*.

Boothby summarises the death drive as "...a drive toward death.... related to the alienating structure of the imaginary ego" (2014, p. 41). According to Freudian psychoanalytical theory, the death drive has its origin in the conflict between the subject and its imaginary identity. In Freudian terms, it could be said the conflict between my ego and id has defined how I create art, as I am trying to stem this internal conflict through art-making. This can be seen in the way I use *détournement* and auto-ethnography in my practice to self-enquire into this paradoxical relationship I have with militainment. To unpack the death drive in-depth is well out of the scope of the project, but it is critical to understanding that my art practice serves also as a meditative space for reflection on my consumption of militainment. With respect to these ideas, I believe my desire to engage with military entertainment is extreme. It is from this analysis that I believe I have been conditioned by my mirror phase into finding pleasure in potentially self-destructive behaviours (Boothby, 2014). This pleasure, found in moments of *jouissance*, represent the desire of my ego and is expressed through the acts of narcissism and aggression found in my obsession with military films, games and literature. In regard to this, the next chapter will discuss militainment in relation to these desires and my art practice.

Chapter 2

Contextual Review

While Chapter One discussed the methodological approaches that inform my art-making, this section covers the theoretical landscape which my practice sits in. Although the theories discussed throughout the methodology and contextual review can seem disparate, this is due to the cross-medium aspects of virtual reality technology (VR) and the inter-disciplinary approach of my practice. The conceptual ground covered within this contextual review aims to provide a lens through which I am interrogating the images of my desire; those found in militainment.

Militainment in Contemporary Society

A crucial context for this project is media theorist Peter Mantello's observation that the popularity of militainment has led to a subculture of video game players that are unconsciously entwined with the geopolitical theatre in which the U.S. operates (2017). Video game titles such as *Battlefield Bad Company 2* (2010) and *Call of Duty: Modern Warfare* (2010) place players in special operations teams of the U.S. military and replicate similar combat-zones for these digital soldiers to play in (Clarke, Rouffaer and Sénéchaud. 2013). I played both series as a young teenager, battling my friends and thousands of other real players in massively-multiplayer

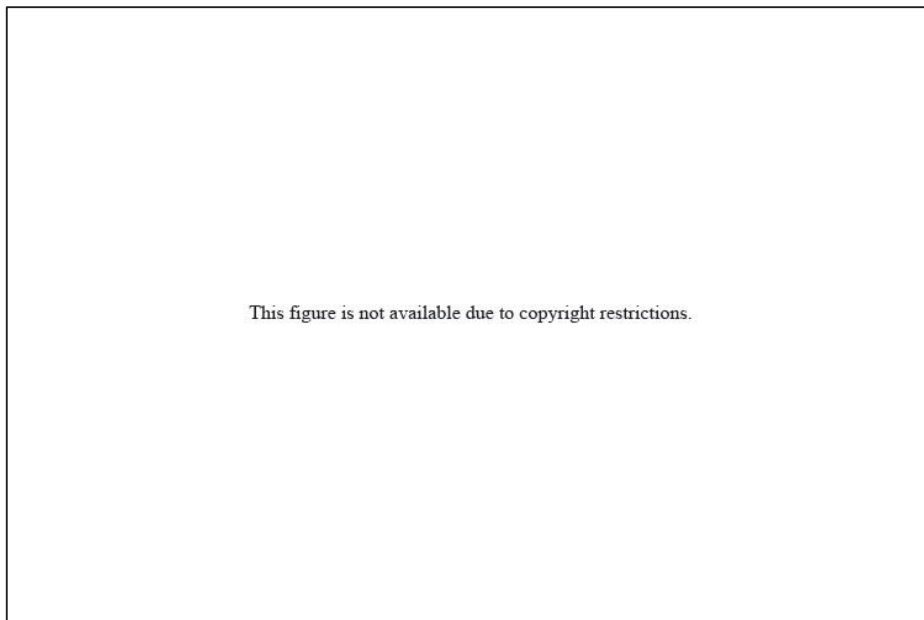


Figure 3: Electronic Arts., Dice. (2019). *Bad Company 2* [In-game screenshot]. Retrieved from <https://www.battlefield.com/games/battlefield-bad-company-2>

wargames. I remember not taking these games seriously, laughing and fighting with friends or strangers, using the in-game voice chat as we moved through the gore ridden streets of maps resembling operational theatres such as Kuwait and Iraq (Figure 3). However, I always had the most fun as a youth pretending to be a real special operations soldier, attaching silencers to high-precision sniper rifles, using military terms like *contact right*, and reciting the NATO phonetic alphabet (*Alpha, Bravo, Charlie*, etc.). It made me feel like I was in my favourite movies and my friends and I would talk about our favourite moments the next day at school. In particular, I was struck with a feeling that these moments of joy (*jouissance*) bonded us together and made me feel like we had created our own personalised militainment, that I likened somewhat to soldiers sharing war stories. In this way, while these images of violence, war, and combat functioned as a fun game to my peer group, for me they became an obsession.

Unlike my friends, I would spend countless hours watching the documentaries and reading historical books that contextualised the militainment I was engaging with. While my friends never seemed to delve into the historical contexts of these games quite like I did, games do manipulate players in a broader sense to explore specific ideas and environments through the design of the games themselves. As argued by video game theorists Ian Bogost and Nick Robinson, video games allow players to explore rules and actions that underpin digitized societies and in turn enable critique and reflective learning (Robinson, 2012; Bogost, 2008). By experimenting with a game's rules and boundaries, players are not just having a gameplay experience, but are also discovering the meaning of the game itself (Bogost, 2008). Media theorist Alexander Galloway expands that 'realistic' or 'realist' games are a crucial example of this notion, as these games rhetorically "...reflect critically on the minutiae of everyday life" (Galloway, 2006, p. 91-92). However, this idea is complicated by the fact that games are not generated by the actions of everyday life, but instead are produced, constructed and released as a representation of game developer's varied and idiosyncratic ideologies (McAllister, 2004). Thus, the two elements of gameplay, ludology (the dynamics of play) and narratology (the story in play), can never be unbiased or neutral due to the presence of the video-game production process (Robinson, 2012). This prompted questions about my own art practice, which as discussed originated from my encounters with the militainment complex. Was I reiterating the ideologies of these game makers through my art practice? I address these concerns below in Chapter Three when I discuss my

body of work; however, it is critical to point out that perhaps my previous ethnographic practice of my Honours research was not undermining this military-entertainment-complex, but instead repackaging the ideas of it.

According to the Entertainment Software Association (2018), the most played games of 2017 in the U.S. were shooter-games at 35%, with the bestselling title being the military shooter *Call of Duty: WW2* (2017). In combination with Hollywood films made about wars in the Persian Gulf, Iraq and Afghanistan, military-themed video games have become an integral part of what J.C. Herz designates the *military-entertainment-complex* (Herz, 1997). Originating from what C. Wright Mills conceptualised as the *military-industrial-complex*, the military-entertainment-complex builds on the concentrated links between politics, military and industry to perpetuate the war economy of the United States established in the Second World War (Mills, 1958). This revised complex of entertainment and the military refreshes the modes in which military-driven research outputs are transferred into civilian life as militainment products (military-based films, games, etc.). This is particularly relevant to this project as the technological developments in computer hardware and simulation upon which militainment relies also relate closely to the needs of the modern U.S. military. As politics and gaming theorist Nick Robinson points out:

[t]he growth in the use of military simulations has been accompanied by what some have seen as the development of a change in military ethos towards ‘net-centric warfare’ in which computer technology has become increasingly integral to military supremacy on the battlefield (Robinson, 2012, pp 509).

These links between digital technology and the military provide context for a domain where military technology is then transferred into commercial application and ultimately militainment (Stahl, 2006). This was exemplified in the 1990s when military simulators designed by Lockheed Martin for the U.S. Department of Defence, such as *Desert Tank* (1994) (figure 4) and *Apache* (1995), were adopted by video game developer Sega and released internationally as arcade games for teenagers, of which I remember being my first interaction with game versions of militainment (Stahl, 2006; Robinson, 2012). However, as a pre-workforce-teen I could not afford to purchase these games at the time, therefore it’s more apt to discuss the video games that dominated large hours of my childhood, particularly the free-to-play video game *America’s Army* (2002) due to its links to the military-entertainment-complex.

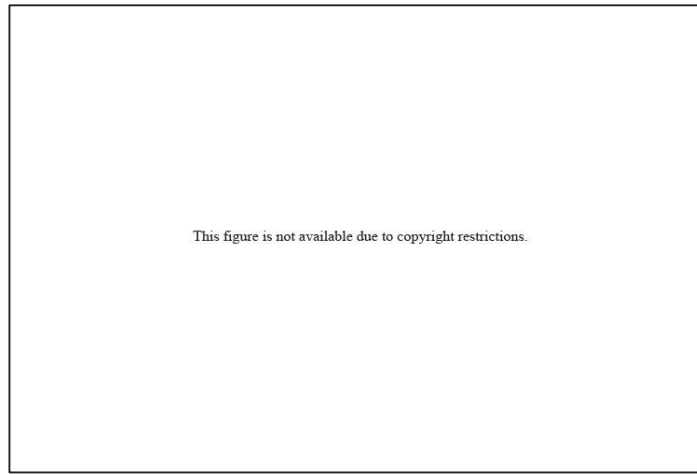


Figure 4: Sega. (1994). *Desert Tank* [Sega model 2]. Computer Game, 3D animation.

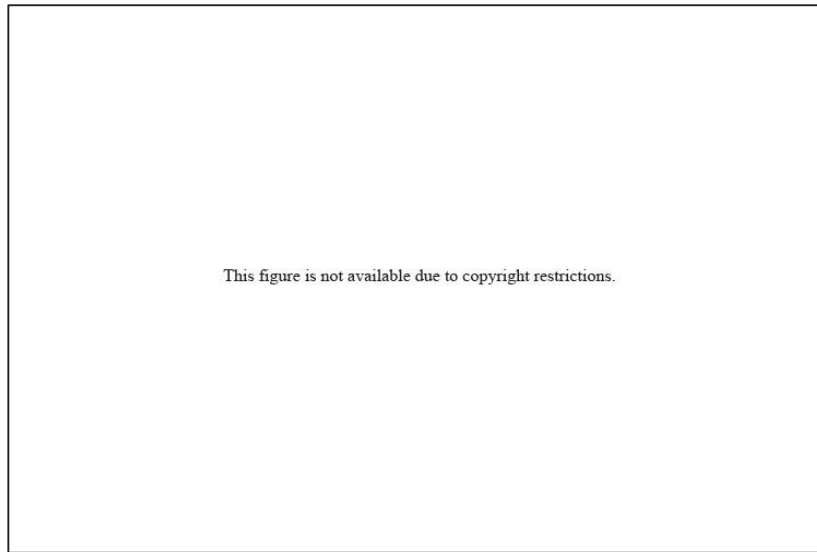


Figure 5: Siegismund, F. (2009). *For the new ES2 system there is a suitable training course in the basic training of America's Army 3* [Für das neue ES2-System gibt es einen passenden Trainingskurs in der Grundausbildung von America's Army 3]. Retrieved from <https://www.gamestar.de/artikel/americas-army-3-im-test-youre-in-the-army-now-again,1957119.html>

While it is obviously graphically outdated compared to today's games, *America's Army* is clear example of the U.S. military's desire to indoctrinate civilians with a representation of their armed forces, recruiting them into a virtual 'netwar' (Robinson, 2012). Players must embark on a compressed version of basic training and agree to the U.S. Army's rules and regulations (figure 5), before then participating in online gameplay; play is conducted in two squads, each with missions similar to tasks faced by real army personnel (Robinson, 2012). However, the game censors the experience of war by reducing depictions of violence and similarly limiting various scenario possibilities. This includes stylising bullet wounds (showing clouds of red smoke instead of blood and gore), removing the bodies of combatants after their killing, a complete lack of civilians on the battlefield, and an inability for the player to surrender (Robinson 2012). Robinson

argues in his article *Videogames, Persuasion and the War on Terror: Escaping or Embedding the Military–Entertainment Complex?* that “restrictions on gameplay are justified by the US military on the basis that the game can/should be playable by teenagers” (Robinson, 2012 p. 512). In essence, *America’s Army* dictates gameplay through rules designed by the U.S. military to represent a censored war for its civilian net-army, acting as a striking demonstration of the U.S. military-entertainment-complex (Robinson, 2012). Because of its prominence within this complex and its sphere of influence, this video-game also penetrated into the entertainment complexes of the United States’ allies, such as Australia.

In playing this game as a young adult, this military simulator allowed my younger self to venture into the training of U.S. soldiers with thousands of other players, engaging in tactical situations that mimicked the combat tasks of Australian and U.S. troops in the Iraq War period (2003-2011). As Daniel Flitton argues in his paper *Perspectives on Australian Foreign Policy* (2003), Australia’s foreign policy of supporting the international conflicts of the U.S. has driven the Australian Armed Forces into combat theatres, such as the Iraq War (2003-2011). Playing with mainly gamers from the U.S. due to connection speeds in Australia, *America’s Army* came to represent for my teenage-self, a virtual mirror to the constant stream of televised images coming from occupied Iraq. This is important to my practice as at the time, as video games were the most prominent way I explored military content, in trying to understand the experience of Australian soldiers in Iraq. However, as Robinson argues, *America’s Army* limits the real experience of Iraq through stylisation and gamification (2012). It is through thinking with Stahl and the various aforementioned theorists, that I agree a desensitisation of combat has taken place, neutering the experience of contemporary warfare into a fun-filled adventure. In comparison, this is comparable to the marketing that incited many young Australians to join the Australian Imperial Force in the First World War, who similarly were sold an adventure of excitement, only to be met with devastating consequences in the campaign at Gallipoli and in battles throughout France (Beaumont, 2013). In regard to this, artists such as Joseph DeLappe, have deconstructed, analysed and performed within *America’s Army’s* virtual battlegrounds in order to interrogate this U.S. system of indoctrination.

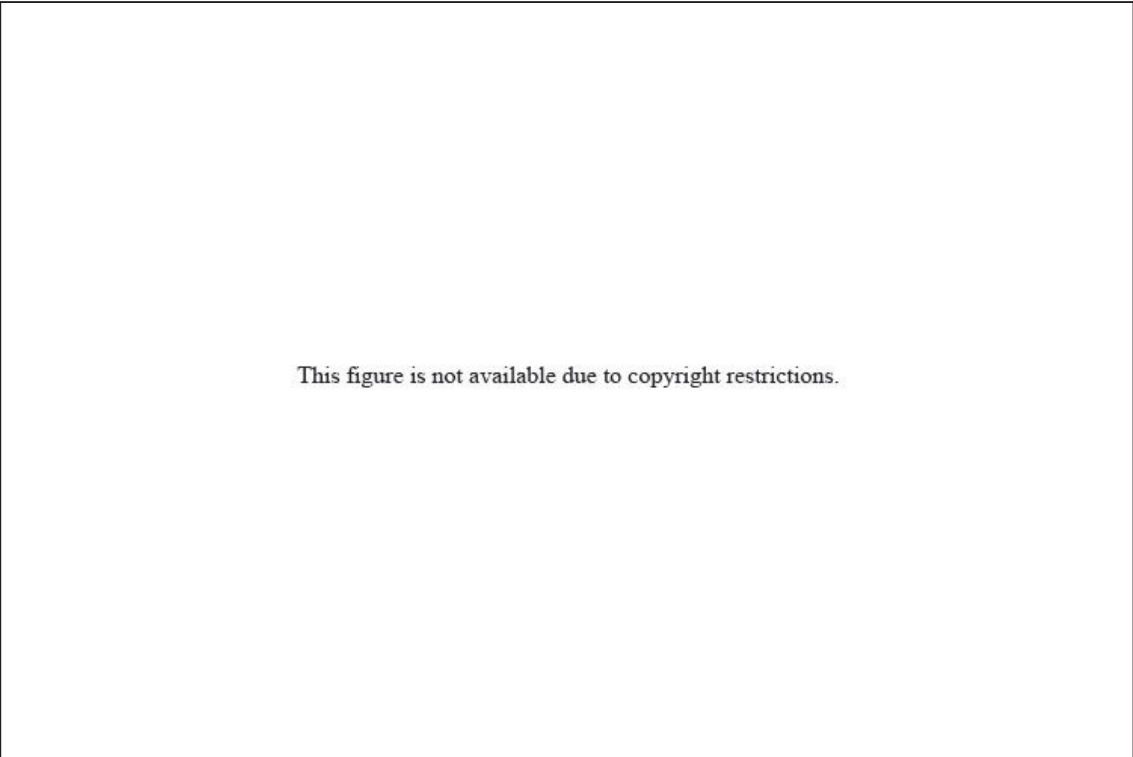
Joseph DeLappe

Joseph DeLappe is an American artist who uses video games, sculpture and performance to reflect on contemporary conflicts such as Iraq and Afghanistan. Throughout his work he engages with military video games in playful ways, often using digital combat arenas as performance spaces for artistic protest and critical contemplation on militainment's ideological foundations (DeLappe, 2013). One such work, *dead-in-iraq* (2006), uses *America's Army* as a performance space, allowing DeLappe to protest against the Iraq War using a simple text-based gesture. In this artwork, DeLappe manually typed the name, age, service branch and date of death of 4484 deceased United States service personnel into the in-game text chat function during hundreds of online games (figure 6; DeLappe, 2013). Throughout the performance, DeLappe would join ongoing *America's Army* battles with up to 24 total players, drop his virtual soldiers' gun and type as many of the deceased's names as possible before being kicked out of the game by players or server administrators. However, each performance was recorded through screen-capture software, allowing post-performance viewers to observe and reflect on the reactions of other players, and ultimately the ideological nature of the militainment-complex (DeLappe, 2013).

I consider DeLappe's *dead-in-iraq* as operating at the intersection of two disparate but conceptually connected conflict realms — memorial and entertainment. By formatting the names of the deceased soldiers in the same style as military graves and memorials and then exposing these to a community of anonymous gamers, the work creates insight into the morally and ideologically complicated nature of this intersection of reality and militainment (DeLappe, 2013). This is made clear in the text chat reactions of game players who observed the performance:

```
[US Army] -hk-burritoman#1 messaged: i think they are dates of deaths of soldiers  
[US Army] dead-in-iraq messaged: CEDRIC LAMONT LENNON 32 ARMY JUN 24  
2003  
[US Army] BgRobSmith messaged: are those real people??  
  
[US Army] dead-in-iraq: ERICKJ HODGES 21 MARINE NOV 10 2004  
[US Army] -os-zelptic messaged: dead stfu you dumb ***** {FUBAR}rtftd was shot by  
{-Boomer-}  
[US Army] turkeybird messaged: who cares (DeLappe, 2008).
```

In these responses, it seems that within a militainment space, the imposition of reality is a taboo for online gamers who instead wish to enjoy the aesthetics, aggression and adrenaline provided by these combat zones, unfettered by ethical and political complexities. Throughout this work, DeLappe directly confronts players with the tragic and fatal realities of conflict, and in turn, viewers of the artwork with the contradiction inherent in *America's Army* itself. Viewers are left to question why these virtual and real spaces of conflict are so disparate when the outcomes of both are so intertwined. Reading messages such as “jeeez shut up already we get it people died” and “mm so whats your point?” (DeLappe, 2008, p. 3) prompts reflection on this intersection. The performance acts to rupture the game’s ability to act as an ideological tool, undermining a technological and militarised desensitisation to death in combat, and recontextualising a virtual space that had been stripped of its own context. While the censored version of combat remains, with names of real soldiers killed in action suddenly inserted into the virtual battlefield the work makes clear the compromised nature of the game itself. I think of this contradiction as complementary to my own relationship with representations of conflict; I am divided between enjoying militainment as a virtual soldier but simultaneously being repelled by the violence and cruelty that I understand is found within real combat zones. However, while DeLappe’s



This figure is not available due to copyright restrictions.

Figure 6: DeLappe, J. (2006-2011). *dead-in-iraq* [Multi-channel video, game based performative intervention].

confrontation prompts contemplation on such contradictions, the broader geopolitical, racial, and religious aspects of the Gulf War depicted in the game remain unaddressed.

As with my own project, these contextual dynamics appear to lie outside the scope of DeLappe's work, and instead the focus is on the interrogation of these spaces of militainment through existing computer game environments. In using players' reactions and the interactive interface itself as part of the performance space, DeLappe confronts the dichotomous relationship between military memorials and entertainment, successfully questioning the different conceptual zones that conflict occupies. This is further reiterated by DeLappe's refusal to participate in the prescribed destruction of the battle. In this way, his work is of particular interest to this project through his tactical use of the game's own virtual realm to subvert its ability to indoctrinate and influence. This becomes more apt further in this document where I will discuss using computer game aesthetics to interrogate the contradictions between real and represented combat in Chapter Three. However, *America's Army* is not the only game that permeates militaristic ideologies through its game framework, and through more modern simulator's realism has taken charge over arcade-aesthetics.

Consequence, Drill and Indoctrination

When playing at virtual combat in more recent games such as *Battlefield 4* (2013) and *Call of Duty: Modern Warfare* (2019), in-game consequences for the virtual violent actions are often excluded from the game design. As part of the moral contradiction that I discussed as central to the project, what I am interested in is how this aspect of the game design, the rules of engagement for combat (or lack thereof), shape the attitudes that players carry towards the games' real-world locations, such as the *Call of Duty: Modern Warfare* game map, *Euphrates*, which resembles a combat zone in Iraq (Clarke, Rouffaer, Sénéchaud, 2013). As many of the dominant games are based around 'shoot and destroy' mechanics, any solutions to problems set in these locations can easily become associated with violence and destruction (Robinson, 2012). Tasked with missions like neutralising terrorist threats, these games seem to clearly perpetuate the simplistic 'black-and-white' ideology demonstrated by recent U.S. foreign policy to these same regions and exemplified by George W. Bush's notorious maxim, "[e]ither you are with us – or you are with the terrorists" (Cable News Network, 2001).

This binary and simplistic approach to the geopolitics of war is, as Roger Stahl discusses, how video games mobilize the rhetoric of the war on terror; by allowing players to act out the virtual duty of a ‘global police force’ (2006). At the same time, the research outputs of the U.S. military, mean that international drone warfare has become a new method of anonymously dealing with security threats (Stahl, 2006). Interestingly for this project, this has also meant that some sections of the military, such as drone pilots, have been accused of adopting a ‘PlayStation mentality’ and displaying little regard for International Human Law (IHL) in these arenas (Clarke, Rouffauer, Sénéchaud, 2013). This, as argued by Stahl, is because U.S. based game-publishers are influenced by state and military officials to produce games that predict future security threats to enable citizens to act as key members of the state’s defence (Stahl, 2006), (Mantello, 2017). In correlation, my experience as a consumer of this militainment has led to my art practice, which is generated from this content, to be a way of recontextualising militainment with the horror and terrible acts that comes with real conflict.

Essentially, I am creatively exploring in this project is how the military shooter genre of video game has become “an integral part of dominant post-9/11 security discourses” and what this has meant for my own sense of self (Mantello, 2017, p. 517). As suggested by Mantello, young adults, predominantly 16-24-year-old males, are subject to an invisible form of ideological indoctrination through the distribution of commercialised military knowledge (Mantello, 2017) This militaristic indoctrination of everyday life can be seen in the “...embodied, pedagogical relationship...” (Smicker, 2005, p. 108) that gamers have with the actions they perform. Comparable to military ‘drills’, video game design encourages gamers to perform the same actions repeatedly to teach them how to win certain scenarios. In this way, knowledge of military tactics (such as using cover or performing flanking manoeuvres) can be indoctrinated into game players:

[w]ar video games function as increasingly common performative spaces within the domain of everyday life where one enacts particular images, narratives and discourses of past or present military violence to (purportedly) prepare for its repetition (Smicker, 2005, p.117).

This idea of being indoctrinated into militaristic thinking and certain political ideologies is important to my practice because it allows me to understand my desires towards this content due

to my position as both artist and consumer within this complex. This is particularly pertinent given that in recent years, militainment games have become increasingly more realistic through graphical resolution, animation and player experience. In games such as in *ARMA 3* (2013), *Insurgency* (2018) and *Post-Scriptum* (2018), developers have consciously aimed to simulate the experience of real tactical combat and allow audiences to train in strategies used in contemporary conflict zones with a realism never before experienced. An example of this realism, *ARMA 3*, was developed as the civilian version of real military simulators (VBS3) for various defence forces, including the Australian Defence Force and U.S. military (Stuart, 2019). Its large open-world design and topography, as well as its realistic physics and combat mechanics, means *ARMA 3* allows civilians to train in the same simulators that real combat soldiers use. This is an integral part of my own research, as I myself, a 23-year-old male (within recruiting bracket) engage with these military-themed simulators on a regular basis. In this way, throughout this project I wanted to explore my history with militainment to try and further understand whether consistent consumption of militainment has brought me to a point where I desire to experience militainment through new levels of immersion, such as within VR.

With the introduction of consumer-grade virtual reality technology, several shooter games exist on the platform for civilians to test their ability in military situations. *Zero Caliber* (2018) is a virtual reality military FPS (first-person-shooter) which allows players to engage in multiplayer combat with military rifles and equipment (Xreal Games, 2019). However, although it offers players the ability to shoot, aim and reload like real soldiers through hand tracked motion controllers, consequences for poor tactical decisions or incorrect target acquisition, such as physical pain or a court martial, do not feature in these forms of militainment. It therefore suffers from similar problems of the aforementioned FPS, *America's Army*. This leads me to believe, that although VR pledges to be more realistic than traditional FPS screen-based shooters, there has not yet been sufficient time for a large studio to develop a military shooter that has the depth of tactical realism that simulators such as *ARMA 3* has. However, I can only ask what conflict-based militainment will become available to future audiences to permeate the ideologies and strategies of the U.S. military-entertainment-complex? This question is key to both my work and the work of several contemporary artists who work in relation to various digital mediums, including Baden Pailthorpe and Harun Farocki.

Baden Pailthorpe

In relation to this project, the work of Australian contemporary artist Baden Pailthorpe explores numerous important themes including the ontological aspects of militarism, virtual simulation, and even drone pilots. Pailthorpe approaches his creative work primarily through the lens of German cultural theorist and philosopher Peter Sloterdijk; aligning Sloterdijk's theories alongside other philosophers and artists under the term *military spatiality* (Pailthorpe, Murphy and Costello, 2015). Pailthorpe's practice traverses a landscape of military history, mythology and art to create works that reflect on warfare involving Australian contemporary conflicts such as Afghanistan War (2003-present) and the Iraq War (2003-2011) (Pailthorpe, Murphy and Costello, 2015). With these contexts in mind, his works *MQ-9 Reaper I* (2014) and *Cadence* (2013) both explore the aesthetic possibilities of 3D animation found in military simulators. However, in this document I will focus on discussing *MQ-9 Reaper I* to explore the previously mentioned spatial terrain between the mystic of the U.S drone network and their invisible operators (Brady, 2016).



Figure 7: Pailthorpe, B. (2014). *MQ-9 Reaper I* [3D animation, digital video installation]. Screen Render.

MQ-9 Reaper I is a high-definition, two-channel video work within Pailthorpe's series *MQ-9 Reaper I-III*. Utilising the forms of 3D animation, motion-capture and digital topology, the work consists of a United States drone covered in a reflective chrome material drifting over a barren desert landscape (figure 7). Following this sequence, a shipping container floating ambivalently in the same space opens its walls outwards like a doll's house. This reveals its interior which

includes a drone control room and a living room lavished with consumer grade items such as TV plasma screens and IKEA couches (Pailthorpe, Murphy and Costello, 2015). A civilian clothed man who performs actions of everyday life, traverses the interior of the container. In this sequence, the drone and the operator square off, the operator boxing at the hovering drone while standing on the ledge of his control room. It is within this confrontation, the vast distance between combatants of contemporary combat is dissected (Brady, 2016).

Like the anonymous soldiers playing online combat in militainment games, drone operators enter control rooms in Creech Air Force Base, Nevada, and are transported to landscapes of Afghanistan or Iraq through screen-based imagery (Brady, 2016). In this screen-mediated teleportation, we can consider the operators physical body as becoming intertwined with the mechanical and digital sensors of the drone. I see this idea having a correlation within Pailthorpe's work, where the chromed material covering the machine, absorbs the light of the vast desert these drones so often operate in. This relationship between material, body, and space is explored through the confrontation between the operator and drone. In reality, drone pilots and their machine counterparts seldom meet, with the former remaining in a disparate state-side space, and the latter wreaking real-world violence abroad. But in this work, I see Pailthorpe as exploring this real/virtual space dichotomy by bringing the two entities into a surreal face-off between their physical forms (Pailthorpe, Murphy and Costello, 2015). The work seems to contemplate the identity of the master, the ambivalent floating camera tracking the motions of the operator as he shadow-boxes this tool of war. Here, in the virtual 3D landscape of the artwork, the operator's ontological position is brought into question; what difference exists between the sensory experience of a drone pilot and the real-world drone they operate? Similarly, I also think of this question with respect to my own practice; what experiential difference exists between a drone pilot in Creech, USA, and a computer player simulating a drone strike in high-definition graphics?

To further examine these ideas, Pailthorpe chooses to utilise a realistic 3D rendering technique which mimics the material properties of landscapes, objects and people with high fidelity. It can be said that this verisimilitude reflects the fetishization of military technology that exists both in general society, as well as specifically in video gaming's virtual sphere (Pailthorpe, Murphy and

Costello, 2015). Much like the reactions of awe found at public displays of gleaming military hardware (air force flyovers for example), computer players fetishize and lust over the realistic graphical mimicry of physical spaces and materials rendered in pixels (Nieborg, 2010). Pailthorpe, acknowledging these parallels, uses the production methods of advanced video game development including 3D object modelling and motion-capture technology (Pailthorpe, Murphy and Costello, 2015). Motion-capture technology allows a performer to don a suit covered in tracking markers so that infrared cameras can track their movement, and a computer can interpolate a new virtual 3D space and performance. As I will discuss later in this document, these techniques have become critical to the development of my own artwork. Similar to Pailthorpe, my use of these technologies adopts the formal aesthetics of computer games in order to critically examine them and ultimately interpret my complicated relationship to them.

In Pailthorpe's use of 3D animation I see a creative and critical examination of the complicated relationship between machine and operator in contemporary military conflicts. His use of realistic computer game aesthetics and motion-capture technology creates new symbolic narratives that illustrate the conceptual intersection of militarism, video game culture, and contemporary art practice. *MQ-9 Reaper I* is an example of how the use of these digital techniques can create an experientially reflective artwork, which prompts the viewer to consider the extent of militarisation within our contemporary societies. More broadly, these notions of militarism, video gaming, and virtual space are the very same that my work also considers. However, Pailthorpe's also discusses these ideas in relation to as Peter Sloterdijk's theories of *atmospheric spheres* and *military spatiality*. For Sloterdijk, atmospheric warfare began with the *airquake* — the introduction of chemical warfare in the First World War (Sloterdijk, 2002). Since, this aerial war on a combatants' own atmospheric space has advanced in the multiple world conflicts, and in the 21st Century, has found its place within the omniscient U.S. drone network that Pailthorpe states: "...peer increasingly deeper into the inner zones of our territories" (Pailthorpe, Murphy and Costello, 2015, p. 91). In this regard, *MQ-9 Reaper I* explores the drone's role of autonomously gathering and translating spatial data for the operator to determine responses of life and death within geopolitical topologies (Pailthorpe, Murphy and Costello, 2015). It is through my focus on VR technology in the studio, I am interested in including Pailthorpe's ideas of spatial hybridity to translate my virtual excursions into militainment into creative works that investigate my desires to

engage with it. This is similar to Pailthorpe in that I use the aesthetics of video games to visualise and contextualise my work.

Computer Game and Neo-Baroque Aesthetics of the Mixed-Space

As I have discussed above, my interest in the work of artists like Baden Pailthorpe and Joseph DeLappe, as well as my obsession with militainment, makes clear the importance of video games to this project. In this project I am invested in using video game aesthetics in ways discussed by theorist Graeme Kirkpatrick who asserts that game aesthetics represent "...a locus of aesthetic form in contemporary culture" (2007, p. 74). I am also interested in how this idea of video game aesthetics cultural centrality also relates to the concept of the neo-baroque as addressed by cultural theorists including Angela Ndalians and Carole Moujan, and how the combination of these ideas has developed my understanding of how video game aesthetics can operate in a critical function within my practice.

Kirkpatrick's assertion is that the relatively new medium of the video game, although understood as a massive industry in economic terms, has evolved within a bounded sub-culture, and thus has received only moderate amounts of formal and conceptual influence from other disciplines (Kirkpatrick, 2007, p. 75). Therefore, he argues that understanding a video game outside of its sub-cultural position requires consideration of it as operating "...somewhere in between the traditional 'game' which structures play, and the aesthetic object or 'artwork'" (2007, p. 75). That a game can be understood as an 'in-between' form; part interactive game and part aesthetic art object. I'm interested in this in-between status with respect to my own VR works because, while interactable, they also function as aesthetic experiences. Crucially, Kirkpatrick stresses that "[i]f we want to assess the computer game as a form we must start with play" (2007, p. 75). Drawing from this idea, play comprises the aesthetic of the video game medium, and that social relations are made through its formal and experiential qualities. Similarly, I consider my creative adaptation of gaming assets and development processes as playful.

Another assertion of Kirkpatrick that I think relevant to this project is his idea is that the history of video games sits in relation to, but is distinct from, the histories of art and aesthetics.

Kirkpatrick goes further to playfully argue, that video games occupy a space where traditional

artforms once stood, that: “[w]hen Adorno wrote that there could be no poetry after Auschwitz, this is what he had in mind... the computer game emerges at the end of art in the traditional sense” (2007, p. 76). It is important to note Kirkpatrick states that he is not saying computer games are supplementing or replacing art, but are — playfully — occupying a dominant position in contemporary culture (Kirkpatrick, 2007). Post-Holocaust, Kirkpatrick argues that art has been in crisis, unable to provide theological meaning in which the previous artforms had alluded too (Kirkpatrick, 2007). This is an important reflection on my own experience with letting go of an ethnographic practice similar to my hero Modernist artists, as they are responding to period that is far disparate from my own. This will become clearer through my use of 3D animation and photogrammetry⁴ as discussed in Chapter 3; however, in adopting the same computer game aesthetics and processes of militainment, my practice is afforded the ability to better critically reflect on these images I détourn from.

Here Kirkpatrick positions the video game in historical terms as coming in the wake of post-war abstraction, and an overall rejection of the pre-war symbolism and aesthetic beauty (Kirkpatrick, 2007, p. 77). Further, that by engendering play, games provide a new level of agency to players that were previously only positioned as viewers in the modernist history of art. This understanding of games as *ludological*, based in play and player agency, sits in contrast to a *narratological* interpretation of games that considers them as similar to film or literature, with stories, structured through characters, problems and conclusions (Kirkpatrick, 2007). However, the aim of this project is not to resolve this dichotomy, but instead to quite creatively interrupt both these ideas of video games through my practice.

The ludological interruption that my work engages in stems from an experimentation within a game’s rules, boundaries and environments. Kirkpatrick’s idea is that this experimental play is central in audience’s finding and decoding meaning within the digital space of a game (Kirkpatrick, 2007). Here, he refers to Immanuel Kant who argues that what characterises aesthetic experience is “...play in the mental life of the human subject” (Kant in Kirkpatrick, 2007, p. 80). This is interesting to me because of a strong memory I have of video game play

⁴ Photogrammetry is the process of generating 3D objects from photographs (Ioannides, Magnenat-Thalmann, and Papagiannakis, 2017).

from my childhood. When as a young child, my sister and I would play our *PlayStation 2* together and try to ludologically ‘break’ as many games as possible. In one game, *The Simpsons: Hit and Run* (2003), we discovered a glitch in which, by activating a speed cheat code, we were able to drive the in-game car through walls and escape the sanctioned sections of the game map. On the outside of the regular map, strange things would happen to the games’ characters and objects, often mashing them together to create new forms such as a washing machine with a cow’s head. In retrospect, I now understand this ability to play and test the boundaries of the forms and design of a game becomes more about finding individual meaning within the game’s structures (Kirkpatrick, 2007). For my sister and I, the ability to ‘break out’ of the game represented a rebellion against the designer’s restrictions, instead traversing regions of the game previously unexplored and intended to be unexplorable. For Kirkpatrick:

[t]his is the allegorical significance of the computer game play... Computer games facilitate the reinsertion of time into the permanent presence of data in the hard drive only as the extrusion of inner life of subjects who ‘play’ (Kirkpatrick, 2007, p. 90).

Again, this idea is crucial to my practice because the artistic appropriation of computer game elements and gameplay that I will discuss further below, allows my audiences to be set free from the physical restrictions placed on viewers in contemporary art settings.

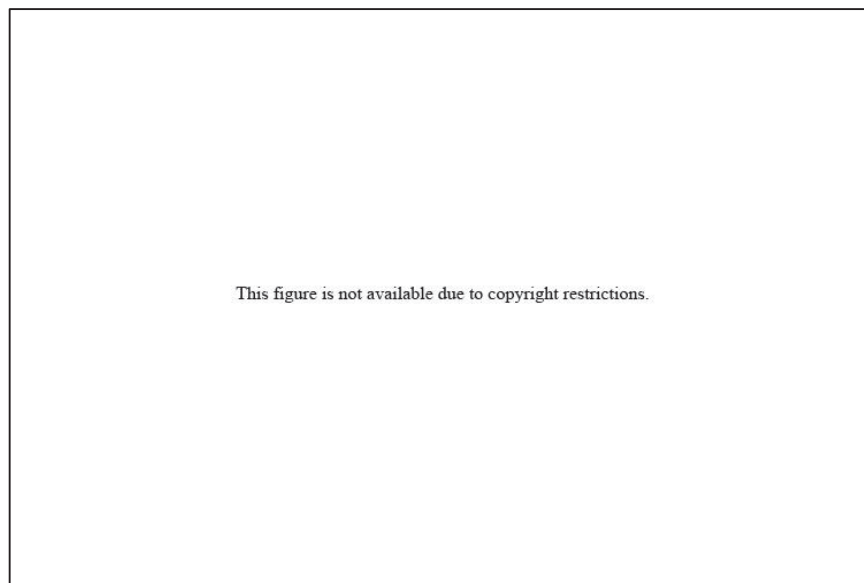


Figure 8: Farocki, H. (2009-2010). *Serious Games I-IV* [series of four video installations]. New York: MOMA. Photograph by Muzikar, J. Retrieved from <https://www.moma.org/collection/works/143767>

These ideas of gameplay's liberating potential are complicated in this project due to my use of VR. In this project, I consider the experience of VR as a fusion of the above discussed play and what cultural theorist Angela Ndaljianis terms the neo-baroque. This term characterises the multiplicity of immersive media that engages with the senses of human experience. Ndaljianis' idea is that VR, one of the primary technologies associated with this term, is best understood in relation to the illusionary baroque spaces of the 17th Century (2004). An intersection of art, science and architecture, baroque spaces allowed paintings adopting mathematical perspective to draw audiences into immersive environments that depicted endless skies in the cathedrals of 17th Century France (Ndaljianis, 2004). Painted from illusionary vantage points, baroque murals filled the walls with characters and stories, depicting allegories of social life with themes of death and triumph (Moujan, 2011). Derived from this baroque aesthetic, virtual reality allows audiences to experience the sensation that the *baroque* always aimed to achieve: move the viewer *inside the painting* (Grau, 2003).

Virtual reality is a multi-sensory medium (sight, sound, and virtual touch) that employs numerous disciplines (3D animation, photogrammetry, installation, sound design, etc.) to allow a player to view, move around and interact with digital objects in a virtual 3D space (Grau, 2003). Through a head-mounted display, virtual reality combines the properties of video games in combination with neo-baroque aesthetics to bring images from the flat 2D plane of a screen to the physical senses of its viewer. Carole Moujan argues that through this creation of a virtual, traversable space, VR designers and artists are in-fact creating a 'mixed-space' (Moujan, 2011). These mixed-spaces occupy physical attributes of the real such a gravity and light but also contain qualities of the virtual such as limited interactivity and pixilation. Therefore, through these spaces a "...new dimension emerges, not just within the mind, neither inside the screen, but in physical space" (Moujan, 2011, p. 169). This means that as an artist using VR as a medium, I am in-fact creating a new type of space, and as Moujan argues, for viewers interacting with such a space, there is activated an unstable sense of space-time. This is the type of space that interests this project, as it offers a space that has not yet been contextualised by military simulators in the same way computer games have been. The space therefore offers a critique on both real and virtual spaces, affording this project the ability to intersect the two so I may further understand this paradoxical

relationship in which my desires lay. Here in this new dimensional experience VR effectively plays with the sensory-haptic experience of the player, creating a space where:

...images can become places, built spaces which are not yet places, reveal as such, and real places express multiple, unfolded dimensions, enabling new and complex readings of space (Moujan, 2011, p. 175).

In essence, through this discussion I understand that in the neo-baroque, mixed-space installations I create in my practice, images, places, and events can be explored through a playful use of video game forms. Further, that these 'mixed-space' installations can be interrogated not only by the design of my VR spaces, but by the actions and experience of the 'players' of these spaces. In relation to the military-entertainment complex I discussed earlier, VR is clearly afforded an opportunity to allow viewers to digitally and experientially consider physical sites and acts of violence. However, in intersecting the critical and reflective space of contemporary art with this militainment-bred desire through virtual reality, my practice can generate new perspectives on a daunting future in which VR replicates the actions of combat. Another artist who also explores this intersection between militainment, VR and video game aesthetics, is German artist Harun Farocki.

Harun Farocki

Artist and experimental film maker Harun Farocki (1944-2014) created works that addressed the violence of conflict present in screen-media since the Vietnam War. However, it was only in the last decade, before his death in 2014 that he began working with images of violence found in video games and VR. One of Farocki's last works, *Serious Games I: Watson is Down* (2009), is a documentary that depicts U.S. combat veterans using VR technology to relive their experiences of the Iraq War (2003-2011).

Farocki's work consists of a two-channel video projection loop that shows U.S. VR training facilities constructed to prepare soldiers for operations in Iraq and Afghanistan (Grinberg, 2016). In one channel of the film, a 3D rendered Iraqi town is shown; on the other, an Iraq War veteran is seen wearing a VR headset (figure 8). The two channels alternate between the two views, accompanied by subtitles that occasionally describe the events unfolding on the opposite channel.

At one point, we see an instructor place a virtual *IED* (improvised explosive device) somewhere in the virtual Iraqi town. After several minutes, this then explodes, turning the street into a debris field of bodies and smoke. At this point, the veteran says “I can’t do this anymore” while he takes off the VR headset. Farocki’s work powerfully juxtaposes the virtual and real views, pointing out the clear difficulty veterans can have reliving the experiences of combat, even in low-resolution virtual form (Grinberg, 2016).

This work of Farocki’s is of key importance to this project because it can prompt viewers to ask why such simulations of war are even necessary. Obviously, this is a key question for my own research as I search for a clearer understanding of my motivations for watching, playing and seeking out ‘entertainment’ from representations of war and violence. The VR simulations that Farocki’s work depicts were designed by the U.S. Army, but are now far exceeded technologically by commercially available VR software and hardware. While this fact has alarming potential given the veteran’s inability to engage with even the more rudimentary imagery, the idea of exploring already lived events and spaces through a ‘mixed-space’ nonetheless remains compelling to me as a gamer and an artist. As I have discussed earlier, this contradiction has emerged as a central concern in my practice, as exploring past conflict through simulation is how I connect my reality with that of others. Although Farocki examines this idea through his documentary, obviously he does not provide audiences with a VR or ‘mixed-reality’ space to interrogate the environment for themselves, Instead, this is where I understand my own practice as operating. As I will discuss below, the VR artworks of this project aim to give audiences opportunities to explore combat environments for themselves in ways that Farocki’s work, or even militainment, fails to do. Further, in the next chapter I will address how I think of this exploration as allowing the viewer/player to critically contemplate how combat representations function conceptually.

Chapter 3

Creative Works

As I have discussed above, this project investigates my desire to engage with militainment through an auto-ethnographic, practice-led methodology that uses processes of détournement. In this chapter, I will discuss and analyse my creative practice in relation to these methods and interpretive paradigms. In my practice, my play with the forms and content of militainment intersects with my experimentation with photogrammetry, motion-capture and 3D animation to produce the artworks that are included in the culminating exhibition of this research. For me these works, and the experiments that came before them, play a definitive role in my further understanding the dichotomous relationship I have with combat spaces, as well as conceptually and experientially giving form to the ideas I have discussed in this exegesis. In this chapter I will first discuss these experiments that determined the critical creative processes in my practice, before discussing the exhibited artworks in an analysis of their processes, form, content and context. In conclusion, I will then discuss the final exhibition as a whole and how this informs a body of creative works that function as practice-led research.

Battle at Gallipoli and Militainment-Me

After my Honours research, there was a series of significant changes in my practice. My newly found interest in the technological process of photogrammetry, as well as the previously discussed adoption of an auto-ethnographic methodology, has shifted my understanding of the paradoxical relationship I have with militainment. Previously, I had been absorbed with constructing artworks around the experience of others and had not realised the need for critical analysis of the relationship between myself and these militainment images to take place in my work. In initial discussions with peers and research supervisors in reflective artist critiques, questions arose about who was being featured in the drawings within my creative practice. Was I depicting the soldiers that had fought in the historic battles? Or was it myself playing out these roles in the militainment I was engaged with? Reflecting on those questions was a defining moment within my project, as I considered that in my drawings, I was depicting the former. For example, my drawing titled *Battle at Gallipoli* (Figure 9) depicts Turkish troops charging the Australian defences at Quinn's Post, Gallipoli, 1915. Within this image it is clear the faces of the Turkish soldiers are all



Figure 9: Lobwein, Guy. (2018) *Battle at Gallipoli* [Pen and ink on paper, digital colouring]. Detail.

portrayed with the same cartoonish-complexion. I believe this as due to my contradictory relationship with militainment. In understanding the conflict as traumatic to the soldiers that fought, I feel uneasy towards drawing the soldiers of this historical battle in a photo-realistic style. As I have no experience of combat's reality and do not fully understand the Turkish soldiers suffering, I opt to instead represent them in a cartoonish nature, which reflects my experience of combat through militainment. Realising the conceptual significance of this previously overlooked decision caused a crucial shift in how I thought of my practice and forced me to acknowledge my position in my own practice in a new way. This was given further weight in the context of the other militainment I was engaged in at the time: EA's *Battlefield 1* (2017), and the developer's addition of ANZAC and Turkish forces.

While *Battlefield 1* uses high-resolution graphics, physics simulators and realistic light rendering to recreate the horrors of the First World War, the characters and objects in-game are falsified from actuality through their immersion-breaking capability to *glitch* and *morph* (Klein, 2004). In Norman Klein's *The Vatican to Vegas*, Klein describes cartoons and animation as a way to

“...convert terror into a friendly ride” (2004, p. 14). It is through this ability that cartoons have evolved with an openness to the illusions embedded within the special effects of film making. Klein states, “...animation is a string of instants when you see that this could not be real. It builds stories from when both illusion and the ‘real’ are trapped inside the same gesture...” (2004, p. 249). Often in *Battlefield 1*, players will experience moments in which characters or objects glitch through the unsolid virtual environments or characters will stretch and morph due to a physics simulation error (Apperley, 2013). This breaks the illusion of the game and reveals the complex algorithms and processes that are taking place beneath the digital world (Apperley, 2013; Haig, 2018). *Battle at Gallipoli* highlights this notion, taking my experience of playing as historic soldiers in-game and morphing them into a mass of simplified, cartoon figures. It is through this conversion of *Battlefield 1* into a cartoon image that I accept my experience of combat as one of engaging with illusions. Therefore, I understand that when I depict conflict in my work, I am drawing from my extensive illusionary experience with the motions, actions and forms of militainment. Crucially, this is where I began to engage with auto-ethnographic practice, considering these figures as self-portraits of myself playing out these scenarios. This led to significant experimentation with self-portraiture and the photogrammetry scans of myself, such as in my VR installation *Militainment-Me* (2018).

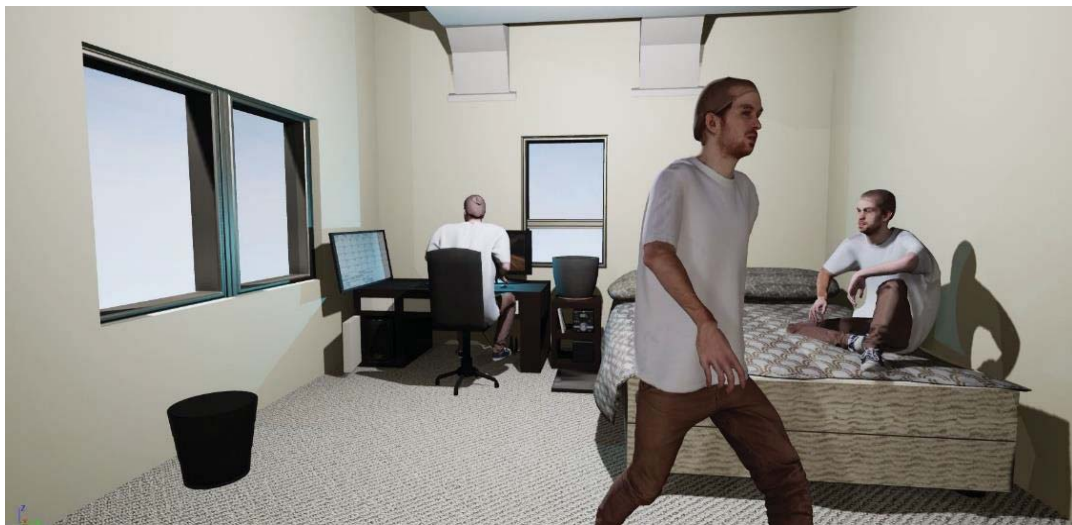


Figure 10: Lobwein, Guy. (2018) *Militainment-Me* [Virtual reality installation, Oculus Rift headset]. Interior render.

In my VR installation titled *Militainment-Me*, I used photographs taken from my home in Brisbane to construct a traversable 3D model of the building (figure 10). However, I also included détourned objects (3D models) of military games that I had purchased from Unreal Engine 4

asset-makers, as well as 3D versions of myself in military uniforms. Viewers experienced a VR installation that explored an in-between space of domesticity and militainment. Searchlights, sandbags and destroyed segments of walls are juxtaposed against the simplicity of suburban architecture. Audiences are invited to explore this eerie collage of militainment and everyday life through the use of an interactive flashlight, as the house is shrouded in darkness. This aimed to reflect on my secret military passions, of which I keep separate from my everyday life. This idea — juxtaposing domestic spaces with the objects of militainment — was a concept I had previously explored within my Honours in a work titled *A Walk to Jones Park* (2017). In this work, I injected a local park I frequently visited with elements of militainment (figure 11), populating it with armoured personnel carriers and attack helicopters. This allowed audiences to consider how the everyday spaces can drastically change by the intrusion of military vehicles. However, *A Walk to Jones Park* failed to interrogate my relationship to these vehicles as audience members had no reference to my reality or the context of these military machines. As well, the park being minimal in its use of contextual and symbolic forms, could have been any green park and not specifically the dog park I consistently visited. Through utilising auto-ethnography, *Militainment-Me* aimed to reframe this concept through self-portraiture.



Figure 11: Lobwein, Guy. (2018) *A Walk to Jones Park* [Virtual reality installation, Oculus Rift headset]. Melbourne, VIC: RMIT Gallery

The house found in *Militainment-Me* is populated with 3D photogrammetry scanned characters of myself to recontextualise the work in relation to my consumption of militainment. Created using a high-resolution photogrammetry system (a multi-camera rig with software that uses numerous

photographs to generate a 3D model), these self-portrait scans are high-polycount 3D models that closely-resemble the shapes and complexion of my facial and bodily features. When rigged with a digital skeleton, animated and given basic artificial intelligence, these digital-copies can be set to roam about the virtual house, performing slow repetitive actions drawn from militainment; i.e. crawling, running and shooting. As I worked with the photogrammetry scans and the military objects, I came to a realisation that all of these objects, scans and environments were 3D models as self-portraiture. This became critical to understanding the relationship between myself, my physical everyday life and the digital militainment I engage with. This allows audiences to contemplate on the objects of militainment, the artist and the suburban space through the VR experience as a representation of my desire. This was further reinforced by the installation of this work, which was displayed in a large, white arcade cabinet (figure 12).

This physical framing device was also intended as a conceptual one, as I was reminiscing about the times in childhood where I would play arcade games before movies, often involving games similar to Sega's *Desert Tank* (1994); prompting viewers to consider this work in context to these early forms of militainment. In this way, the choice was auto-ethnographic and provided viewers with a form that framed the artwork within specific spaces where militainment can be found. Through exploring these elements, *Militainment-me* provided a steppingstone of creative processes in which I could then build on through further experimentation with photogrammetry

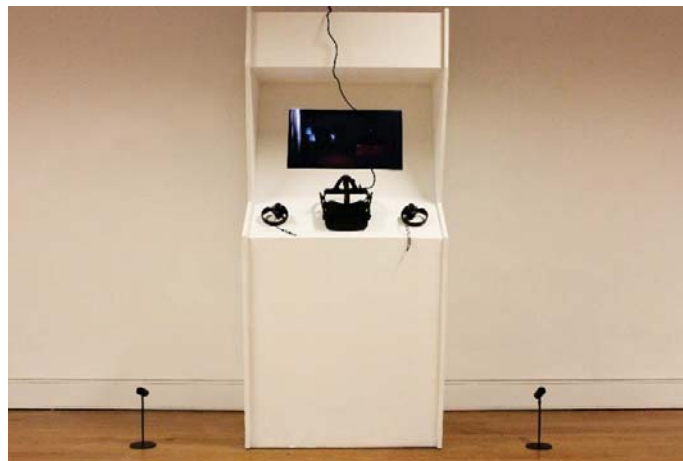


Figure 12: Lobwein, Guy. (2018) *Militainment-Me* [Virtual reality installation, Oculus Rift headset]. Interior render.

and self-portraiture. These became intrinsic to my work *Virtual Karelia*, which was created on international residency in Karelia, Russia.

Karelian International Art Residency and VR in Digital Cultural Heritage

My work *Virtual Karelia* (2018) initially started out as an international art residency project. It is important to note that this residency, although initially unrelated, became significantly entwined with my research due to the findings and artworks that I produced. The project was pitched as a way to initiate cultural exchange through a creative practice; utilising virtual reality technology to respond to the rhythms of life in a regional area of Russia (see supplementary USB or www.guylobwein.com/virtualkarelia). On arriving in northern Russia in June 2018, I immediately started a month-long 1300km tour of Karelian national parks, villages and cultural sites by train, car and boat. Sites included Kivache National Park, the White Sea and Petrozavodsk, the capital of Karelia. However, one site captured my full attention. In hindsight I understand why this location, called Vartiolampi, became so important to the final outcome of this residency, *Virtual Karelia*.



Figure 13: Lobwein, Guy (2018). Vartiolampi Historical Site. [Photograph].

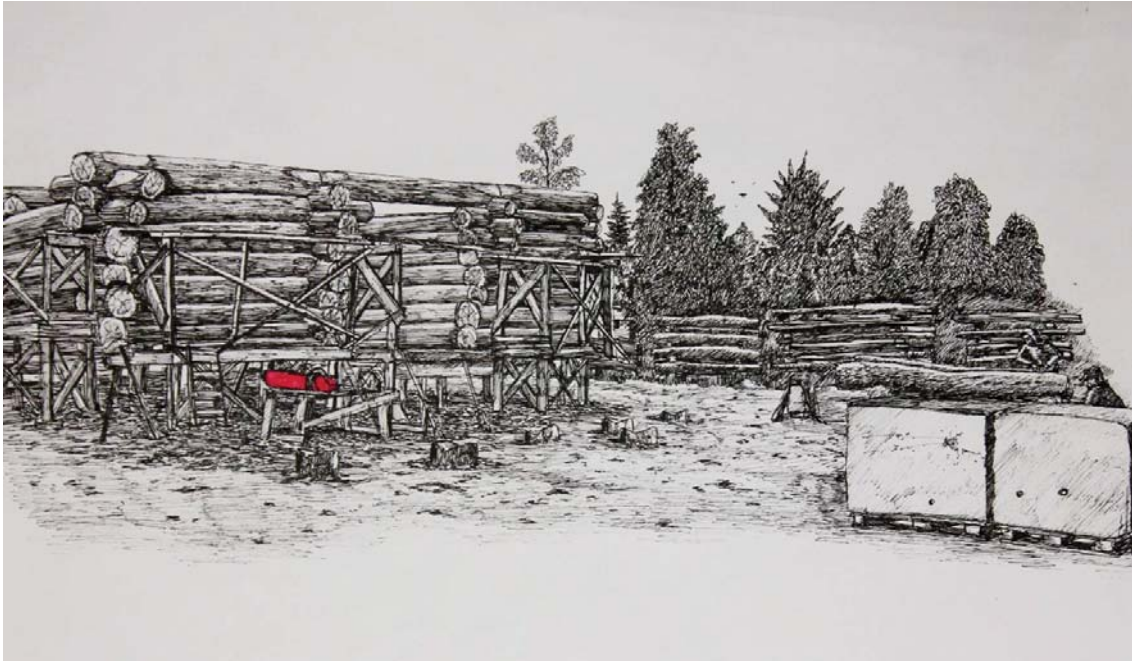


Figure 14: Lobwein, Guy (2018). *Izba in construction*. [Drawing].

As records and sources of the fate of this village have mostly been lost throughout Russian databases, the only information I could retrieve was from the on-site guides and the Paanajarvi National Park history plaques. In using these sources, I learnt the village of Vartiolampi was destroyed in the Second World War by a fire in the Axis retreat from the Karelian-front in 1944 (Paanajarvi National Park, 2013; figure 13). Axis forces had installed a field hospital, named Kommanda-Turra by locals, along a road that had previously been a major trade route between Karelia and Finland. This village is now barely visible except for the small dips in the ground where it had occupied the clearing and represents one of the many destroyed in the Axis invasion of the Soviet Union. However, modern Russian cultural initiatives meant one of the original homes in the Karelian village had been rebuilt to give a clear example of the local architecture and building processes (Paanajarvi National Park, 2013). This palpable sense of history meant that I became extremely attached to not only this village, but the surrounding conflict damaged environment. Because this location existed within the disputed Karelian-Finnish border, access to travellers was strict. Therefore, the village and surrounding land that had endured a fierce battle was extremely well-preserved apart from occasional disturbances from animals, guides, and uncareful tourists.

I found myself wandering these landscapes consistently, detaching from scripted tours whenever I got a spare chance. I explored and mapped out several trench networks, bunkers, hospitals and dugouts. I found soup cans, gas masks, bullet casings, truck wheels and ammo tins. Although rusty and full of holes, the objects told stories of the long wait in-between battles and the landscape reiterated this through marks of foxholes and shell craters. Often, I thought about how each participant in this conflict must have felt; the German and Finnish troops, the Soviet soldiers and the civilians caught in the crossfire. Ultimately, this contradictory process of imaging and empathising with all sides is what drives my practice and my interest in militainment. I imagine these experiences through images I have seen within militainment, in movies such as *Come and See* (1985) and *Ivan's Childhood* (1962), as well as games like *Red Orchestra 2: Heroes of Stalingrad* (2011) and *Company of Heroes 2* (2013). For these reasons, in this residency I experimented with photogrammetry to create 3D traversable spaces and experiences in which I could explore this contradictory relationship.

In the final Karelia work, viewers are able to venture into a 3D digital Karelia that is generated through the method of photogrammetry functioning in a cultural heritage role (Ioannides, Magnenat-Thalmann, and Papagiannakis, 2017). As this process extrapolates on the ideas of *détournement*, I will in this paragraph explain my process. Initially, I took photos of local timber logs — the most common building material in Karelia due to its expansive pine forests — to



Figure 15: Lobwein, Guy (2018). *Izba*. [screen-capture, 3D model].

project onto various 3D cylinders in order to create virtual versions of them. By conversing with a local Russian carpenter who was in the process of building a traditional Karelian house or izba (изба́), I learnt that the buildings hold together with chainsaw cut dovetails that allow logs to intersect and support each other. In understanding this process by documenting his carpentry through my drawing practice (figure 14), I gained knowledge on how to authentically recreate these homes through 3D modelling (figure 15). Using this method of projecting images onto custom 3D shapes, I was able to build entire villages quickly by duplicating my pre-made digital assets of walls, roofs, doorframes, etc. By applying this process of creating general structural assets for Karelian homes to other key features of the worlds such as natural foliage and rocks, I was able to generate entire Karelian environments without the need to scan individual objects. In digital worlds, this more efficient process of duplication allows small teams to construct large environments for low time and financial cost (Ioannides, Magnenat-Thalmann, and Papagiannakis, 2017).

As discussed within *Mixed Reality and Gamification for Cultural Heritage*, projects that create ‘serious games’ — using computer game technology for the benefit of educational and research purposes — often lag behind the multi-million-dollar entertainment industry (Ioannides, Magnenat-Thalmann, and Papagiannakis, 2017, p. 374). As the development teams for multiplayer games are usually much higher in number and acquire larger budgets, the gap “...can be overcome with recent developments in procedural methods that can be used to automatically generate much of the game content, including the actual game world...” (Ioannides, Magnenat-Thalmann, and Papagiannakis, 2017, p. 374). However, I found that with in understanding the traditional processes of building, I was able to create more faithful representations of objects in comparison to when I attempted to construct them without knowledge from local guides, workers and archaeologists. It was through my roles as a practice-led researcher that I was able to construct a digital environment in which viewers could explore a representation of Karelia and consider these historic spaces. However, although this artwork utilised processes from cultural heritage, the final VR artwork is to be read as a work formed through creative practice.



Figure 16: Lobwein, Guy. (2018) *Virtual Karelia* [Virtual reality experience, Oculus Rift headset]. Interior render.

In Chapter 8 of *Mixed Reality and Gamification for Cultural Heritage*, researchers⁵ determine that VR and AR are becoming increasingly more important in the preservation of cultural and natural history (Ioannides, Magnenat-Thalmann and Papagiannakis, 2017, p. 243). Using photogrammetry and 3D scanning, buildings and environments can be preserved and deconstructed to explore various perspectives on cultural knowledge, such as a site's historic past or testing future conservation methods. Using this data, sites can also act as "...a platform for enhancing the learning process, motivating and understanding of certain events and historical elements for the use of students and researchers" (Noh, Sunar and Pan, 2009, p. 50). Therefore, in building a 3D version of Karelian homes and environments, *Virtual Karelia* was approached through a transdisciplinary methodology — combining artistic practice with cultural heritage photogrammetry and digital archaeology — to recreate the destroyed village of Vartiolampi. I think it is critical to say that in operating as distinctively an art project, this work is not cultural heritage but an artistic response to the natural and structural environments of the Karelia. This is an important crossroad in the project as although it shares some methodologies with cultural heritage, the objective of this residency became auto-ethnographic, not ethnographic. The

⁵ Federica Maietti, Roberto Di Giulio, Marcello Balzani, Emanuele Piaia, Marco Medici, and Federico Ferrari. (2017). *Mixed Reality and Gamification for Cultural Heritage*. (1st ed.). Springer, Switzerland.

objective of the final artwork evolved into a personal reflection of these spaces, rather than an ethnographic study of a people, their customs and environment. This is an extremely significant shift in the context of this project because it was in my experiences in the forests around Vartiolampi, that I began to really consider my position as an artist and consumer of militainment.

The objects of conflict, the ammunition tins and boxes that I populate *Virtual Karelia* with are references to my consumerist and historicist compulsions and how the practice contends with the paradoxes I have discussed above. Although my initial residency proposed to explore the rhythms of life in Karelia, during the project my underlying desire for militainment essentially commandeered part of my residency. This desire caused my artistic behaviours to fixate on finding, analysing and creating from the objects of combat historiographies. The neglected battlefield site at Karelia prompted me to consider how I could represent aspects of war that I hadn't seen in militainment; for example, utilitarian objects that physically bore the scars of combat. As in *Militainment Me*, the military objects represented were digital fakes of their real-life counterparts. To take scans of these historic artefacts, I was investigating the objects themselves, and by placing their digital counterparts in the virtual space, I thought of them as surrogates for the unseen bodies that were disfigured, maimed, or even killed and left laying in the now tranquil landscape. This symbolic way of making and thinking meant that *Virtual Karelia* became an important stepping-stone in my practice, reflecting as it did on the difference between militainment objects and images, and the realities of combat itself. This would later be important for works such as *Patton*, which is discussed later in this chapter. In this way, I valued these moments of jouissance when exploring the trenches and finding artefacts, often returning to ask the guides specific questions then researching online about details of the smaller conflicts in relation to the whirlwind of shifting Axis-Soviet frontlines. In the end, the final work became an exploration of my own impulses; a reflection of what happened when I finally came into contact with these sites of conflict.

Virtual Karelia

In the residency's final exhibition titled 'Virtual Karelia' at the Frank Moran Memorial Gallery at Queensland University of Technology, I incorporated over 40 *en-plein-air*⁶ drawings together with the aforementioned VR installation (figure 18). In the VR experience, participants explore 3D representations of multiple sites within the Karelian Oblast. Overall, there are four separate levels in which the viewer uses VR teleportation to traverse the landscapes and interiors. The player can move from an island on the Karelian lake Ozero to several buildings in the small village of Kinerma. The viewer can then teleport to the trenches of Kommanda-Turra and finally to the reconstructed village of Vartiolampi (figure 16). Participants can interact with specific objects that I have created to be interactable, however none of the environments allow total manipulation. Objects have been derived from my photographs in the region, many of them of

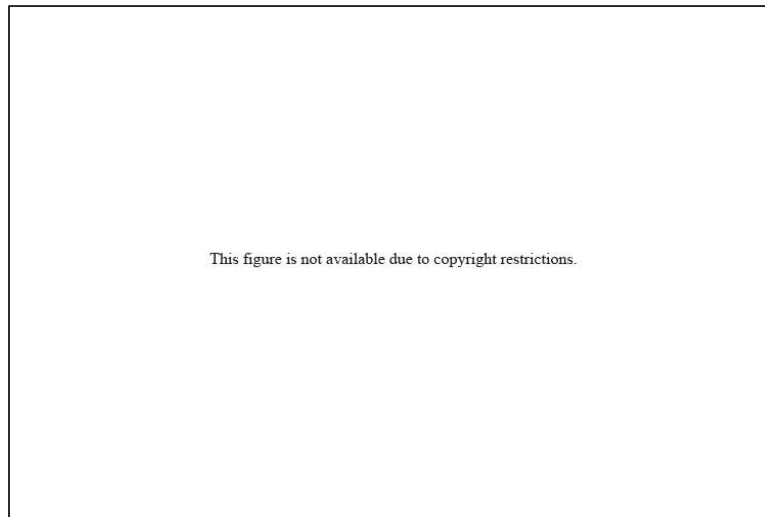


Figure 17: Sachs, Tom. (2003) *Nutsy's* [multi-medium interactive installation, cardboard, Mini-Z racers]. Deutsche Guggenheim, Berlin.

military related or miscellaneous forms that piqued my interest. Some of the objects include an old German issued food tin, a large Soviet flag and a signpost with the village name, Kinerma (Кинерма). What objects are included in the experience are however dependant on my aesthetic, historical and cultural interest in them. I think of this treatment of objects in terms of attraction to material forms and in relation to the work of American artist Tom Sachs.

⁶ The act of creating in open air – Guides, M. (2013) *Art + Paris Impressionist North of Paris and Normandy Along the Seine and Normandy*. Museyon Inc. New York.

Tom Sachs creates works in response to his feelings of desire towards commodified objects and experiences (Kalb, 2017). This approach adopts the notion of *bricolage* — the arrangement and collecting of elements to combine into a new assemblage — as in his interactive installation *Nutsy's* (2002). Here, Sachs created a competitive racetrack for *Mini-Z racers* in which participants would drive the remote-control cars through a course of sculptures and challenges (figure 17). Sculptures made of plywood, foamboard and plaster replicate artworks by Picassos and Brancusi, as well as a 1:25 scale model of Le Corbusier's *Unité d'Habitation*. As Peter Kalb discusses throughout his essay *Tom Sachs's American Bricolage and the revised logic of space travel*, Sachs looks at these objects in response to the overwhelming attitude of ownership within capitalist economies:

American Bricolage in *Nutsy's* produces a sculptural installation that integrates analogue and virtual space, juxtaposes high and mass culture, provides a playground for some of his friends and viewers, and also demonstrates the logic of capitalism being renewed and recreated across the surface of the planet (2017, p. 356).

In essence, *Nutsy's* is a playground or micro-fantasy of Sachs's own desire and social experience for audiences to explore. In relation to *Virtual Karelia*, my own work combines the environments and objects I find interesting into a real-time experience for audiences to traverse and play in. Like *Nutsy's*, *Virtual Karelia* arranges the locations I visited into a micro-world in which participants investigate and engage with specific objects and experiences. This is evident through



Figure 18: Lobwein, Guy. (2018) *Virtual Karelia* [Exhibition, multi-media installation]. Brisbane, Qld: QUT Frank Moran Gallery

my adaption of certain objects, like the wood-chopping station in the village of Vartiolampi in which I spent many hours splitting logs to prepare the fire for a Karelian sauna house. In correlation, it is also these saunas which allow participants to teleport to different locations. This experience therefore culminates in a combination of methodologies, intersecting cultural heritage, contemporary art processes, game-design, object détournement and bricolage. Through reflecting on the exhibition as a whole, and how the VR and drawing works could be read in relation to each other, these key intersections produced new understanding of my paradoxical relationship with militainment, specifically in reframing my previous installation decisions in *Militainment-Me*.

As mentioned, spread out around the room were the drawings produced on the residency, including several of the village of Vartiolampi (figure 18). These pen and ink drawings helped to contextualise the experience within *Virtual Karelia*, as some of the drawings included various objects that appeared within the experience. This is clear in figure 18 where I sketched the locations of the village buildings and farm areas with information from various guides. On the ground in front of the VR installation is a line-marked area; a safety choice rather than an aesthetical one. In keeping out of this area, other viewers are kept safe, as both they and the headset-wearing viewer are effectively blind to the hazards of the intersecting virtual and physical spaces. The installation was also invigilated by a trained technician, as this hazard, as well as potential nausea and claustrophobia are inherent in the emerging technology. This invigilation was also intended to troubleshoot any technical issues with participant navigation within the VR environment. As a still-emerging technology, created by myself as a sole practitioner, some of these malfunctions can be anticipated, but the larger conceptual and experiential implications of these errors for participants will be further discussed in a later section. The VR headset cable was also tensioned by a retractable cord using a spring rotary system common to retractable clothes lines. This aided in keeping the participant free from tangles in the headset and posing a tripping hazard. In the final installation of *Virtual Karelia*, I opted to use the arcade cabinet from my previous work *Militainment-Me* to house the computer and monitor. In retrospect, such a link between traditional arcade games and game-based militainment had not been made in the work, and so this choice could prompt confused readings of the work. These potential complications and diversions from my initial project aim — to explore my paradoxical relationship with militainment — prompted further questions of my practice: why was the medium of VR so intrinsic to my approach to

practice? Responding to this question opened up new ways of experimenting that culminated in creation of the series titled *Stolen Valour I-III* (2019).

Stolen Valour

In *Stolen Valour I-III*, I decided to further explore the potential of the 3D scans I had previously captured for my work *Militainment-Me* (see supplementary USB or www.guylobwein.com/stolenvallour). In Blender, the primary 3D modelling program I use for digital sculpting and building, I began playing with armatures of the digitally-rigged characters of myself in combat uniforms. Echoing my childhood memories of manipulating G.I. Joes and military action figures to re-enact my favourite battles, I started positioning the scans into the action-poses from famous photographs of conflict (figure 19). This included famous scenes like



Figure 19: Lobwein, Guy. (2018) *Stolen Valour Experiment* [HD video, 3D animation, infinite loop]. Brisbane, Qld: QUT Frank Moran Gallery



Figure 20: Rosenthal, J. (1945). *Raising the Flag on Iwo Jima*. the Associated Press. Retrieved from https://en.wikipedia.org/wiki/Raising_the_Flag_on_Iwo_Jima

the flag-raising on Subarachi, Iwo-Jima 1945 (figure 20) and an Australian soldier carrying a wounded comrade from the Battle of the Nek at Gallipoli, 1915. As well as these poses, I replicated stills from iconic scenes from my favourite movies, such as the bar shoot-out from *Inglorious Bastards* (2007) by director Quentin Tarantino. The characters were then placed in an ambivalent void space, surrounded by darkness with only their body language to charade the iconic scenes. These scenes, rendered with a digital camera that circled the 3D scenes in a full 360-degree pan, were then spliced together with other scenes in two separate videos. These two videos were displayed on two opposing 48" monitors during installation testing, in order to investigate the symbolic juxtaposition of real and represented combat.

In compiling represented conflict with scenes of the real combat through digital self-portraiture, *Stolen Valour I-III* draws on the ideas of combat simulation in contemporary philosophical theory. This was an extrapolation of Jean Baudrillard's theory of the hyperreal. The theory of hyperreality, as discussed by Jean Baudrillard in his collection of essays' *The Gulf War did not take place*, is described as the inability to distinguish the experience of reality from a simulation of it (Baudrillard, 1995). To Baudrillard, the condition first manifested during the 1991 Gulf War. For the first time, the invasion of a foreign country was televised like a sports game, a 24-hour screen-based spectacle. With a constant live-feed of the invasion of Kuwait, viewers could watch the war unfold in real-time, with glowing sparks and explosions intertwined with commercials and weather broadcasts (Baudrillard, 1995). In the televising of the conflict, Baudrillard believed the reality of war had become blurred with its depiction on the screen and had become commercialised through its marriage with television formalities:

...we have created a gigantic apparatus of simulation which allows us to pass to the act 'in vitro' (this is true even of pro-creation). We prefer the exile of the virtual, of which television is the universal mirror, to the catastrophe of the real (Baudrillard, 1995, p. 28).

In this regard, Baudrillard believed war was becoming a hyperreality and a ubiquitous spectacle. In combination with this comes Baudrillard's critique of societal spectacle through his theory of *simulacra*. While my use of photogrammetry offers another opportunity to connect with theories of the *simulacrum*, these ideas lay beyond the scope of this research and could be expanded on in further research. Instead, to focus on militainment, as previously mentioned, Roger Stahl argues

that militaristic spectacle went beyond representation, and instead brought a war-time narrative to U.S. citizens in ways that blurred the boundaries between the home front and the battlefield (Stahl, 2006). But within *Stolen Valour I-III* did not want to only confront these aspects of spectacle as informed by Debord, Stahl and Baudrillard, but also the paradoxical relationship that continuously questions my moral position on these discourses. This desire explored through *Stolen Valour I-III* is one of both understanding and guilt. I am ashamed to re-enact something so violent and barbaric through video games and film, however I find compulsively driven to engage with this content; yet again I contradict myself by not wanting to leave my civilian life to join military forces. Through this work I wanted to target this guilty underbelly in my ego. To do this, the audio component of the work was détourned from pop cultural content that engaged with guilt similar to the guilt that I felt.

‘Stolen Valour’ viral videos are small clips of under 10 minutes in which real military personnel catch out uniformed imposters and shame them in public by shouting “stolen valour” and then promptly lecturing the individual on the disrespectful nature of their activity (Willsey, 2018). In these videos, the accuser (most commonly an ex-military or currently-serving soldier) finds a discrepancy in the uniform being worn by a possible imposter. After finding the mistake, the accuser then confronts the imposter claiming they have stolen valour from real soldiers and from those who died on battlefields such as Iraq or Afghanistan. This was a crime in the U.S. from 2006-2012, known as *The Stolen Valor Act*. This law meant that any persons unauthorised to wear military medals or decorations, and was doing so, could be convicted (Smith, 2012). This law was found to be an abridgement of the First Amendment and was removed in 2012 (Smith, 2012). However, the video-captured evidence of soldiers and citizens taking this law into their own hands has become a central part of my exploration of guilt in my militainment tendencies.

The public shaming of these imposters causes these videos to be incredibly uncomfortable. As these imposters usually try and find excuses for their mistakes, the videos become even more uncomfortable as the accuser usually insults and frames the imposter as a criminal (Willsey, 2018). In watching these videos, I felt as though my shame of enjoying militainment was similar to the guilt I saw expressed by stolen valour perpetrators. I therefore decided to reflect this shame myself by appropriating the abusive audio of the ex or current military personnel and overlaying

it over the videos. In this way, the work focuses on an ambivalent shaming of myself for performing and playing digital war in a uniform when I have not done so in reality. At the same time as this very personal aspect of the work, I was also interested in confronting the problematic nature of a military complex that is so entwined with Western entertainment.

In wearing the uniforms of Gulf War combatants in *Stolen Valour I-III*, the work explores the glorification of military dress in western society specifically relating to middle-east conflicts such as Iraq and Kuwait. As someone who doesn't remember a time when US-led, coalition troops were not active in the middle east, this work is both responding too and meditating on the images of conflict that have been perpetuated through the Western military-entertainment-complex. In films and games such as *American Sniper* (2014), *Green Zone* (2010) and *Battlefield 3* (2016), the narrative often follows a brave American hero and saviour in a story of defeating crazed Islamic terrorists who plants roadside bombs and kills innocent civilians (Wilz, 2010). However, there are some examples of militainment that present an anti-war narrative such as the mini-series *Generation Kill* (2008) and influentially to this project, *Jarhead* (2005). *Jarhead* is the fictional story of U.S. Marine sniper Anthony Swofford who joins the military when becoming indecisive about his future. He is deployed in the first Gulf War and throughout the entire film is chasing his desire to kill (Wilz, 2010). *Jarhead*, although not critically acclaimed, is unique as it interrogates the indoctrinating ability in the military culture surrounding war (Wilz, 2010). As Kelly Wilz discusses in *Rehumanization through Reflective Oscillation in Jarhead*, the film is a response to the celebration of anti-war films by young military personnel:

[t]hrough Swofford, we too become witnesses, as we discover a film more concerned with critiquing war culture than with becoming susceptible to military pornographic cooptation. We see a film more interested in bridging differences between heroes and enemies than in creating them (2010, p. 588).

As argued by Wilz, films like *Full Metal Jacket* (1987) and *Apocalypse Now* (1979), although shocking to some members of audiences, become like pornography for military personnel and enthusiasts through showcasing the terrific and terrible capabilities of the fighting man. *Jarhead* avoids becoming this type of film and instead focuses on the suspense in waiting for the satisfying shootout most pop-culture war films end with (Wilz, 2010). It was through understanding *Jarhead* and militainment like it that I developed more ambivalent forms for my work to avoid

potentially being read as military pornography. I decided to convert my original two films into single-scenario infinite loops. For *Stolen Valour I*, I chose an elaborate looping charge of five versions of myself clad in desert U.S. military camouflage fatigues (figure 21). For *Stolen Valour II*, I chose an animated loop of myself dressed as an Iraqi, squirming as if wounded on a battlefield. What drew me to these two comparative scenes was the narratives viewers could establish from them. The U.S. troops, seemingly on a perpetual assault towards an invisible enemy while the Iraqi soldier painfully awaits a death that never comes. In highlighting these specific motions in the digital self-portraits rather than the weapons and environments of militainment, the works formed a more ambivalent and complacent reading for viewers. This is through juxtaposition within their installation (figure 26), in which audiences are confronted with the baroque ideals of triumph (the heroic charge) and death (the wounded soldier). With the détourned audio of the accusers in *Stolen Valour* videos overlaid, these baroque ideals, my performance and the uniforms of the Iraq War combatants are then altogether, shamed. In doing this, my goal with these works was publicly air my guilt in playing out these conflicts through militainment, as well as confronting and subverting the complex that allowed me to do so. This is similar to DeLappe's work, where militainment's purpose is undermined through his text-based performance. Therefore, in my final iteration of the series, *Stolen Valour III*, I combined all of these elements into one work.

Stolen Valour III combines various scans of myself performing actions of militainment into a 3D real-time environment that is explored by a self-roaming computer player. When installed, this work also includes an audio soundtrack détourned from the 1970 film *Patton*, slowed down to 25% speed. *Stolen Valour III* aims to connect the two previous iterations of the *Stolen Valour* series through a similar void-space in which various individual looping actions of myself performing militainment were displayed in a constellation-like arrangement. Throughout the constellation, the self-portraits play various looping animations that were sourced from the Adobe animation library, Mixamo. With the animations titled *death_by_headshot*, *sprinting_with_rifle* and *throwing_grenade_underarm*, this work focused on consolidating the motions of militainment into one space where the actions are frozen in position, restricting them from interacting together as they would in games like *Call of Duty: Modern Warfare* (2019). This is

accomplished through coding the digital portraits to be without navigational properties. In this way, these motions are locked to float away from the battlegrounds that contextualise them.

As per from my previous discussion of militainment, the motions from films and games are part of a complex that consistently leaves indoctrinated youth with false perspectives about combat (Wilz, 2010). In my works, I wanted to isolate these motions from their weapons, tools and environments; alienating them from the combat they are usually associated within. *Stolen Valour III* however, does not contain audio from *Stolen Valour* videos, leaving it without this element of shaming. This is instead to focus on framing these motions away from the tools, environments and machines of war that they are so closely attached too. In doing this, I wanted to draw attention to the rigid and tactical motions that the body performs in combat; actions that can be found in a movie such as *Patton* (1970) and my virtual reality work of the same name, *Patton* (2019).



Figure 21: Lobwein, Guy. (2018) *Stolen Valour II* [HD video, 3D animation, infinite loop]. Brisbane, Qld: QUT Frank Moran Gallery

Patton

Patton is virtual reality installation that digitally recreates a battle that takes place in the film *Patton* (1970) using self-portraiture and photogrammetry (see supplementary USB or www.guylobwein.com/patton). When I was growing up as a young adult, I would watch war films while I drew large baroque images for extraordinarily long hours in my bedroom. Consequently, the motifs within each film repeated throughout my drawing works, such as the aforementioned *Battle at Gallipoli*. *Patton* (1970) became one of my favourite instances of militainment due to the long drawn out battle scenes, the multiple perspective film-making and George C. Scott's portrayal of the American general. Other films such as *The Dirty Dozen* (1967), *Kelly's Heroes* (1970) and *Stalingrad* (1993) had a similar effect on me, however it was the dialogue and performance of the general that consistently brought me back:

[t]wo-thousand years ago, I was here. You don't believe me, do you, Brad? You know what the poet said:

Through the travail of ages,
Midst the pomp and toils of war,
Have I fought and strove and perished
Countless times upon a star.

As if through a glass, and darkly
The age-old strife I see—
Where I fought in many guises, many names—
but always me.

Do you know who the poet was? Me. – (Coppola, North, Schaffner, McCarthy, 1970).

Reflecting on this quote from the film I can see why the film resonated with my younger self. Through replicating the battles of history through video games I was essentially digitally reincarnating myself in these histographies. But, in repeatedly interacting and playing out warfare — its motions and tactics — I simultaneously recreated its horrors. This relates back to the question of where I sit in relation to these representations, as my anti-war morals are in contradiction with the actions in these events. Considering this, my earliest memory of re-enacting battles within video games was in a feature that some games included: the sandbox.

Sandbox video games can either be a feature in a video game or the premise of the video game itself, such as in *Minecraft* (2011) or the *Sims City* series (1989-2013). In sandbox games, players can create their own levels and scenarios using the in-game characters, environmental libraries and pre-made assets. As previously mentioned within *Virtual Karelia*, the idea of using a pre-made library of assets to draw from is not uncommon within the video game industry. The very first game I owned that included this feature, *Age of Empire II: Age of Kings* (1999), allowed me to build versions of my favourite medieval battles from the *Lord of Rings* (2001), *Kingdom of Heaven* (2005) and *Braveheart* (1995). However, I could only ever create moderately similar versions of these battles due to the limitations of the in-game assets, environments and scale. Until I could purchase games that were directly developed for the purpose of re-enacting certain battles, such as *Battle for Middle-Earth* (2004) which included all of the battles from *Lord of the Rings*, I would use other games with similar assets to create the events. *Halo 3* (2007), *Far Cry 2* (2008) and *Empire: Total War* (2009) all included developer tools to create maps in which I could détourn assets from the game to try and mix the filmic imagery and my historical or literature-based knowledge into one simulation. This can be seen in Figure 22, where a player has used in-game assets to create a détourned version of a castle from *Lord of the Rings*. In this way, I used

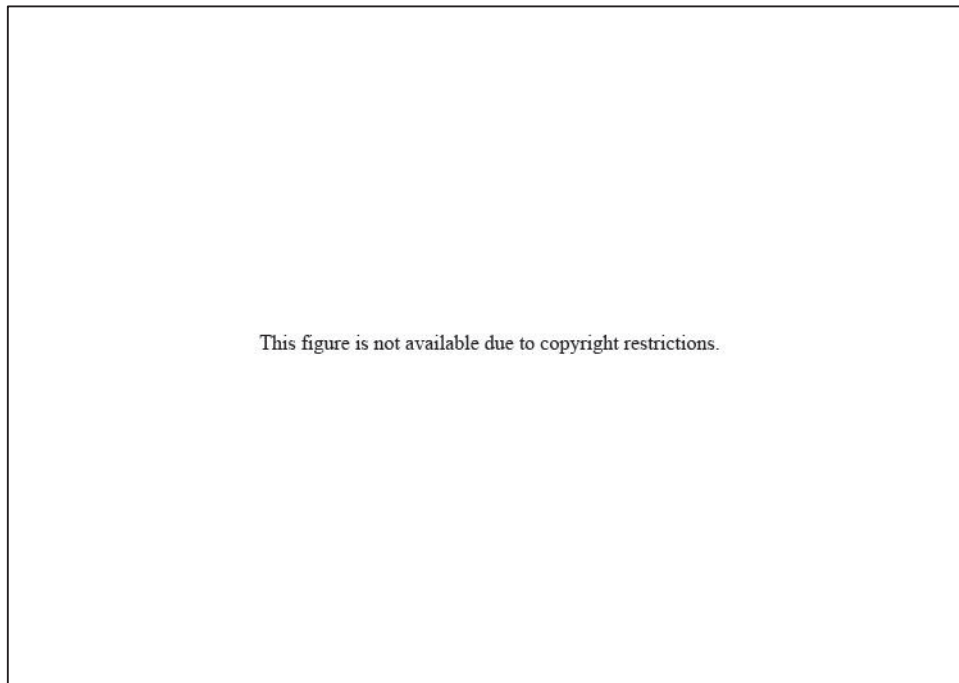


Figure 22: Garrarufa. (2010). *Minas_Tirith_2.21.fc2map* [multiplayer map]. Retrieved from <https://www.moddb.com/addons/minas-tirith-far-cry-2>

the in-game assets to creatively combine elements into a new version of these filmic historical battles. By doing this, I was trying to understand the experiences, fictional or factual, to re-enact them without having to engage in the physical activities that I see as immoral. This drive still arises when I find myself still repeating this process today within modern simulators such as *Hearts of Iron IV* (2016), a real-time strategy game in which players can take on the role of any leader of all countries during the Second World War.

The strategy simulator is incredibly in-depth, allowing players to control entire logistical trains, political parties and army manoeuvres. In understanding these skills, players can recreate history and entirely change the outcomes of the Second World War. It was during playing a game of *Hearts of Iron IV* that I noticed myself specifically re-enacting Patton's battle at El Guettar, a decisive battle that occurred in Tunisia, 1943, during Axis commander Erwin Rommel's westward push against the U.S. invasion of North Africa. I had watched this battle recreated many times in the 1970 film *Patton*. Using historically inaccurate 1960's tanks, the Axis forces are ambushed by General Patton's US II Corps in a double envelopment, causing the ranks to break and heavy casualties among Rommel's Afrika Korps (Zaloga, 2011). In trying to recreate this battle in *Hearts of Iron IV* with another online player and with a computer AI, I wasn't satisfied with my experience as the limitations of the game did not permit me to view the battle from



Figure 23: Lobwein, Guy. (2019) *Patton* [Virtual reality installation, Oculus Rift headset]. Interior render.

Patton's perspective. This lust for a better recreation incited me to recreate the battle using the new experimental processes I had learnt on my Karelian residency.

Using photogrammetry and digital topography programs, *Patton* draws on a combination of creative techniques to reproduce the Battle of El Guettar. I first tried sculpting the terrain topography with digital brushes in reference to the film stills, but in using this time-consuming process the outcome was cartoonish and unrealistic. Instead, I wanted to approach this auto-ethnographic work with processes that textured the landscape with the same detail that my photogrammetry self-portraits possessed. I therefore used a method of topographical mapping, downloading NASA JPL satellite data from the open-source website *OpenTopography*. In first finding the battles filming location — in *Spanish Hollywood*, north of Almeria, Spain — I then requested a topographical scan from the site and extracted this data into *World Machine*, a program designed to generate large scale environments that include the effects of erosion (Almerian, 2010). This results in a similar aesthetic to that of Pailthorpe's work, *MQ-9 Reaper I*, where real topography was digitally scanned with satellite images into a 3D environment. In refining the environment through this program, I was able to upload the data into the landscape editor of Unreal Engine 4, which then allowed me to add smaller assets such as rocks, sand, gravel and grass onto its 3D surface. After I finished the image texturing and foliage of the map, I composed the lighting of the scene by adjusting the occlusion, reflection and shadow values. To further enhance the realism, I digitally modelled several key positions and foxholes that are seen in the 1970s film and populated them with photogrammetry self-portraits in U.S. and Axis uniforms, such as those discussed in *Militainment-Me*.

In détourning Axis and Allied uniforms sourced from various re-enacting websites, I was able to duplicate versions of myself in their uniforms (figure 1) and using a VR plugin, added weapons, tanks and artillery effects for the participant to interact with (figure 23). As well as this, I used motion capture to recreate the actions of George C. Scott's performance and applied it to scanned version of myself in Patton's uniform. As I will later discuss in relation to my work *Mission Accomplished*, this motion capture data was used to create a 2D video that juxtaposes footage from the filmic battle against in-game rendered footage of the battle in my VR world. This film plays on the installation screen while VR participants experience the simulated Battle of El

Guettar. In combining these processes, participants are offered to experience a mixed-space version of the battle, in which the theoretical fields of video game aesthetics and militainment can be subverted.

Within *Patton*, viewers are thrust into a virtual looping recreation of the Battle of El Guettar in which images from the original film have been combined with the physical qualities, actions and objects of the real experience. Participants are able to pick-up a loaded WW2 submachine gun and open fire at my Axis-uniformed self-portraits. As well, a Second World War radio allows users to drop artillery fire on the oncoming tanks and fly military planes over the battlefield. Here, as discussed in relation to Moujan's writings, the plasticity of the virtual is mixed with the motions and movements of the physical real (Moujan, 2011). Users perform the actions of combat in a non-physically harmful way, but nevertheless act out the actions that occurred at El Guettar in 1943, as well as the performance in the 1970 film. This combination allows this work to sit in-between a historical realm and its re-representation; linking the two in a mixed-space experience. In this domain participants can contemplate the sandbox recreation as a space that although not entirely interactable, mirrors the façade presented by Hollywood militainment through its goofy death animations and large fireball explosions, inciting them to perform the actions of real WW2 soldiers. In exploring these notions, *Patton* exists to reflect on my relationship with recreating battles with what tools are available to small budget game design.

As discussed previously, small game development teams are susceptible to many design and gameplay problems that are avoided in larger budgeted games (Ioannides, Magnenat-Thalmann, and Papagiannakis, 2017, p. 374). These issues, such as glitches and other computational bugs can result in various gameplay failures. For example, in *Patton* problems can occur where a player may not be able to pick-up an object, these glitches as argued by Thomas Apperley in *The Body of the Gamer: Game Art and Gestural Excess* (2013), can reveal the background processes of the development of the virtual worlds, and can create interesting exploratory moments, such as my experience described previously in the *Simpsons: Hit and Run* game. In working within the limitations of my micro-budget project, *Patton* embraces the faults that many large videogames would try to eliminate or hide from players. As discussed in *Battle at Gallipoli*, these glitches allow the viewer to see the VR representation as constructed, and in doing so an opportunity is

created to subvert the entertainment intention of militainment. For example, although *Patton* limits the player's movement to a small observation post amidst the larger VR battle, the glitches (including a gun that falls through the virtual floor, and dead bodies that contort in impossible poses) mock the high-budget entertainment value of other militainment that permeates my civilian life. This is important because in growing up with militainment, this desire to recreate such violence has left me ambivalent in my relationship to military histories, artefacts, and screen-culture. Subverting such militainment in VR allows me to reflect on and represent the moral paradoxes of using combat as entertainment, an idea further represented through the use of my self-portrait as the face of every combatant in the artwork. My ambivalence is compounded by an arguably shared concern that future VR militainment may not allow such moral reflection, and instead could further entwine consumers of such entertainment with the geopolitical theatre of the U.S. For this reason, as an artwork, *Patton* offers a glitchy, uncomfortable, and subversive experience to audiences, with the intention that in such failures and paradoxes, a viewer could reconsider the entertainment value of such media, and ultimately a space can be made for contemplation. In thinking through these ideas, my third VR installation titled *Mission Accomplished* mediates further on my relationship with the theatre of geopolitics, and specifically on the war-time posturing of George W. Bush.

Mission Accomplished

In *Mission Accomplished* (2019), viewers can observe an animation of myself acting as Bush at his 2003 speech aboard the aircraft carrier USS Abraham Lincoln (figure 25) (see supplementary USB or www.guylobwein.com/missionaccomplished). Viewers are then invited to adopt this role of Bush themselves, putting on the VR HMD, to find themselves at Bush's podium, a prop Texan cowboy hat in front of them, along with four red buttons that each trigger an event on interaction. Pressing each button, viewers are able to make the audience of military service-personnel clap or boo, call in low fly-overs by F-18 fighter jets or even commence the playback of the song *Hail to the Chief*. To the right of podium, a teleprompter scrolls through a transcript of Bush's speech. In interacting in with the VR experience, viewers explore what it was like to be in the position of Bush during this speech. In adopting this position of digitally inhabiting Bush's body, the work offers viewers an experience at the apex of spectacle, inside the famous televisual imagery. In relation to Debord's description of the society of spectacle, this allows viewers to gain new

perspectives on the constructed nature of a speech that has become popularised in culture through its images, symbolism and patriotic rhetoric (1967).

Even though Bush was a pilot during the period of the Vietnam war, serving in the National Guard, he never flew combat missions and his irregular attendance saw him honourably discharged in 1977 (Rountree, 2010). When the September 11 attacks occurred, his role as Commander-in-Chief pivoted to that of a war-time President (Rountree, 2010, p. 80). This was abundantly displayed in the speech aboard the USS Abraham Lincoln (figure 24). Becoming the first President to solo-land a military aircraft aboard an aircraft carrier, Bush presented an image to the public of a combat veteran who knew military equipment just as well as his soldiers (Lyke, 2003). Bush's speech became quickly cemented in popular culture as the 'Mission Accomplished Speech' due to its unironically patriotic images and symbolism (Rountree, 2010). This speech has become of considerable interest in my practice because of these images. In exploring this military space, I wanted to further understand Bush's role to understand this pivotal moment in history.

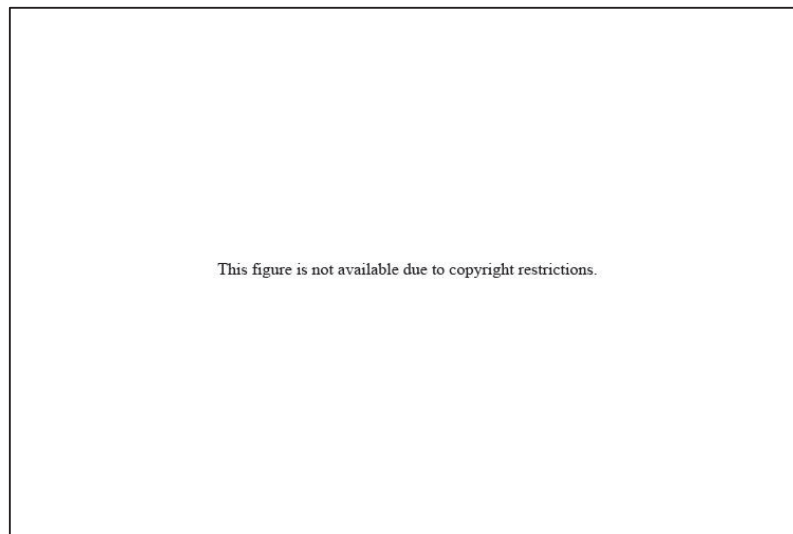


Figure 24: Associated Press. (2003). *President W. Bush declared an end of major combat in Iraq as he speaks aboard the aircraft carrier USS Abraham Lincoln off the California coast on May 2, 2003.* Retrieved from <https://www.bostonglobe.com/news/nation/2018/04/14/bush-was-haunted-his-own-mission-accomplished/E73SdlkXxBfUGsbyXv7ISl/story.html>

Utilising motion capture to re-perform the last 5 minutes of Bush's speech, I — dressed in a motion-capture suit — acted out the specific waves, hand movements and postures of the *Commander-in-Chief*. I then applied this motion-captured data to a photogrammetry self-portrait that had been re-adapted to the black suit Bush was dressed in. Also, I recreated the imagery of the televised broadcast such as the chyron and presidential banners. This became the 2D video

aspect, which was then displayed on a TV monitor mounted along with the VR component. This element of the artwork acts as both a mirror to the participant in the VR and a result of my auto-ethnographic process. In displaying myself within the artwork, viewers are asked to consider my relationship to militainment, as well as their own. Like *Patton*, when entering the VR world viewers are again confronted with many photogrammetry scanned self-portraits of myself playing the roles of the audience, as seen in Figure 25. This use of self-portraiture, also present within my previous artwork *Patton*, also gives rise to further questions about the body, spectacle and representation; and in future research could explore how motion-capture and photogrammetry technologies can allow creative interrogation of these notions. However, given the focus of this Masters research on militainment, these questions lie outside the scope of my research. Instead, I regard my use of self-portraiture primarily as an essential approach to my auto-ethnographic investigation of militainment and my desire. What is important to add to this discussion however, is how *slapstick* comedy unintentionally surfaced in the making of the work (as it also did in my work *Patton*), and how this can allow viewers a conjunctive reading of the work as political *satire*.



Figure 25: Lobwein, Guy. (2019) *Mission Accomplished* [Virtual reality installation, Oculus Rift headset]. Interior render.

Slapstick comedy, an element used in political satire to create humour, is found in *Mission Accomplished* through the giant red buttons, the goofy, unrefined self-portraits, and in the interactivity capabilities of the VR environment. As cultural theorist Leonard Feinberg states, satire is “...a playfully critical distortion of the familiar” (2006, p.7). It adapts cultural and political material to comment on social conventions, and in doing so creates new perspectives

from its blending of humour, such as slapstick comedy, and reality (Grönroos, 2013). As slapstick humour often pertains to exaggerated and unexpected physical movements (Grönroos, 2013), the clumsy and awkward actions a participant is asked to perform in VR can create comedic effects. In fact even in my own testing of this work I found slapstick to be inherently embedded in the VR experience, as VR motion tracking failures, and the unpredictable nature of computer systems, can produce humorous results. As discussed above with regard to *Patton*, because of VR's cutting-edge technology, it still produces glitches that can make objects act bizarrely, folding in on themselves or falling through the virtual terrain. As well as this, the limitations of a micro-budget project make it very difficult to stop these errors from occurring. What I have realised however, is that in accepting these problems and embracing VR's potential for slapstick and satire, the practice can create new meanings and experiences for the participant. In the case of *Mission Accomplished*, by humorously recreating this icon moment of militaristic, pop-cultural history, the work creates an experiential space that can undermine the grandiose nationalism of the original political spectacle. In subverting what is arguably a piece of militainment with satire, the work also draws on my own relationship with militainment. On reflection, I think this use of humour has become a way of confronting my paradoxical relationship with militainment. While this understanding has only been developed at the culmination of this project, I recognise now that it offers an opportunity for much further creative and critical investigation beyond the scope of this project. Further, that in coming to terms with my own seduction by militainment through satire, I can now see that the work also offers participants a space to similarly grapple with these iconic events and reflect on the nature of media spectacle.

Mission Accomplished therefore combines the theoretical focuses of my project into a VR experience which explores the positions that can be performed within militainment. In this way, I reflect on this work as an extrapolation of my desire to gain different perspectives throughout militainment and as a representation of my complicated relationship with it. Both this work and *Patton* essentially exist as a way to quench my frustration in not being able to experience these pivotal events in reality. However, through this mixed-space environment, participants are able to explore a creative intersection between the images of spectacle and physical space of these historic events, allowing the motions and actions to be reflected upon in bodily ways that have been previously unavailable through interacting with a 2D screen. By giving the participant

presence within militainment, I believe *Mission Accomplished*, as well as *Patton*, affords audiences a creative way to rethink their perspectives on the images of spectacle that are ubiquitous in contemporary culture. In understanding that these works operate in conjunction with these images of spectacle, the installation of these works were required to reflect the overlap between 2D and 3D space.

Installation and Exhibition

The final exhibition of this project culminated in *The Warehouse* gallery space at Metro Arts, Brisbane, and comprised the works *Virtual Karelia*, *Stolen Valour I-III*, *Patton* and *Mission Accomplished*. In installing these works, I wanted to form a sense of cohesiveness and aesthetic unity throughout the exhibition. Although the themes in *Virtual Karelia* were slightly different to *Mission Accomplished* and *Patton*, I relied on a homogenous approach to installing the VR equipment. I did not want to separate the virtual reality installations from the 2D video artworks that shared similar such related content and contexts (figure 26), so instead, I aimed to unify them through their formal installation qualities.



Figure 26: Lobwein, Guy. (2019) *Stolen Valour I-III* [Three-channel installation, HD video, infinite loop]. Brisbane, Metro Arts.

Each of the VR works comprised of a monitor installed on a black-painted theatre flat (displaying the 2D video component of the work), while the headset and controllers sat on a white housing box that contained the computers and multiple power cords (figure 27). These two-metre high black-painted theatre flats mirrored the shape of the television screens in *Stolen Valour I-III* (figure 26), giving the VR works a powerful theatrical element to them. Similarly, the portrait 48” monitors in *Stolen Valour I-III* were placed on two-metre high theatre trusses, granting an

immediate unification of the VR and video works through similar height levels. To further link the works, the form of the black rectangle was repeated throughout the exhibition. This shape is reminiscent of the large monolith form in Stanley Kubrick's *2001: A Space Odyssey* (1968), however it is important to also relate to the pre-existing shapes of the gallery. In Figure 26, the portrait monitors closely mirror the three windows behind them, stimulating a reading of them as windows themselves. In combination with the use of theatre equipment, such as trusses and theatre flats, I believe the works therefore become formally linked to the theatrical and baroque qualities of screen-based militainment. This is important when considering how I wanted the VR and 2D works to be read.



Figure 27: Lobwein, Guy. (2019) *Patton* [Virtual reality installation, Oculus Rift headset]. Installation view. Brisbane, Metro Arts.

On reflection now, I believe that the exhibition comprised of two triptychs, one comprising of *Stolen Valour I-III* and the other *Patton, Mission Accomplished* and *Virtual Karelia*. These two triptychs were separated in medium, however were connected through the formal installation qualities and the similar military content. This was achieved through consistently using the processes of photogrammetry and *détournement* throughout the six works, which highlighted my adoption of video game aesthetics within them. As previously discussed, the works universally explore my position as artist and consumer of militainment. In each of these works, I used self-portraiture to occupy multiple roles within the works, allowing audiences to correlate this research to an auto-ethnographic process of reflection on my desire for militainment. However,

on reflection, I do think there are additional ways I could have achieved this, and potentially generated more concise experiences that relayed my contradictorily relationship to audiences through my creative work. In this regard, I believe that in continuing this research, there is potential to find new ways of using virtual reality technology to understand the multiplicity of perspectives within historical frameworks. Using processes such as détournement in correlation with video game aesthetics, I believe this research can be applied to various disciplines, to examine, investigate and further understand their own relationships with 3D spaces that have been reconfigured into 2D screen-based entertainment.

Conclusion

In exploring the contextual field of militainment and my desire to engage with it, this research project has generated a contemporary body of work that investigates the dichotomous relationship I have with conflict and its histories. In using an auto-ethnographic, practice-led methodology, the creative outcomes have dissected my position as both artist and consumer within these overlapping physical and virtual, combat spaces. In discussing the works of aforementioned contemporaries such as Baden Pailthorpe and Harun Farocki, the question of why I engage with conflict has been critically framed in relation to my concerns of militainment's presence in the emerging medium of virtual reality. As understood in relation to the theories of Lacan, Debord, Baudrillard and Stahl, virtual reality can be used to gain understandings of how an obsessive desire to create can generate new perspectives on the military-entertainment-complex of Western societies.

The creative outcomes of this project, along with this reflection on them, represent a turning point in the way I operate as an artist and researcher in regard to my desire for militainment. This turning point has allowed my creative practice to generate perspectives on militainment that previously had not been recreated with VR. Through the artworks *Patton* and *Mission Accomplished*, VR has afforded my practice the ability to creatively reinterpret these pop cultural scenes, allowing audiences, and myself, different understandings of the actions and motions that occurred in the original performances captured through film earlier. In doing so, I have addressed my initial research question: 'How and why do I create artworks about war when my only experience of combat is drawn from militainment?' — by responding with artworks that reflect on the ambivalent relationship between myself and the military-entertainment-complex. This is because that although the complex reveals itself through the image spectacle in society through the forms of games and films, it still relies on my desire and interaction with it, to allow me to become indoctrinated with its idiosyncratic ideologies.

Therefore, in framing the creative processes and works in relation to the conceptual fields discussed, artists working within these virtual and physical spheres can reflect on historic events by experimenting with mixed-reality installation. In doing so, I believe this research has addressed an intersection of transdisciplinary practice; combining processes of cultural heritage,

game design, contemporary art installation and neo-baroque aesthetics. In intersecting and analysing the effect of these fields on the creative outcomes, this project has identified further ways of thinking and making that form significant research in artistic production. Like the interdisciplinary medium of VR, this project has allowed these notions to provoke further experimentation in the processes and theories of these conceptual fields. In understanding how these processes operate individually, such as with the cultural heritage of *Virtual Karelia*, and cooperatively, such as the photogrammetry and détournement in *Patton*, this creative research has found avenues where the construction of historic scenarios from 2D representations can develop mixed-reality artworks with critical and reflective experiences.

In understanding these ideas, the research has the potential to continue experimenting with the same methodologies, processes and conceptual fields to creatively explore multiple perspectives of historical or pop-cultural events. As such, I consider VR as a most apt medium to provide contemporary art audiences with new experiences of such events. In this way, I believe my research reflects the transdisciplinary nature of VR, in which artists can further expand the mediums use as an experiential art form. As well as this, VR allows artists and viewers to reconsider their own practices, as well as the relationships between themselves and the images of spectacle as described by Debord (1967). In using the medium's ability to critically interrogate mixed-spaces, artists can contemplate the ubiquitous nature of images in contemporary society and imagine what possible futures await in the rapidly increasing advancement of image-making technologies.

In starting this project, I initially considered my obsession with military entertainment as one driven by an overall general interest in the objects, culture and history surrounding it. However, in approaching these ideas through the aforementioned processes, methodologies and theoretical frameworks, I now understand that a more complicated, dichotomous relationship exists. In researching my desires through an understanding of the militaristic indoctrination as described by Stahl and Mantello, my practice has been afforded the ability to comprehensively reveal and interrogate the structures of spectacle that are behind my drive to create art about conflict (Stahl, 2006; Mantello, 2017). In reflecting on this relationship through my body of artworks, I have found critical spaces in which I can position myself as both artist and consumer. I have

discovered that humour and satire are entwined with my art-making. They are both representative, and performative of my paradoxical position. Here, I can subvert the military-industrial-complex that frames my everyday experience of consuming militainment. In contemplating and reflecting on this relationship, this research has led me to a further understanding of conflict space — virtual and physical — as a site to explore our interactions with the technology that permeates our consumerist life.

Glossary

3D Animation	Drawing of motion of three-dimensional models using a computer-generated system (Thalmann M, Thalmann, D.1990).
3D Model	An object, environment or character in a three-dimensional computer system composed of polygons, edges and vertices (Moore, 2011).
3D Modelling	The development of a 3D model through a three-dimensional computer program (Moore, 2011).
Artificial Intelligence (AI)	Development of computer simulated systems that can perform human orientated tasks (Funge, 2004).
Augmented Reality (AR)	A computer simulated environment that projects digital three-dimensional images onto reality (Azuma, 1997).
Autoethnography	Deriving cultural understanding from the experience of one's self (McCann, 2002).
Bug	Computational error relating to a computer game, in which a problem has occurred that the developer did not include in the game (Apperley, 2013).
Consumerism	The theoretical economic principle of the acquisition of goods and services in exchange for monetary funds (Debord, 1981).
Ethnography	Deriving cultural understanding from others (Rutten, 2016).
3D Game Design	The process of developing a content and rules for a video game through tasks such as level creation, art direction, animation and puzzles (Moore, 2011).
Glitch	A temporary malfunction or fault in equipment; or 3D object (Apperley, 2013).
HMD (Head-Mounted-Display)	A headset incorporating optical lenses, high-pixel density screens and sensors to create an interactive virtual reality (Grau, 2003).

Immersion	Deep mental involvement in a task or experience (Grau, 2003).
Jouissance	Refers to a multitude of unmediated states of pleasure in the body (Boothby, 2014).
Militainment	The cultural entertainment, such as films, literature, and games that features or celebrates the military (Stahl, 2006).
Military-Industrial-Complex	The cooperation of industry and the military in a nation's economic and political sphere (Herz, 1997).
Morph	A smooth change from one form to another through the manipulation of images (Klein, 2004).
Motion-capture	The process or technique of recording movement and actions digitally (Gleicher, 1999).
Polygon	A shape of three or more vertices and edges, and one plane. When connected form a hollow 3D shape (Moore, 2011).
Photogrammetry	The science of using measurements and photographs to create a 3D model or world (Ioannides, Magnenat-Thalmann, and Papagiannakis, 2017).
Virtual Environment	A three-dimensional environment that is constructed using digital images, animation and polygons (Grau, 2003).
Virtual Reality (VR)	A computer-simulated environment that can be interacted with in a way that mimics reality (Grau, 2003).
Vertex (Vertices)	A location point in a three-dimensional space that relates to a 3D polygon (Moore, 2011).

Reference List

- Almerian, A. (2010). *Hollywood in España: Patton*.
<http://almeriafilms.blogspot.com/2012/05/patton-1969.html>
- Apperley, T. (2013). *The body of the gamer: game art and gestural excess*. *Digital Creativity*, 24 (2), 145 – 156.
- Associated Press. (2003). *President W. Bush declared an end of major combat in Iraq as he speaks aboard the aircraft carrier USS Abraham Lincoln off the California coast on May 2, 2003*. Retrieved from
<https://www.bostonglobe.com/news/nation/2018/04/14/bush-was-haunted-his-own-mission-accomplished/E73SdIkXxBfUGsbyXv7ISl/story.html>
- Austin, J. (2005) *Culture and Identity* (2nd ed.). Pearson Education, Australia.
- Azuma, R. (1997). *A Survey of Augmented Reality*. *Presence: Teleoperators and Virtual Environments*. 6 (4), 355-385.
- Barret, Estelle., Bolt, Barbara. (2007.). *Practice as research: approaches to creative arts enquiry*. Tauris. London, I.B.
- Baudrillard, J. (1995). *The Gulf War did not take place*. Bloomington, Indiana University Press.
- Beaumont, J. (2013). *Broken Nation: Australians in the Great War*. Allen & Unwin.
- Bogost, I. (2008). *The Rhetoric of Video Games*, in K. Salen. (2008). *The Ecology of Games: Connecting Youth, Games, and Learning* (1st ed.). Cambridge MA: MIT Press. (p. 117–40).
- Bonnett, A. (1999). *Situationist strategies and mutant technologies*. *Angelaki*, 4 (2), 25–32.
- Boothby, R. (2014) *Death and Desire Psychoanalytic Theory in Lacan's Return to Freud* London: Routledge/Taylor and Francis, 2014.
- Brady, A. (2016). *Drone Poetics*. *New Formations*, 89 (89/90), 116–136.
- Cable News Network, LP. (2001). *Transcript of Bush's Address*. Retrieved from
<http://edition.cnn.com/2001/US/09/20/gen.bush.transcript/>
- Clarke, B. Rouffaer, C. and Sénéchaud, F. (2013). *Beyond the Call of Duty: Why shouldn't video game players face the same dilemmas as real soldiers?* *International Review of the Red Cross*, 94 (886), 711–737.
- Coppola, F. North, E (Writers). Schaffner, F. J. (Director). McCarthy, F. (Producer). (1970). *Patton* [Motion picture]. United States: 20th Century Fox.
- Cork, Richard. (1994). *A bitter truth: Avant-garde art and the Great War*. New Haven, London; Yale university Press in association with Barbican Art gallery.
- Debord, G. (1967; 1994). *The society of the spectacle*. New York: Zone Books.
- Debord, G., Wolmnan, G. (1956). *Les Lèvres Nues* [A User's Guide to Détournement] (Knabb, K. Trans.). Retrieved from <https://www.cddc.vt.edu/sionline/presitu/usersguide.html>

- DeLappe, J. (2008). *Provocation: Dead-in-Iraq*. *The Drama Review*, 52 (1), p. 2-3.
- DeLappe, J. (2013). *Playing Politics. Machinima as live performance and document*. In Ng, J. (2013). *Understanding machinima essays on filmmaking in virtual worlds*. New York: Bloomsbury Academic.
- Der Derian, J. (2009). *Virtuous War: Mapping the military-industrial-media-entertainment network* (2nd ed.). New York: Routledge.
- Dyer-Witheford, N, Peuter, G. (2009). *Games of empire: Global Capitalism and video games*. Minneapolis and London. University of Minnesota Press.
- Elliott, A. (2004). *Social theory since Freud: traversing social imaginaries*. London: Routledge.
- Entertainment Software Association. (2018). *Essential Facts About the Computer and Video Game Industry*. Retrieved from <http://www.theesa.com/esa-research/2018-essential-facts-about-the-computer-and-video-game-industry/>
- Flitton, D. (2003). *Perspectives on Australian foreign policy, 2002*. *Australian Journal of International Affairs*, 57 (1), 37-54.
- Funge, J. D. (2004). *Artificial intelligence for computer games: an introduction*. AK Peters/CRC Press.
- Gleicher, M. (1999). *Animation from observation: Motion capture and motion editing*. *SIGGRAPH Comput. Graph.* 33, 4 (November 1999), 51–54.
- Grau, O. (2003). *Virtual art: from illusion to immersion*. Cambridge, Mass: MIT Press.
- Gray, C. (2004). *Visualizing research a guide to the research process in art and design*. London: Routledge, n.d.
- Grinberg, D. (2016). *Virtual battlegrounds: the multiple realisms of Harun Farocki's Immersion*. *Jump cut*, 0146-5546 (57).
- Grönroos, A. (2013). *Humour in Video Games: Play, Comedy, and Mischief*. (Unpublished master's thesis). Department of Media, Aalto University. Helsinki.
- Guides, M. (2013) *Art + Paris Impressionist North of Paris and Normandy Along the Seine and Normandy*. Museyon Inc. New York.
- Haig, I. (2018). *Against realism: The badly rendered potential of VR*. *Artlink*, 38, (4), 44-50. Cited 2nd of February 2020.
- Hazell, P. Williams, R. (2012). *Sport is good, war is bad: discuss*. *Current Opinion in Psychiatry*, 25 (4), 261–263.
- Herz, J. C. (1997). *Joystick Nation*. New York, Little, Brown, and Co.
- Holman Jones, S., Adams, T., and Ellis, C. (2013). *Handbook of auto-ethnography*. Walnut Creek, California: Left Coast Press, Inc.
- Ioannides, M., Magnenat-Thalmann, N., and Papagiannakis, G. (2017). *Mixed Reality and Gamification for Cultural Heritage* (1st ed.). Cham, Springer.

- Kalb, P. (2017). *Tom Sachs's American Bricolage and the revised logic of space travel*. *The Sculpture Journal*, 26 (3), 349–401.
- Kirkpatrick, G. (2007). *Between Art and Gameness: Critical Theory and Computer Game Aesthetics*. Thesis Eleven, 89, 74-93. Sage Publications, London.
- Klein, N. (2004). *The Vatican to Vegas* (1st ed.). New York: The New York press.
- Knabb, K. (2006). *Situationist International anthology* (Rev. and expanded ed.). Berkeley, CA: Bureau of Public Secrets.
- Lyke, M.L. (2003). *Commander in chief's visit sets aircraft carrier's crew a buzz*. Seattle, pi. Retrieved from <https://www.seattlepi.com/news/article/Commander-in-chief-s-visit-sets-aircraft-1113821.php>
- Mantello, P. (2017). *Military Shooter Video Games and the Ontopolitics of Derivative Wars and Arms Culture*. *American Journal of Economics and Sociology*, 76 (2), 483-521.
- McCann, H. (2002). *Researching the Self- Auto-ethnography*. in Austin, J. (2005). *Culture and Identity* (2nd ed.). Pearson Education, Australia.
- Mills, C. (1958) *The Structure of Power in American Society*, *British Journal of Sociology*, 9 (1), 29–41.
- Moore, M E. (2011). *Basics of game design*. AK Peters/CRC Press, Boca Raton, FL.
- Moujan, C. (2011). *Learning from Baroque*. In Mura, G. (2011). *Metaplasticity in Virtual Worlds: aesthetics and semantic concepts*. (p. 167–181).
- Ndalianis, A. (2004). *Neo-Baroque aesthetics and contemporary entertainment*. New York: MIT Press.
- Nieborg, D. (2010). *Training Recruits and Conditioning Youth: The Soft Power of Military Games*. In Huntemann, N. Payne, M, T. (2010). *Joystick Soldiers*. Routledge, Taylor and Francis. New York.
- Noh, Z., Sunar, M., and Pan, Z. (2009). *A review on augmented reality for virtual heritage system*. 5670, 50–61.
- Paanajarvi National Park. (2013). *History of Paanajarvi Area*. Retrieved from <http://eng.paanajarvi-park.com/istoriya-paanayarvi/#.XbfssUYzZPY>
- Pailthorpe, B., Murphie, A., and Costello, B. (2015). *Spatial Operations: Peter Sloterdijk and Contemporary Military Atmospheres*. Retrieved from <http://handle.unsw.edu.au/1959.4/55816>
- Riley, H. (2005). *Visualizing Research: A Guide to the Research Process in Art and Design: Carole Gray and Julian Malins*. *The Design Journal*, 8 (3), 61–62.
- Robinson, N. (2012). *Videogames, Persuasion and the War on Terror: Escaping or Embedding the Military–Entertainment Complex?* *Political Studies*, 60 (3), 504-522.
- Rountree, C. (2010). *George W. Bush A Biography*. Westport: ABC-CLIO.
- Rutten, K. (2016). *Art, ethnography and practice-led research*. *Critical Arts*, 30 (3), 295–306.

- Schulzke, M. (2010). *Defending the morality of violent video games*, *Ethics and Information Technology*, 12 (2), 127–138.
- Shaw, I. G. R. (2010). *Playing war*. *Social and Cultural Geography*, 11 (8), 789–803.
- Sloterdijk, P. (2002). *Terror from the Air*. (Patton, A. Corcoran, S. Trans). MIT Press.
- Smicker, J. (2010). *Future Combat, Combating Futures* in Huntemann, N., and Payne, M. *Joystick soldiers*. New York: Routledge. 106-121.
- Smith, H. Dean, R. (2009). *Practice-led research, research-led practice in the creative arts*. Edinburgh: Edinburgh University Press.
- Smith, K. (2012). *Hey! That's my valor; the Stolen Valor Act and government regulation of false speech under the First Amendment*. *Boston College Law Review*, 53 (2), 775 – 806.
- Stahl, R. (2006). *Have You Played the War on Terror?* *Critical Studies in Media Communication*, 23 (2), 112-130.
- Stuart, S. C. (2019). *How Simulation Games Prepare the Military for More Than Just Combat*. Retrieved from <https://au.pcmag.com/features/62064/how-simulation-games-prepare-the-military-for-more-than-just-combat>
- Thalman N.M., Thalman D. (1990) *Computer Animation*. In: *Computer Animation*. Computer Science Workbench. Springer, Tokyo.
- Willsey, K. (2018). *"Fake vets" and viral lies: Personal narrative in a post-T ruth era*. *Journal of American Folklore*, 131 (522), 500-508, 511.
- Wilz, K. (2010). *Rehumanization through Reflective Oscillation in "Jarhead."* *Rhetoric and Public Affairs*, 13 (4), 581–609.
- Xreal Games. (2019). *Zero Caliber VR*. Retrieved from xrealgames.com/zerocalibervr/
- Zaloga, S. (2011). *George S. Patton*. Bloomsbury Publishing.

Bibliography

- Allen, R. (2017). *America's Digital Army: Games at Work and War*. University of Nebraska Press.
- Aneesh, A. Hall, L. Petro, P. (2012). *Beyond Globalization: Making New Worlds in Media, Art, and Social Practices*. Rutgers University Press.
- Candy, L. Ferguson, S. [Eds.]. (2014). *Interactive Experiences in the Digital Age*. Springer, Switzerland.
- DeLappe, J. Simpson, D. (2011). *Virtual Commemoration: The Iraqi Memorial project*. *Critical Inquiry*, 37 (4), 615-626.
- Der Derian, J. (2001) *Virtuous war; mapping the military-industrial-media-entertainment network*. Westview Press.

- Duncan, M. (2004). *Autoethnography: Critical appreciation of an emerging art*. International Journal of Qualitative Methods, 3(4), 28-39.
- Elsaesser, T. (2017). *Simulation and the labour of Invisibility: Harun Farocki's Life Manuals*. Animation: An Interdisciplinary Journal, 12 (3), 214-229.
- Ensslin, Astrid. (2014). *Literary Gaming*. MIT Press.
- Feinberg, L. (2006). *The Satirist / Leonard Feinberg; With a New Introduction by Brian A. Connery*. New Brunswick: Transaction Publishers.
- Greitemeyer, T. (2015). *Everyday sadism predicts violent video game preferences*. Personality and Individual Differences, 76, 19-23.
- Hancox, S. (2012). *Contemporary Walking Practices and the Situationist International: The Politics of Perambulating the Boundaries Between Art and Life*. Contemporary Theatre Review, 22 (2), 247-250.
- Harrigan, P. Kirschenbaum, M. G. [Eds.]. (2016). *Zones of Control: Perspectives on wargaming*. MIT Press.
- Hellmich, C. Purse, L. (2017). *Disappearing war: interdisciplinary perspectives on cinema and erasure in the post-9/11 world*. Edinburgh: Edinburgh University Press Ltd.
- Hirschman, C. (1983). *Predictors of Self-Projection, Fantasy Fulfillment, and Escapism*. The Journal of Social Psychology, 120 (1), 63-76.
- Johnson, M. Woodcock, J. (2018). *Gamification: What it is and how to fight it*. The Sociological Review, 66 (3), 542-558.
- Juhasz, A. Lebow, A. [Eds.]. (2015). *A companion to contemporary documentary film*. Wiley-Blackwell.
- Kempshall, C. (2015). *Pixel Lions – the image of the soldier in First World War computer games*. Historical Journal of Film, Radio and Television, 35 (4), 656-672.
- McGarrigle, C. (2010). *The construction of locative situations: locative media and the Situationist International, recuperation or redux?* Digital Creativity, 21 (1), 55-62.
- Messham-Muir, K. (2018). *The BADFAITH machine: The phantom point of view in VR*. Artlink, 38 (4), 12-19. Cited 2nd of February 2020.
- Mukherjee, S. (201). *'Shall we kill the pixel soldier?': perceptions of trauma and morality in combat video games*. Journal of Gaming and Virtual Worlds, 2 (1), 39-51.
- O'Sullivan, S. (2005). *From Possible Worlds to Future Folds (Following Deleuze): Richter's Abstracts, Situationist Cities, and the Baroque in Art*. Journal of the British Society for Phenomenology, 36 (3), 311-329.
- Pace, S. (2012). *Writing the self into research: Using grounded theory analytic strategies in autoethnography*. Journal of Writing and Writing Courses, 13, 1-15.
- Pederson, C. (2010). *Trauma and Agitation: Video Games in a Time of War*. Afterimage, 38 (2), 9-13.

- Pérez, R. (2012). *Severo Sarduy and the Neo-Baroque Image of Thought in the Visual Arts*. Purude University press.
- Power, R. (2009). *Video Games and a Culture of Conflict*. *Journal of Children and Media*, 3 (1), 90-94.
- Shoales, I. (2003). *What is Reality?* *Intelligent Enterprise*, 6 (16), 48.
- Simanowski, R. (2011). *Digital Art and Meaning: reading Kinetic Poetry, Text Machines, Mapping Art and Interactive Installations*. University of Minnesota Press.
- Stockburger, A. (2007). *Playing the third place: Spatial modalities in contemporary game environments*. *International Journal of Performance Arts and Digital Media*, 3 (2-3), 223-236.
- Stob, J. (2014). *The Paradigms of Nicolas Bourriaud: Situationists as Vanishing Point*. *Evental Aesthetics*, 2 (4), 23-54.
- Thwaites, D. (2018). *Ways of (not) seeing: Structures of visibility in VR*. *Artlink*, 38 (4), 28-35. Cited 2nd of February 2020.
- Trier, J. (2014). *Detournement as Pedagogical Praxis*. University of North Carolina at Chapel Hill, USA.
- Watson, C. (2009). *Picturing Validity: Autoethnography and the Representation of Self?* *Qualitative Inquiry*, 15 (3), 526-544.