

Military Computer Games and the New American Militarism

What Computer Games Teach Us About War

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Thesis Submitted to the University of
Nottingham for the Degree of Doctor
of Philosophy

December 2008

Abstract

Military computer games continue to evoke a uniquely contradictory public, intellectual, and critical response. Whilst denigrated as child's play, they are played by millions of adults; whilst dismissed as simplistic, they are used in education, therapy, and military training; and whilst classed as meaningless, they arouse fears over media effects and the propagandist influence of their representations of combat. They remain the object of intense suspicion, and as part of a new and growing mass medium, they are blamed for everything from obesity to falling literacy standards, and from murder to Abu Ghraib. Much of the suspicion surrounding military computer games has been caused by the development of the military-entertainment complex - the relationship between the computer game industry and the U.S. military which has seen the production of dual-use games, co-produced by the military and the computer game industry and released for both military training and commercial sale. This relationship has placed military computer games at the centre of an intensely politicized debate in which they have become characterized as a mass medium which functions under the control of the military and political establishment and which promotes the militaristic ideals of the neoconservative Bush administration. This thesis serves as a fundamental reevaluation of such preconceptions and prejudices, and in particular, a complete reevaluation of the understanding of the relationship between computer games and American militarism. Its analysis focuses on three main areas: firstly, the content of military computer games; secondly, the determinants which affect the production and representation of war in computer games; and thirdly, the contribution of the representation of war in computer games to the misunderstandings and misconceptions concerning warfare which, in turn, have supported American militaristic beliefs.

Acknowledgements

I would like to thank Professor Roberta Pearson for her support in developing and guiding my research over the last three years, and for her help in offering regular editorial assistance. Thanks also to Professor Matthew Jones, who directed my research into American military and foreign policy, and to the editors and blind peer reviewers at *Popular Communication: The International Journal of Media and Culture*, whose guidance and suggestions in reorganising the article 'From Underdog to Overmatch: Computer Games and American Military Policy' - based around the content of Chapter 1 - also helped my thesis immensely. My thanks also go to Liz Evans, who read the final draft and offered suggestions, and to all those involved with the postgraduate community at the University of Nottingham – staff and students - whose comments and feedback on chapter drafts have proved invaluable. Finally my thanks go to the Arts and Humanities Research Council (AHRC) - without their financial support, this PhD would not have been possible.

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INTRODUCTION

Why Study Military Computer Games?

In 2006, U.S. military interventions in Venezuela, Iran and North Korea threatened to trigger a global conflict. In Venezuela, the U.S. invasion was met by accusations of psychological terror; in North Korea, *The Korea Times* warned that the American attack would lead only to ‘miserable defeat and gruesome deaths’;¹ and in Iran, an attack on Iranian nuclear facilities by American Special Forces was met not only by petition campaigns and official denunciations, but also Iranian infiltration into Iraq and attempts to disrupt world oil supplies by blowing up a U.S. tanker in the Strait of Hormuz.

Of course, none of these events occurred in reality; they occurred only in the virtual reality of computer games. Yet such was the significance attached to these computer game representations that the events that they portrayed came to play a part at the level of genuine global geopolitics. In Venezuela, Ismael Garcia, a Venezuelan congressman and supporter of President Chavez, warned of an impending American invasion, claiming that ‘the U.S. government knows how to prepare campaigns of psychological terror so they can make things happen later’.² He was responding to the representation of an American invasion in the computer game *Mercenaries 2*.³ *The Korea Times*, in threatening ‘miserable defeat and gruesome deaths’, was responding to the depiction of an American attack on North Korea in the game *Ghost Recon 2*.⁴ The attack on Iranian nuclear facilities carried out in the game *KumaWar* was

met by petition campaigns and official denunciations in Iran, but also by a virtual military response in the game *Rescue the Nuke Scientist*, produced by the Union of Islamic Student Societies, in which Iranian forces infiltrated Iraq.⁵ The Iranian government, following Khomeini's threat that he would seek to disrupt oil exports if the U.S. did not back off Iran's nuclear program, funded the production of *Counter Strike*, a game illustrating how to disrupt world oil supplies by blowing up a U.S. tanker in the strait of Hormuz.⁶ In the Middle East, there has been news of the Hezbollah produced *Special Force*, based on actual battles from 2000, and the Damascus based Afkar Media productions *UnderAsh* and *UnderSiege*, which depict the Israeli occupation and the intifadas.⁷ In the U.K, the intelligence agency G.C.H.Q. have begun to embed recruitment advertisements within games such as *Tom Clancy's Splinter Cell: Double Agent*⁸, and according to the U.S. Defense Department, al Qaeda has begun to use games as recruitment tools.⁹

The global use of computer games as tools of recruitment, propaganda, and political confrontation, and the reaction which these games have evoked, is testament to the belief in the power of games on the part of governments, intelligence agencies, militaries, and terrorist organizations. But nowhere has this potential been seized upon as greatly as in the U.S., where the U.S. military has adopted computer war games for the purposes of training, recruitment, testing and procurement. As Michael Macedonia, the U.S. Simulation, Training and Instrumentation Command (STRICOM) Chief

Scientist and Technical Director has argued: ‘computer games are not nonsense. We win wars with these games’.¹⁰

The purpose of this chapter is:-

- 1) To provide a very short explanation of some of the key terms and analytical choices of the thesis. In particular, the terms authenticity and realism, and the choice of tactical shooters as the focus of analysis.
- 2) To provide an overview of the ‘military-entertainment complex’ – the relationship between the U.S. military and the computer game industry which has provided the framework for the current debate concerning military computer games.
- 3) To explain why computer games represent an important area for research.
- 4) To provide a review of the existing literature concerning military computer games and to identify the key limitations of this body of work.
- 5) To define and justify my own approach to the study of military computer games in relation to this existing body of work, and to provide a detailed overview of the thesis as a whole.

1) Key Terms and Analytical Choices: Authenticity, Realism, and Analyzing the Tactical Shooter

In carrying out research into military computer games, it is impossible to avoid encountering the terms authenticity and realism. These terms are used ubiquitously in the marketing of games, in audience feedback and reviews concerning games, and also in the criticism of games – both academic and journalistic. As I argue later in the chapter, the status of a game as authentic or inauthentic, realistic or unrealistic, is of fundamental importance not only to how a game is marketed, but also to how it is received and interpreted. As a result, the perception of the authenticity and realism of games is central to considerations of the influence of military computer games on popular understandings of warfare. The problem with these terms, however, is that they are fluid, subjective, and political, and whenever they are applied to a given representation, they are inevitably open to contradiction. As Richard Peterson argues in *Creating Country Music: Fabricating Authenticity* (1997), ‘the word [authenticity] is not often invoked unless the attribute is contested’.¹¹ They are, as Lionel Trilling has argued, implicitly polemical concepts.¹² And the use of the terms realism and authenticity in relation to computer games is no different. Whilst marketing promoters and game players might share an understanding of the authenticity of games as being based around the involvement of the military in computer game production – an involvement which is seen as encouraging realistic representations of weapons, uniforms, tanks, buildings, tactics, scenarios and settings; critics might view this relationship between the computer game industry and the

military not as one which encourages authenticity and realism, but instead, as a relationship which discourages or even precludes the possibility of games presenting critical representations of combat, thereby reducing the sense in which they can be seen as realistic or authentic (see Chapter 2). In this respect, it becomes clear that the terms realism and authenticity can be – and are - used in different and sometimes contradictory ways. On the one hand, the realism of games is seen in relation to the graphical, functional, and photorealistic aspects of the representation of combat in games, whereas the authenticity of games is seen as deriving from their association with the military and their representation of real-life conflicts, weapons, troops and military hardware. On the other hand, the perception of games as unrealistic and inauthentic is often seen as a result of the fact that they fail to offer anything in the way of critical reflections concerning combat. And this absence is often blamed on the relationship which exists between the military and the computer game industry (see Chapter 2).

The differing connotations which surround these terms are dealt with in more detail later in this chapter and also in Chapter 2; but the purpose of this introductory note is simply to acknowledge the contentious nature of the terms, whilst also pointing to the fact that the way in which these terms are - and have been - used reveals something about how military computer games are received.

Strictly speaking, a computer game is a game which is played on a desktop or laptop computer, whilst a video game is a game which is played on a dedicated games console. However, since this thesis does not distinguish between the two in any methodological or conceptual sense, the phrase computer game is used to refer to both forms to avoid jumping between the two. Information on the platform on which I played each of the games referred to in the thesis can be found in the gameography. As game players will notice, with the exception of the games *F2C2* (2006), *Full Spectrum Warrior* (2004), and *Full Spectrum Warrior: Ten Hammers* (2006), which are classified as real-time strategy games,¹³ the games which I consider in this thesis are all either first person or squad based tactical military shooters. The reason that I do not consider more traditional turn-based and real-time strategy games is that there is an almost complete absence of such games which represent the more recent conflicts and more recent military policy with which this thesis is primarily concerned (this argument could also be applied in relation to the lack of Massive Multiplayer Online Role Playing Games (MMORPGs)). The differing perspectives offered by first person shooters – which provide a first person perspective of combat, and allow the player to view combat as if through their in-game character’s own eyes; squad based shooters – which provide either a first person or a third person perspective of combat, as if hovering just behind the troops under the player’s command; and strategy games - which traditionally provide a ‘helicopter view’ of warfare and include resource gathering, base building and technological development, as well as abstract military unit control,¹⁴ are

considered in Chapter 3, as are the consequences of these differing perspectives for understandings of warfare. The reasons behind the absence of strategy games which depict contemporary combat and contemporary U.S. policy, and the consequences of this absence, are also considered in Chapter 3.

With clarification of these terms and analytical choices, the framework for the current debate concerning military computer games and American militarism – the relationship between the computer game industry and the military - can now be laid out.

2) The Military-Entertainment Complex

The relationship between the computer game industry and the military, as Kline et al argue in *Digital Play: The Interaction of Technology, Culture and Marketing* (2003), stretches right back to the inception of video games. *Spacewar* (1962), the first interactive game produced,¹⁵ in which two players controlled rocket ships and fired missiles at each other, was created in the context of the space race, Cold War, and threat of nuclear proliferation, at a time when military funding to universities and businesses drove the development of computing to aid on all these fronts.¹⁶ ‘Practical military objectives’, as Paul Edwards describes, ‘guided technological development down particular channels, increased its speed, and helped shape the structure of the emerging computer industry’ – and by extension, the computer game industry.¹⁷

Spacewar was the creation of the Hingham Institute Study Group on Space Warfare working at MIT under Steve Russell - the outcome of the 'conjuncture of military-industrial funding, hacker experimentation, and science fiction subcultures'.¹⁸ Five years later, Ralph Baer's invention of the primitive home console - the 'Television Gaming Apparatus' (1967) - whilst working at the military electronics firm Sanders Associates, developed from a similar technological and cultural context. Baer's creation remained classified as a military training tool until 1968, when he was given permission to continue commercial development.¹⁹ The games industry therefore grew out of the 'military-industrial-academic complex' – a variant of military funded computing developments intended for practical military purposes which included war gaming.²⁰

In the 1980s, the military began experimenting with the use of arcade games as skill enhancers, and Atari's *Battlezone* (1980) attracted the attention of the U.S. Army Training Support Centre who saw it as a basis for training. They briefly experimented with the game for the development of hand eye coordination, modifying the controls to make them similar to an actual tank.²¹ In a speech in 1983, Ronald Reagan famously made reference to the potential of video games in developing tomorrow's pilots;²² since then, the link between the military and the computer game industry has developed into a formalized relationship in which co-production and co-development between the

computer game industry and the military has become almost a market standard. In 1996, this relationship, which has become known as the ‘military-entertainment complex’, gained formal recognition from the military in the form of the meeting of The Committee on Modeling and Simulation: Linking Entertainment and Defense, and the Marine directive 1500.55.²³

The ‘Committee on Modeling and Simulation: Opportunities for Collaboration Between the Defense and Entertainment Research Communities’ was convened in 1996 as a result of a request made by the Department of Defense’s Defense Modeling and Simulation Office (DMSO). The DMSO had asked the National Research Council’s Computer Science and Telecommunications Board to convene a multidisciplinary committee to investigate areas for collaboration between the military and entertainment industries. The concept was based around the understanding that both industries shared some common interests in developing simulation technologies:

Modeling and simulation technology has become increasingly important to both the entertainment industry and the U.S. Department of Defense. In the entertainment industry, such technology lies at the heart of video games, theme park attractions and entertainment centers, and special effects for film production. For DOD [Department of

Defense], modeling and simulation technology provides a low-cost means of conducting joint training exercises, evaluating new doctrine and tactics, and studying the effectiveness of new weapons systems.²⁴

The conclusions of this National Research Council committee were published in a report in 1997, which suggested ‘formal collaborative arrangements between entertainment companies and the Department of Defense (DOD), efforts by individual firms to supply modeling and simulation technology to both communities, or joint research endeavors mediated by a university research center’.²⁵ By the turn of the century, all these measures had been put in place.

In the early 1990s, the U.S. Marine Corps had initiated a program to evaluate commercial war games software for use in training. The Corps’ Combat and Development Command in Quantico, Virginia, evaluated nearly 30 games in 1995 and identified several as possibly suitable for training, including *Harpoon 2*, *Tigers on the Prowl*, *Operation Crusader*, *Patriot* and *Doom*.²⁶ The Computer War Game Assessment Group recommended the use of these games, and in 1996, the Marine Corps General Charles C. Krulak’s directive 1500.55 stated that:

The use of technological innovations, such as personal computer (PC) based wargames, provide great potential for Marines to develop decision making skills, particularly when live training time and opportunities are limited. Policy contained herein authorizes Marines to use Government computers for approved PC-based wargames.²⁷

In 1996, *Doom* was modified by the Marine Modeling and Simulation Office to become *Marine Doom*, a training tool which included fighting holes, bunkers, tactical wire, friendly fire, and real weapons,²⁸ and which was later reconfigured for a specific mission in the Balkans immediately prior to deployment.²⁹ In 1997, the Marine Corps awarded a contract to Mak technologies to develop *MEU 2000* to be released as a commercial game as well as for military use.³⁰ The company, founded by former members of the military's simulation network (SIMNET) development team, became the forerunner in fulfilling the symposium report's suggestion for 'individual firms to supply modeling and simulation technology to both communities'.³¹ In developing *MEU 2000*, they collected the first contract to produce a 'dual use' computer game to be 'co-funded and co-developed by the Department of Defense and the entertainment industry'.³² Since then, such dual-use development has spread throughout the gaming industry.

As part of the Marine directive 1500.55, it became the duty of the Marine Combat Development Command to maintain a PC-based wargames catalogue on the internet.³³ Although this catalogue no longer exists at its original location, the Department of Defense Game Developers Community Website lists 25 COTS (commercial-off-the-shelf) games which are used by the military in a training capacity. Amongst the games listed on the Department of Defense's site is *America's Army*, the Army's own official computer game, which was released on Independence Day 2002, principally as a recruitment tool. The game was designed by MOVES – the Modeling, Simulation, and Virtual Environments Institute – whose founding director, Michael Zyda, chaired the 1996 workshop on linking entertainment and defense, before going on to become the principal development director for the game. *America's Army* registered a reported 400,000 downloads on its first day, continuing an average of 1.2 million hits per second throughout August 2002,³⁴ and despite being released primarily as a recruitment tool, the game has been used by the military to train officers at West Point³⁵ – as its inclusion on the Department of Defense gaming list attests.

Alexander Galloway has argued that *America's Army* is in some ways unique. 'Because it was developed by the American Army and purports to model the experience of the American Army, the game can claim a real material referent in ways that other military games...simply cannot'.³⁶ Since the game is 'the official U.S. Army game,' originally released as an internet game

downloadable from a U.S. Army site, and developed and produced by the U.S. Army, this statement can be seen as true to a point. But the fact that it claims to model the experience of the actual troops or that it was co-developed by the military no longer makes it unique.³⁷ Amongst the other games listed on the Department of Defense website, *Full Spectrum Warrior*, *Spearhead II*, the *Delta Force* series, and *Falcon 4* can make similar claims, as can games not listed on the site such as *Close Combat: First to Fight*, *Real War*, *KumaWar*, *Socom: US Navy Seals* and *Tom Clancy's Rainbow Six 3: Raven Shield* (amongst many others).

Novalogic's *Delta Force* is used for training plebes at West Point and the *Delta Force* series was produced in conjunction with Special Forces and Delta Force.³⁸ *Socom: US Navy Seals* was produced in consultation with the Naval Special Warfare Command. In 2003, Ubisoft's commercial game *Tom Clancy's Rainbow Six 3: Raven Shield* was licensed by the U.S. Army to be used for testing soldiers' skills.³⁹ *KumaWar* is developed alongside the Army's Combined Arms Support Command for training purposes.⁴⁰ And a customized version of *Microsoft Flight Simulator* is issued by the Navy to all student pilots and undergraduates enrolled at Naval Reserve Officer Training Courses at 65 Colleges.⁴¹ Some games such as *Full Spectrum Warrior* and *Spearhead II* are designed and developed as dual-use, for both commercial release and military training. Some military simulations are spun-off commercially, such as *Joint Force Employment* (commercially released as *Real War*); and *TAC-*

OPS (a commercial clone of the non-commercial military simulation *Janus*). The military also adopts and adapts commercial games such as *Marine Doom* and *Close Combat Marine*, or has the entertainment industry develop simulations for the military, such as *Delta Force 2*, which Novalogic modified on request from the military to include features found in the Army's Land Warrior System.⁴² As this list suggests, *America's Army* is far from a unique example of a modern military computer game; it is one of the many games which illustrate that the National Research Council's requirement for collaboration between the games industry and the military has been met.

The final stipulation in the Research Council's report, for 'joint research endeavors mediated by a university research center', was fulfilled by the creation of the Institute for Creative Technologies. In 1999 the Army awarded a \$45 million grant to the University of Southern California to create the Institute for Creative Technologies (ICT).⁴³ The ICT was created in order:

To build a partnership among the entertainment industry, Army, and academia with the goal of creating synthetic experiences so compelling that participants react as if they were real. The result is engaging, new, immersive technologies for learning, training, and operational environments.⁴⁴

In 2004, the ICT, along with developer Pandemic Studios and special effects house Sony Imageworks, produced the award winning⁴⁵ *Full Spectrum Warrior*, the ‘first military training application published for a games console’, for the Microsoft Xbox.⁴⁶ As the ICT’s report on the development of the game suggests, ‘the first military training application published for the Microsoft Xbox, demonstrated the feasibility and utility of leveraging inexpensive COTS [commercial-off-the-shelf] games consoles to solve a U.S. Army cognitive training challenge...*FSW* [*Full Spectrum Warrior*] is a further proof-of-concept for the ICT’s mission to leverage the U.S. entertainment industry’s wealth of talent, techniques and technology in the development of the new generation of COTS-based cognitive simulation training tools’. In 2004, the Army renewed support for the ICT with a grant of \$100 million.⁴⁷

As the details of the military-computer game relationship suggest, the use of simulation and simulation technologies are now considered a major strategic capability for the U.S. military, and wargaming and simulation are part of the curriculum at every U.S. war college.⁴⁸ As a result, simulation attracts significant financial resources, with PEO STRI (Program Executive Office for Simulation, Training, and Instrumentation) receiving an acquisition budget of over \$2 billion a year.⁴⁹ With about 90% of the 75,000 men and women who join the Army each year calling themselves ‘casual’ gamers, and 30% ‘hardcore’ gamers,⁵⁰ game consoles and computer games offer a familiar, relatively cheap, and easily accessible medium for training.⁵¹ The effect of

using such gaming simulations, as Michael Macedonia – Simulation, Training and Instrumentation Command Chief Scientist and Technical Director – explains:

Has been nothing less than remarkable. Low U.S. casualties in Desert Storm, the Balkans, and now Afghanistan stem in large part from the growing use of training simulators, according to a task force of the U.S. Defense Science Board, whose 35 civilian members advise the Secretary of Defense on matters of R&D.⁵²

But the use of simulation technology has not met with universal support. During the American invasion of Iraq in 2003, U.S. V Corps Commander Wallace famously let slip that ‘The enemy we’re fighting is a bit different to the one we war-gamed against’.⁵³ This comment was seized upon not only by U.S. Defense Secretary Rumsfeld and General Tommy Franks, who discussed Wallace’s dismissal, but also by those critics of the military-entertainment complex, who claimed that this admission illustrated that the use of computer game simulations for military training and planning was promoting the sort of confused logic which had led to the problems in Iraq.⁵⁴ Computer simulations, argued those both in and outside the military, were institutionalizing the limitations of information technology’s capability to represent the true complexities of war.⁵⁵

Critical histories of the use of computers and computer simulations for military purposes suggest that this has long been the case. Paul Edwards, for example, in *The Closed World: Computers and the Politics of Discourse in Cold War America* (1996), traces the practical use of computers, systems analysis, game theory, and computer modeling and simulation right back to the Second World War, in order to show how their practical application has affected military operations. But as Edwards argues, the computer was influential not only in terms of its practical influence on military operations, but also in terms of its ideological influence on understandings and perceptions of warfare. In particular, the use of computers encouraged a belief in high technology and rational analysis as a means of revolutionizing warfare, and a belief in high technology warfare as the solution to complex political issues and the means of meeting global aspirations. Similarly, in the post-Cold War world, the dual-use nature of military computer games raises not only the question of their practical effect on military training, planning and operations, but also their ideological significance and influence on popular understandings of warfare. In pursuing this line of analysis, this thesis investigates in what ways the representation of war in military computer games encourages particular understandings – and misunderstandings – of warfare, and reveals how these understandings have contributed to American militaristic beliefs.

3) The Importance of Research into Computer Games: Their Relationship to War, Popular Culture and Popular Understandings of Warfare

War created the United States. Although many Americans professed genuine hostility toward it, war was central to their history, the instrument by which they forged and expanded their nation and often defined themselves (Michael Sherry, *In the Shadow of War: The United States Since the 1930s*).⁵⁶

Whether we like it or not, this [the computer game] is the medium of our moment. It is a medium that is telling our cultural story, and the fact that it is a primary tool of youth and adolescents means it will have a tremendous impact on how the next generation or two plays itself out. (Sheldon Brown, Visual Arts Professor and Director of the Center for Research in Computing and the Arts at the University of California).⁵⁷

As the opening to Sherry's *In the Shadow of War* suggests,⁵⁸ war has always been central to American history and national identity; but as is increasingly being recognized, it is the mass media and popular culture which have become the central means with which understandings and perceptions of warfare are formed in the American imagination. As William O'Neill has argued, as the number of Americans who have experienced combat has fallen dramatically as a result of the introduction of an all-volunteer force, a reduction in troop

numbers, and the falling numbers of World War II and Korean War veterans, mass media representations of war take on an ever greater significance in terms of establishing images and understandings of warfare within the American imagination.⁵⁹ Increasingly, historians have turned to popular culture as a means of illustrating changing cultural, historical, social and political attitudes towards war and how it is understood. Studies such as Michael Sherry's *In the Shadow of War: The United States Since the 1930s* (1995), Linda Robertson's *The Dream of Civilised Warfare: World War I Flying Aces and the American Imagination* (2003), Paul Edwards' *The Closed World: Computers and the Politics of Discourse in Cold War America* (1996), Tom Engelhardt's *The End of Victory Culture: Cold War America and the Disillusioning of a Generation* (1998), Andrew Bacevich's *The New American Militarism: How Americans Are Seduced by War* (2005), Charles Gannon's *Rumors of War and Infernal Machines: Technomilitary Agenda-Setting in American and British Speculative Fiction* (2003), and the edited collection *The Long War: A New History of American National Security Policy Since World War II* (2007), draw on elements of popular culture including film, literature, advertising, promotional posters, and toys to form a broad picture of the historical and cultural discourses which surround warfare.

Computer games are merely a part of this broader discourse; nevertheless, they are an increasingly important part, exerting an ever-increasing influence on both popular and military culture. In 2006, 69% of heads of households

reported that they played computer games,⁶⁰ whilst in 2007, the computer game industry in North America generated \$9.5 billion.⁶¹ Military games continue to register amongst the best sellers of the year, as they have consistently done since the turn of the century, with many selling over 1 million copies in America alone.⁶² As the interest in prime time news has fallen, from 90% of the television audience in the 1960s, to only 30% in 2000,⁶³ the size and popularity of the games industry continues to rise and now rivals the Hollywood box office in terms of revenue. The release of *Halo 3* in 2007, for example, was the biggest entertainment launch in history, taking in \$170 million in the first 24 hours.⁶⁴

As David Machin and Theo Van Leeuwen have argued:

It is important for critical discourse analysts to pay attention to entertainment texts of this kind. Today's most important and influential political discourses are found...not in newspapers, and certainly not in parliamentary debates and political speeches, but in Hollywood movies and computer games.⁶⁵

Of course, any suggestion that computer games influence public understandings of warfare must concede that the process of audience reception is far more complex than the passive acceptance of meaning that the

'hypodermic needle' model of media effects once suggested, and that the interaction between game and player involves processes of encoding and decoding, as well as resistance and rejection. In studies into the use of computer games as both teaching aids and military training tools, research has shown that the player's perception of games as realistic is a major contributor to how games are received and also to how successful they are in transmitting their intended message.⁶⁶ The perception of the realism of military computer games is therefore of fundamental importance to considerations of the influence of military computer games on popular understandings of warfare. And in this respect, in relation to the perception of the realism and authenticity of games, the military-entertainment complex is important.

Unlike the classic games based on the eponymous characters of *Sonic*, *Super Mario*, *Zelda*, and more recently *Lara Croft* and *Hitman*, military computer games do not rely on the production values of character development and personality. On the contrary, the 'no-name' characters presented in these games are generic versions of heroic soldiers. Yet the currency of military computer games lies in their relationship with the military and the authenticity which this relationship is seen as signifying; and it is these aspects of the games which are endlessly promoted in the paratextual materials on websites, billboards, game boxes, and game manuals. On the back of the box for the game *Full Spectrum Warrior*, for example, is emblazoned the tagline, 'BASED ON A TRAINING AID DEVELOPED FOR THE U.S. ARMY'. The

box containing the sequel, *Full Spectrum Warrior: Ten Hammers*, reads, ‘the most authentic and realistic combat experience ever’. And on the box of *Close Combat: First to Fight* is written: ‘based on a training tool developed for the United States Marines’ - a theme which the game website develops:

The U.S. Marine Corps plans to use *First to Fight* to train Marines. *First to Fight* was created under the direction of more than 40 active-duty Marines, fresh from the frontlines of combat in the Middle East. These Marines, who just weeks before were getting shot at in Iraq or Afghanistan, worked side-by-side with the development team to put the exact tactics they used in combat into *First to Fight*.⁶⁷

As this description of *Close Combat: First to Fight* reveals, the ‘authenticity’ of military computer games is closely related to their origins, accuracy and authorship. These games are seen as authentic because their representations of warfare are based on real-world military referents (origins); they are seen as authentic because of the military involvement in their production (authorship); and they are seen as authentic as a result of the use of games for military training purposes (accuracy).⁶⁸ The ‘realism’ of military computer games, on the other hand, might be said to relate more closely to the actual quality of the game’s graphical representation of warfare and to how realistic this representation of warfare appears.⁶⁹ Of course, not all games are used by the

military for training purposes, or are co-produced by the military; but the military-computer game relationship has made perceptions of the realism and authenticity of games vital to their economic success. As Warren Katz, co-founder of Mak Technologies (the company awarded the first contract to produce a dual-use game to be co-funded and co-developed by the Department of Defense) explains, the military-entertainment complex allowed the production of games which were ‘much more realistic than any other game ever produced for this genre, making [their] commercial success highly likely’.⁷⁰ In this new era for military computer games,⁷¹ in a crowded and competitive computer game market, the military-computer game relationship has therefore pushed games - whether they are formally a product of the military-entertainment complex or not - to strive for ever greater levels of authenticity and realism in their representations of warfare. As a result, the representation of weapons, tanks, planes, and troops – as well as combat environments more generally – has become the subject of the most intricate scrutiny on the part of game producers to ensure that they appear as realistic as possible. And the need for authenticity has encouraged game developers to court the advice of subject matter experts from the U.S. military, and to base their in-game characters on real military units; their in-game weapons on real-life or prototype military weaponry; and their in-game narratives and scenarios on real-life military conflicts.⁷² In the case of games such as *Conflict: Desert Storm* (2002), based on the Gulf War of 1991; *Delta Force: Black Hawk Down* (2003), based on the intervention in Somalia in 1993; and *Delta Force: Task*

Force Dagger (2002), based on the war in Afghanistan, these claims to realism and authenticity are presented through their depiction of real-world military conflicts.⁷³ In the case of *Tom Clancy's Ghost Recon Advanced Warfighter* (2005), the realism and authenticity of the game is based on the representation of an actual prototype military weapons system; and in the case of *Call of Duty 4* (2007), it is the combination of the representation of real weapons and real-world elite military units, with probably the most photo-realistic representation of warfare ever to be found in a computer game, which represents the game's claims to realism and authenticity. Those games produced within the military-entertainment complex can make even grander claims, including their dual-production and dual-use as both military training tools and commercial games. The military-entertainment complex has therefore encouraged the increasing perception of military computer games as both realistic and authentic. And it is in this respect that the military-entertainment complex, and the use of real world referents in modern military computer games - whether in terms of weapons, troops, or conflicts - make an important contribution to the way in which military games are understood and received, encouraging the player to draw direct links between the representation of warfare in computer games and real-world military conflict, between game referents and real world referents, and between the logic of war presented in games, and the logic of war in reality. These connections, along with the increasing perception of the realism and authenticity of military-computer games, increase the potential influence of military computer games on popular understandings of warfare.⁷⁴ In this

respect, the understanding of military computer games as realistic and authentic encourages not only a more viable commercial product, but also a potentially far more influential one.⁷⁵

The increasing size, popularity and influence of military computer games, combined with their use as military training tools, and the subsequent perception of games as increasingly realistic and authentic, therefore provide ample justification for the study of military computer games. Such justifications, however, ignore the ways in which military computer games differ from other media. War films, for example, are also hugely popular, influential and lucrative;⁷⁶ they are frequently described as being realistic and authentic (often more so than games);⁷⁷ and they have also been used for the purposes of military training, with old training videos concerning marksmanship and other facets of soldiering now available to view on the internet.⁷⁸ What makes computer games unique, however, is the interactivity, immersion, embodiment, and simulation associated with gameplay. And it is these aspects of games which not only make them effective military training tools, but influential commercial games when considered in relation to popular understandings of warfare.

Computer simulations have been used for a wide range of disparate military purposes. Large scale simulations have been used for mission rehearsals,

whilst smaller simulations have been used to teach soldiers about local customs, habits, taboos, morals and ethics,⁷⁹ and to train mechanical skills such as marksmanship (as in games such as MARKS, developed by Nintendo⁸⁰). However, the majority of COTS (commercial off-the-shelf) games and dual-use games used by the military are directed at developing tactical awareness. The game *Full Spectrum Warrior*, for example, which – as I have argued - was developed by the ICT as a dual-use game, for both commercial sale and military training, was designed as a ‘cognitive tactical trainer’⁸¹ in order to train decision making skills, correct execution of dismounted battle drills, and squad coordination and maneuverability.⁸² The benefits of using a game – as opposed to a film - for such training purposes can be seen in relation to those qualities of games listed above. Rather than simply watching a video which illustrates and instructs the trainee in how to carry out tactical maneuvers and how to make correct decisions, a computer game simulation allows the player to become immersed in a virtual war environment, to participate in the action, and to inhabit and embody the role of squad leader or soldier through taking control of the in-game avatar. Games therefore offer what Simon Penny calls ‘embodied interaction’.⁸³ Equally as crucial, however, is the fact that gameplay, and the interaction between player and game, is based around the attempts of the player to understand and overcome the obstructions and challenges presented by the game. In this respect, the player is constantly learning, developing and refining their performance according to the rules, challenges and logic of the game. A squad

leader using *Full Spectrum Warrior* to learn about correct tactical maneuvers and decision making skills, for example, will develop these skills through the process of gameplay. If the player makes the correct decisions, and correctly maneuvers and instructs their squad, then they will successfully progress with the game; if not, they will fail, and will have to refine their approach in order to overcome the challenges presented by the game, thereby improving and honing their tactical and cognitive skills in line with the training objective of the game. In this respect, the mechanics of gameplay, which inherently involve processes of learning and implementation, are ideally suited to military training purposes. These aspects of games, however, also make them particularly influential when it comes to considering the influence of commercial military games on popular understandings of warfare. As with military training tools, the mechanics of gameplay remain the same. The player must learn and refine their skills in order to overcome the challenges presented by the game.⁸⁴ In playing a military computer game, therefore, just as a trainee learns how best to carry out tactical maneuvers, so a casual game player learns how best to win wars. And in this way, as I argue in the following chapters, the representation of war in military computer games plays a significant role in contributing to the misunderstandings and misconceptions concerning warfare which are associated with American militaristic beliefs.

The qualities of games in relation to interactivity, configuration, embodiment, immersion and gameplay therefore signal the differences between games and

other media; but these qualities have also led to a debate over how games should be critically approached. This debate has been dominated by the ludology versus narratology divide.⁸⁵ Ludologists argue that the uniqueness of games requires the foundation of a new and independent field of game studies, which resists the imperialist and colonizing approaches of existing disciplines such as film studies, literary theory, and narratology.⁸⁶ For ludologists, game analysis should not focus on the idea of games as representation, narrative, or storytelling, or on the associated elements of plot, characters and setting; rather, game analysis should focus on the structural features of gameplay – the rules and goals – along with its unique features - interactivity, simulation, configuration, and the manipulable elements of games.⁸⁷ In particular, the ludologists have taken issue with what they see as the imposition of narratological approaches which ignore the uniqueness of games and the experience of gameplay. Janet Murray's reading of the game *Tetris* has become particularly famous in this respect. In illustrating her idea of games as 'symbolic dramas', Murray describes the game *Tetris* as:

A perfect enactment of the overtasked lives of Americans in the 1990s – of the constant bombardment of tasks that demand our attention and that we must somehow fit into our overcrowded schedules and clear off our desks in order to make room for the next onslaught.⁸⁸

In this instance, Murray - who, along with theorists such as Marie Laure-Ryan, has become synonymous with the narratological side of the narratology versus ludology debate – clearly overstates the possibility of providing a narrative reading of an abstract game such as *Tetris*. In response to Murray’s claims, ludologist Markku Eskelinen has written that:

Instead of studying the actual game, Murray tries to interpret its supposed content, or better yet, project her favorite content on it; consequently we don’t learn anything of the features that make *Tetris* a game.⁸⁹

As I argue later in the chapter, Eskelinen’s suggestion, that critics have a tendency to project and impose their favored interpretations on games irrespective of their content, holds particular relevance to existing analyses of military computer games, as does his suggestion that critics often ignore the fundamental aspects of gameplay. But it is not the case - as Eskelinen and other ludologists have sometimes stated – that attempts to understand games as narrative, storytelling, or forms of representation, should be considered completely misinformed.

In ‘The Gaming Situation’ (2001), Eskelinen states his desire to:

Annihilate for good the discussion of games as stories, narratives or cinema. In this scenario stories are just uninteresting ornaments or gift-wrappings to games, and laying an emphasis on studying these kinds of marketing tools is just a waste of time and energy.⁹⁰

For ludologists such as Eskelinen, the narrative and representational elements of games – the characters, visual appearance, plot, narrative, fictional world and setting – are almost entirely irrelevant to the study of games and the experience of gameplay. These aspects of games relate to what have become known as the ‘rules of irrelevance’ – those aspects of games which, if changed, would have no effect on gameplay,⁹¹ and which are therefore considered entirely ‘coincidental to [the] game’.⁹² In his most famous explanation of this position, leading ludologist Espen Aarseth argues that:

The dimensions of Lara Croft’s body, already analyzed to death by film theorists, are irrelevant to me as a player, because a different looking body would not make me play differently.⁹³

Strictly speaking, this statement is accurate, since a change in the appearance of Lara Croft would not affect the gameplay, the rules of the game, or its structural mechanics. Yet it is clear that the appearance of the avatar, the

setting and game world, and the visual qualities of a game do have a significant impact on how a game is understood and received. As Jesper Juul has argued ‘Players undoubtedly... want to be able to identify with the fictional protagonist and the goal of the game in the fictional world, and hence the fictional world is very important to the player’s motivation’.⁹⁴ In the case of military computer games, the importance of playing a game which represents real U.S. soldiers, within realistic combat scenarios, and with real military weaponry and technology, has been highlighted on gaming forums by game players.⁹⁵ And whilst it can be argued that the majority of first person or squad based shooters exhibit similar rules and patterns of gameplay, and run on similar game engines, there is a clear difference between the meanings and understandings which are encouraged by games based around the “mutants versus space marines” scenario made famous by games from *Doom* through to *Halo*, and the meanings and understandings encouraged by games such as *Full Spectrum Warrior*, which attempt to recreate realistic troops, weapons, tactics, and scenarios. Eskelinen has argued that in-game characters are flat and functional;⁹⁶ and Barry Atkins that the ‘story, such as it is, more often than not provides a wafer thin narrative excuse for the real meat and drink of games’ – the gameplay, action and fighting.⁹⁷ These arguments may seem especially true of military computer games, which compared to role playing games such as the *Final Fantasy* series, offer very little in the way of in-depth character and plot. But that does not make the narrative, representational, and visual elements of games irrelevant. On the contrary, as I argue in the following

chapters, the fixed narrative, visual and representational features of games, such as the setting and environment, the soldiers at your command, the weapons and technology which you use, the mission which you are assigned, and the victory conditions which you achieve, are all relevant to the meanings and understandings which military computer games encourage. Whilst the ludologists are therefore correct to point to the importance of the unique aspects of gameplay and game rules in analyses of computer games, they overstate the extent to which narrative, visual and representational elements can be considered irrelevant. Not only this, but in emphasizing the uniqueness of games, they have exaggerated the distinction between simulation - the dynamic, configurative, and interactive potential of games – and more traditional forms of narrative. This is especially true when one compares the idealistic vision of games as a dynamic and configurative form, with the realities of gameplay in military computer games.

For Gonzalo Frasca, the key difference between computer games and other media is that games are based around simulation and not storytelling, representation, or narrative. For Frasca, ‘the potential of games is not to tell a story but to simulate: to create an environment for experimentation’.⁹⁸ ‘Unlike what would happen in storytelling, the sequence of events in a simulation is never fixed. You can play it dozens of times and things would be different’.⁹⁹ Simulation ‘does not deal with what happened or is happening, but with what may happen’.¹⁰⁰ Military computer games, however, fall short of these ideals

of simulation. Unlike games such as *SimCity* or *Grand Theft Auto*, which allow the player considerable freedom for experimentation and investigation, the interactive and configurative possibilities of military computer games are restricted in a number of ways. In a free-roaming game such as *Grand Theft Auto*, for example, the player can choose to ignore specific objectives, whilst in games such as *SimCity*, there are no explicit goals or objectives to achieve. As I argue in Chapter 2, however, when it comes to military computer games, the weight of technological restrictions, computer game convention, player expectation, and the fundamental structure of military computer games – based around set missions, goals and objectives – severely challenge the notion of military computer games as ‘laboratories for experimentation’¹⁰¹ in which ‘the sequence of events... is never fixed’. Military computer games belong to a category of game which Jesper Juul has called ‘progression games’, in which ‘the game designer has explicitly determined the possible ways in which the game can progress’.¹⁰² As Juul argues, such games involve a ‘predefined sequence of events that the player then has to actualize or enact’.¹⁰³ Whilst the interactive gameplay of military computer games is therefore still dynamic and participatory, ‘Underneath and around the variations of real time play’, as David Buckingham has argued, ‘there is a conventionally structured narrative whose sequence cannot be altered’.¹⁰⁴ In this respect, whilst - as the ludologists suggest - analyses of games should concentrate on the gameplay, configurative and interactive elements of games; military computer games can also be seen as a form of narrative, and their narrative elements – characters,

setting, game world, plot – are also important to the understandings of warfare which they encourage.¹⁰⁵

Like commercial military computer games, the freedom and interactivity of military training tools is also limited. As researchers working at the ICT on the development of games as military training tools have argued:

Since there are certain pedagogical goals we want to achieve for the trainee, we feel that it is necessary to provide structure and guidance to the experience he has. If he is allowed to wander aimlessly through the simulation, he may never encounter the decision making dilemmas we want him to experience.¹⁰⁶

Unlike military training tools, commercial military computer games are not deliberately limited in order to deliver specific pedagogical objectives; but the representation of warfare which commercial games present is directed by a number of influences. These include, as I have argued, technology, game structure, player expectation, and computer game convention, but also player agency, computer game perspective, military policy, the popular hero narrative and remediation. Remediation, as Bolter and Grusin describe in *Remediation: Understanding New Media* (1999), is the ‘representation of one medium in another’.¹⁰⁷ ‘What is new about new media’, argue Bolter and Grusin, ‘comes

from the particular ways in which they refashion older media'.¹⁰⁸ The concept of remediation therefore extends the idea of intertextuality to include an understanding of the ways in which new media refashion and repurpose the content of existing media forms, and how they privilege certain aspects, whilst downplaying or ignoring others. As I argue in the following chapters, both the way in which military computer games adopt and adapt the military hero narrative – a narrative made famous by other media - and the way in which games repurpose material taken from Vietnam and World War II films, can be seen as explicit examples of remediation.

The representation of war in military computer games can therefore be seen as the product of a complex interaction between the influence of interactivity, agency, rules, technology, military policy, remediation, game structure, convention, perspective, and player expectation. Throughout the thesis, I refer to these factors as the multiple determinants of games. In Chapter 1, I primarily consider the influence of the popular hero narrative and military policy on computer game representations of war; in Chapter 2, I consider the influence of interactivity, agency, rules, technology, game structure, convention, perspective and player expectation; and in Chapter 3, I concentrate primarily on the influence of remediation. Unlike military training tools, commercial military computer games are not deliberately limited in order to deliver specific pedagogical objectives; yet the influence of the multiple determinants of games results in commercial military games promoting a very

particular understanding of what war involves and how victory can be achieved. In this respect, the multiple determinants of games are central to considerations of the relationship between military computer games and American militarism. Up to this point, however, critics have failed to make any real attempt to characterize the true complexities of the influences which affect the representation of war in military computer games. Instead, they have relied on the idea that the military-entertainment complex is the sole determinant of games.

4) A Review of the Existing Literature

This is certainly not the first study to consider the influence of military computer games on popular perceptions of warfare, or to draw a link between military computer games and American militarism; but it is unique in a number of key ways. Perhaps unsurprisingly, the military-entertainment complex has attracted significant critical attention, and has become the basis for thousands of articles on military computer games.¹⁰⁹ The majority of these articles have focused on the idea of military computer games as a form of propaganda which is defined and controlled by the military and political establishment through the military-computer game relationship, and which is intended as a means of promoting militarism.¹¹⁰ In this respect, critics have used the military-computer game relationship in order to draw a link between what they perceive as the dangerously militaristic outlook of the political establishment, and what they claim is the vision and message of games. This

link is based around the idea that both the real life militarization signaled by the Bush administration's war on terror, and the militaristic vision presented by computer games, can be seen as extensions of the military-industrial complex which Eisenhower warned of in his farewell address of 1961.¹¹¹

Eisenhower's farewell address, and the military-industrial complex that he warned of, have become the starting point for many critiques of current American foreign policy¹¹² - or in the case of Eugene Jarecki's awarding winning documentary *Why We Fight* (2006), the basis for an entire film. But the concept of the military-industrial complex has also been invoked in order to explain the militaristic content and message of games. Critics of military computer games have jumped on the opportunity of casting the military-entertainment complex as a direct practical and ideological extension of the military-industrial complex which Eisenhower warned of. As Carl Boggs and Tom Pollard have argued, whilst Eisenhower and Jarecki (the director of *Why We Fight*) have drawn attention to 'the dangers of an out-of-control military-industrial complex, which by now comes across as rather understated. Neither Eisenhower nor Jarecki... calls attention to a crucial pillar of the system: a militarized popular culture that has only deepened over the past few decades'.¹¹³

In following the logic of Boggs and Pollard's argument, it has become standard practice for analyses of war and game to begin with a reference to

Eisenhower's farewell address,¹¹⁴ and to position games as a direct extension of the military-industrial complex, either in terms of the 'military-entertainment complex', 'the military-industrial-entertainment-complex', or the 'military-industrial-media-entertainment-complex' (MIMENET), as Der Derian has called it. This relationship, between the computer game industry and the military, is described in the most technophobic and dystopic terms. Stockwell and Muir link their 'quick and dirty pre-history' of the military-entertainment complex to Goebbels.¹¹⁵ Stephen Graham describes the 'deepening and increasingly insidious connections between the military, defense industries, popular culture and electronic entertainment'.¹¹⁶ Jonathan Burston points to 'the monstrous moral implications of all this [the military entertainment complex]'.¹¹⁷ And Der Derian subsumes games within his Orwellian vision of MIMENET: a system which 'runs on video-game imagery, twenty-four-hour news cycles, multiple modes of military, corporate, university, and media power, and microchips, embedded in everything but human flesh (so far)'.¹¹⁸ Neal Curtis, author of *War and Social Theory: World, Value and Identity* (2006), posits MIMENET as the prime driver in controlling war and the media: 'Its industrial actors develop the weapons, its actors in news and entertainment circulate the requisite representations, while its military and governmental actors execute the war itself'.¹¹⁹ As Neal Curtis argues, the idea of MIMENET 'is not entirely new... What is new, however, is the idea that the actors within the MIMENET are now losing their relative autonomy and are combining in one cybernetic and autopoietic system'.¹²⁰

Within this relationship, the computer game industry therefore serves simply as another cog with the military machine, churning out propaganda on behalf of the military and political establishment.¹²¹ In doing so, Curtis argues, the industry produces a stream of military computer games which present a deliberately manipulative and distortive view of warfare in order to fulfill their goal of fuelling American militarism or directly encouraging citizens to sign up to the military. Ed Halter, with reference to *America's Army*, argues that the game presents an image of the Army as 'high-tech, fun, and hip'¹²² in order to 'sell the concept of signing up one's life to be a part of a very real and deadly war'.¹²³ Andy Deck argues that 'Game producers avoid critical messages about the horror of war. In the end, this amounts to deception'.¹²⁴ Stephen Graham, expressing disbelief at the empty rhetoric of games, asserts that: 'The rhetoric and marketing of such games, echoing George Bush's nationalistic discourse of "protecting freedom" and "ensuring democracy", imply that the task of the player is to infiltrate these cities to rid the world of "terrorists" and so "fight for freedom"'.¹²⁵ Similarly, Turse, who is taken aback by what he seems to perceive as a radically unreal and fabricated geopolitical context for the game *Full Spectrum Warrior*, cites a passage from the game's handbook concerning the description of the dictator depicted in the game: His 'hatred of the western world is well known' and his nation is 'a haven for terrorists and extremists'. For Turse, such a representation of geopolitical realities is simply a 'primitive means of marketing militarism'.¹²⁶

The effects of such manipulative representations of warfare are both extreme and far reaching. Steven Poole suggests that ‘we cannot blame videogames for the death of Serbian civilians, yet videogame-seeded technologies have contributed to the potentially alienating culture of simulation that allowed them to be killed so easily, so cleanly’.¹²⁷ Jack Thompson argues that, ‘These games don’t just teach skills - they break down inhibition to kill’.¹²⁸ David Grossman, in his studies in ‘killology’ and his book *Stop Teaching Our Kids to Kill: A Call to Action Against TV, Movie and Video Game Violence* (1999), argues that ‘The result [of computer games] is ever more homemade pseudo-sociopaths who kill reflexively and show no remorse. Our children are learning to kill and learning to like it’.¹²⁹ Der Derian suggests that whilst using simulation technologies ‘one learns how to kill but not take responsibility’ leading to a ‘genocidal mentality’;¹³⁰ he also suggests that the game *Doom* was responsible for a high-school shooting, explaining that the killers confused the virtual reality of the game with reality.¹³¹ Graham, citing Deck, argues that games ‘call forth a cult of ultra-patriotic xenophobes whose greatest joy is to destroy, regardless of how racist, imperialistic, and flimsy the rationale’.¹³² And Deck, citing Mary Spio, argues that ‘What we saw in the Abu Ghraib prison scandal was the tip of the iceberg – it was a glimpse of a generation of war gamers coming of age... Video games that allow players to kill real human beings are desensitizing generations of American society’.¹³³

The prevailing understanding of the relationship between military computer games and American militarism can therefore be summarized as follows: there is a parallel between the militaristic outlook of the political and military establishment and the vision of games. In relation to both the political and military establishment, and the vision of military computer games, this militarism is based on a deceptive rhetoric and ideology which shrouds militaristic and imperialist ambitions within a discourse of freedom and democracy. The reason that military computer games recreate such a vision of warfare, and recreate the rhetoric of the military and political establishment, is that they are under the control of the Military-Industrial-Media-Entertainment-Network (MIMENET) which serves as an extension of the military-industrial complex, and controls not only political and military policy, but also the production of media and computer game output. The effect of such computer game representations lies in the militarization of their audience; either in the sense of encouraging them to support the war on terror, to sign up to the military, to become desensitized to war, or to cause them to murder or commit human rights violations such as those at Abu Ghraib.

The extreme and conspiratorial nature of the existing debate concerning military computer games has therefore rested on the exploitation of three converging sets of fears or beliefs: firstly, fears concerning media effects; secondly, the belief in the Bush administration as particularly militaristic; and thirdly, the idea that the military and political establishment control the media

- and military computer games - through the structures of MIMENET. But whilst these converging beliefs have provided the lifeblood for the existing debate concerning military computer games, they have - as the following section reveals - also restricted the debate and obscured more nuanced understandings of the relationship between military computer games and American militarism.

Politicization, Media Effects, and MIMENET: Their effect on the Existing Debate

In April 2002, Senior U.S. District Judge Limbaugh rejected the argument that games should be protected by the first amendment, ruling that they were so vacuous as to be unable to carry any sort of message: 'no conveyance of ideas, expression, or anything else that could possibly amount to speech'.¹³⁴

Although this ruling was overturned in a Court of Appeal in 2003, the view that computer games are too simplistic to carry any ideologically significant message remains pervasive, not only amongst those who see computer games as another mass medium unworthy of critical attention, but even amongst those critics who have chosen the medium as their main subject of study. Even Ed Halter, in his study of the military-entertainment complex, *From Sun Tzu to Xbox: War and Video Games* (2006), dismisses war games such as *America's Army* as being 'too messageless to be called propaganda'.¹³⁵

But inherent in Judge Limbaugh's ruling, and also Ed Halter's critique, is a central contradiction which is characteristic of criticisms which perceive

games in terms of media effects. Games are dismissed as simplistic, messageless and vacuous, but are also described as causing dangerous media effects. In *From Sun Tzu to Xbox*, for example, Ed Halter argues not only that *America's Army* is 'too messageless to be called propaganda', but also that, as part of the 'PR front' in 'President Bush's War on Terror', it is fighting 'to win the hearts and minds of Americans'.¹³⁶ According to this argument, games are both simplistic, messageless and vacuous, and also propagandist material with the potential for significant influence over their audience. The self-evidence of this central contradiction is avoided by the fact that Halter, along with most other critics of military computer games, perceives the influence of military computer games in terms of media effects. As a result, the propagandist influence of military computer games is not seen as a result of a conscious process of interpretation on the part of the game player, nor as a result of the influence of game play and game content in generating meaning and directing the player's understanding; but rather as a spontaneous reaction which cannot be subjected to formal analysis.¹³⁷

Such an approach, however, has serious consequences for analyses of military computer games. As Henry Jenkins argues, the very idea of seeing computer games in terms of effects obscures the possibility of seeing them as a representational form which is capable of producing meaning or being consciously interpreted or analyzed:

Effects are seen as emerging more or less spontaneously, with little conscious effort, and are not accessible to self examination. Meanings emerge through an active process of interpretation; they reflect our conscious engagement; they can be articulated into words; and they can be critically examined.¹³⁸

The result of seeing the influence of games in terms of media effects is to downgrade and ignore the role of gameplay and game content in contributing to the process of interpretation and the generation of meaning. This, as Atkins and Krzywinska argue, ignores a crucial element in terms of the experience of playing games: 'It is only in the act of playing a game, becoming subject to those formal regimes that act to interpolate the player and shape their experience, that we are able to understand at a deeper level the experience of playing videogames'.¹³⁹ Existing critiques concerning the relationship between computer games and American militarism have relied on descriptions of the practical realities of the military-entertainment complex, and vague inferences concerning the parallels between games and political policy which are based purely on an understanding of the military-computer game relationship as propagandist and insidious. On the basis of these inferences, existing criticisms have made emotive claims concerning the effect of military computer games; but behind these claims, there is an absence of analysis

concerning game play, game content, and also the question of how it is that games transmit their meaning and generate understandings.

In his book, *Persuasive Games: The Expressive Power of Videogames* (2007), Ian Bogost investigates the question of how it is that games transmit meaning, generate understandings, and deliver certain ideological messages, through the idea of procedural rhetoric. ‘Procedural rhetorics do mount propositions: each unit operation in a procedural representation is a claim about how part of a system it represents does, should, or could function’.¹⁴⁰ In order to identify the procedural logic of a game, one must play the ‘videogame with an eye toward identifying and interpreting the rules that drive the system’.¹⁴¹ As Bogost argues, ‘videogames are particularly useful tools for visualizing the logics that make up a worldview’. ‘Videogames that engage political topics codify the logic of a political system through procedural representation’.¹⁴² Similar arguments have been presented elsewhere. Alex Foti, for example, argues that ‘The real meaning of a video game, its ideology, is expressed mainly through the internal rules of the game, its structure and mechanisms’.¹⁴³ In the case of military computer games, these rules are very clear.

In many ways, the structure of military computer games mimics the process of actual military planning and execution. The introduction to the game explains the grand strategic vision and the aim of the overall mission, whilst at the beginning of each mission or level within the game, the context of the mission

is set, the player is set objectives and aims to be achieved, is equipped with the assets that are needed to achieve these aims, and is informed on the challenges that he will be faced with. In addition, games often begin with a training level which introduces the player to the tactics which are needed in order to successfully complete the game. The procedural logic of military computer games is therefore revealed by these structuring rules; the player is presented with an objective, and then guided and instructed by the game in how best to achieve this objective using the tools at his disposal. In order to complete the game, the player must learn and internalize these rules of warfare and therefore learn how to win wars according to the logic of the game.¹⁴⁴

It is therefore the logic of these games and the way in which they instruct the player in how to win wars which marks their ideological and political significance, and in this respect, Graham's assertions that these military games echo Bush's 'nationalistic discourse', or Deck's attempts to depict them as 'racist' and 'imperialistic', seem strangely removed from the actual content and message of games. In fact, it is the military vision of these games which is political, as the particular vision of warfare that they present has serious political and strategic implications in relation to beliefs in the utility of force and understandings of warfare as a tool for conflict resolution. The predisposition to see games in terms of media effects, and to attempt to draw parallels between the unpopular politics of Bush and the representation of war in computer games, have marginalized the structuring logic of games and the

experience of gameplay, and have therefore ignored how games function to transmit their ideological message. Not only this, but they have also misconceived what this ideological message is, putting forward arguments relating to nationalism, race, and imperialism, rather than the military logic which games present.

But not only have existing criticisms of military computer games ignored the content, gameplay and ideological significance of games, they have also provided a reductionist explanation as to why it is that games present such a vision of war. For Curtis, Der Derian, and others, the influence of the Military-Industrial-Media-Entertainment Network (MIMENET) provides the sole explanation for the representation of war in computer games. Such an explanation represents an attempt on the part of critics not only to draw political associations between the military-entertainment complex and Eisenhower's military industrial complex, but also to subsume the debate concerning military computer games within existing frameworks for understanding the representation of war in the media more generally. In particular, attempts to present MIMENET as a totalizing explanation for computer game representations of war shows the clear influence of Paul Virilio.

Paul Virilio's work has consistently influenced thinking on the relationship between war, the media and technology over the last twenty years, with his

ideas apparently so prophetic and insightful, that he was invited to discuss them with French military officers following the Gulf War in 1991. As Virilio himself explained: ‘my work on the logistics of perception and the Gulf War was so accurate that I was even asked to discuss it with high-ranking French military officers’.¹⁴⁵ Virilio has written prolifically on the subject of the interconnection of war, technology, and representation, but the main impetus of his writing can be reduced to a number of key concerns. Virilio sees the development of media and military technologies as inextricably intertwined and war and the military-industrial complex as the prime factors influencing the development of history. Virilio shows an extreme concern about developing military and media technologies, what he describes as the ‘technocult’,¹⁴⁶ and argues that such technologies have led to derealisation (the dominance of simulated and technologically mediated perceptions of reality over direct ocular perception of material reality),¹⁴⁷ distortion, and a kind of brainwashing effect on the mass media audience, which turns us into ‘technological monks’.¹⁴⁸ For Virilio, the media is both a tool of deception and a tool of the military. In *Desert Screen* (2002) he draws a parallel between the effect of military and media technologies during the Gulf War; between Iraqi soldiers surrendering to an unmanned aerial vehicle and public opinion surrendering to the distorted images presented on their screens: ‘those millions of tele-spectators who are themselves finally taken in by the misleading synopses of a television controlled entirely by the army’.¹⁴⁹ For Virilio, it no longer makes sense to see war and the representation of war as two separate

things. The media no longer exists independently of war, the media itself is a now a new form of warfare. As Virilio argues in *War and Cinema: The Logistics of Perception* (1989), 'War is cinema and cinema is war'.¹⁵⁰

Virilio's work has provided a framework for understanding media representations of war which has been taken up by critics working across different media platforms.¹⁵¹ What theorists such as Virilio, Der Derian, Curtis and Graham share in common is a kind of conspiratorial suspicion: suspicion of media technology, military technology, the military-industrial complex, and the effect of military-media relations on the militarization of information. But what they lack is any consideration of the idea of media specificity and the differing pressures of production which affect media representations beyond the military-entertainment complex. The pressures which affect the production of news media, television, film, or literary representations of war are clearly different to those which affect the production of military computer games. To suggest that the media represents a homogenous whole and to posit the military-entertainment complex as the sole influence on media representations of war across media, as Virilio and others do, is to ignore this fact.

The rise of the military-entertainment complex and the relationship between the military and the computer game industry has made military computer games a particularly attractive form for such explanatory frameworks. But ultimately, as Jonathan Burston argues: 'In the textual register, conceptualizing

“entertainment” merely as fluff or, conversely, as sinister ideological vehicle, appears increasingly incongruous’ (although he is guilty of doing so himself).¹⁵² The representation of war in military computer games cannot simply be explained by the ‘autopoietic’ system of MIMENET. Rather, as I have argued, the representation of warfare found in computer games is influenced and affected by multiple determinants - interactivity, agency, rules, technology, military policy, remediation, game structure, convention, perspective, and player expectation - and these determinants work together, or sometimes against each other, in order to determine exactly what form the representation of warfare in computer games takes.¹⁵³

5) My Own Approach to the Subject: ‘Military Computer Games and the New American Militarism: What Computer Games Teach Us About War’

As Andrew Bacevich argues in *The New American Militarism: How Americans are Seduced by War* (2005), the perception of the Bush administration as a militaristic organization controlled by a ‘cabal of warmongers’ and driven by a perverse neoconservative and imperialist ideology has spawned a great number of books.¹⁵⁴ As Bacevich suggests, however, these ‘are for the most part angry books. They indict more than explain, and whatever explanations they offer tend to be ad hominem...heaping abuse on the head of George W. Bush’.¹⁵⁵ The existing debate concerning military computer games occupies a similar vein of argument. Whilst it raises serious questions concerning the influence of military computer games, the relationship between the military and the

computer game industry, and the propagandist and ideological significance of games, it does so within a politicized, emotive, and technophobic framework of analysis.

In *The New American Militarism*, Bacevich attempts to distinguish his work on American militarism by replacing the angry ad-hominem indictments of President Bush which, he argues, have characterized analyses up to that point, with a constructive analysis of the historical, social, cultural and political factors which have encouraged a militaristic predisposition in the American political establishment and public. Bacevich sees the current predilection for ‘military metaphysics’ – a tendency to see geopolitical problems and their solutions in purely military terms – not as being founded on any evil ideological footing; but rather ‘the misleading and dangerous conceptions of war... that have come to pervade the American consciousness’¹⁵⁶ and which have led, he argues, to a new American militarism.

The purpose of this thesis is to investigate in what ways military computer games can be said to contribute to this sense of a new American militarism and to misleading and dangerous conceptions of war. In this respect, its overarching research framework, and its association of games with militarism, is not dissimilar to those critiques listed above. But the apparent familiarity of this theme and of the central subject of the thesis in fact points to its major contribution to original scholarship; it serves as a re-conceptualisation of many

of the fundamental assertions and assumptions which have been built up around military computer games, and as a challenge to the prejudices and inaccuracies which have characterized existing analyses of military computer games up to this point.

Crucially, existing critiques of military computer games have marginalized consideration of the content of games, the message of games, how games function to transmit their ideological message, and what influences or determinants impact on their production and form. In viewing games in terms of media effects, rather than in terms of meaning, they also ignore the question of how the representation of war in computer games encourages particular understandings of warfare. This thesis sets out to move beyond these limitations by incorporating textual analysis, a consideration of the culture of production – including the multiple determinants of games - and an analysis of the understandings of warfare which games promote.

This thesis therefore focuses on game content and gameplay, and the meanings and understandings which games generate (rather than the question of media effects). It focuses on the idea of the procedural logic of games and how the logic of war which these games present reveals their ideological and propagandist significance (rather than making vague assertions concerning the political message of games). And it analyses the representation of war in computer games not only in relation to the military-entertainment complex, but

also in relation to the multiple determinants which affect the computer game form.

The thesis is therefore based around the following research questions:-

- 1) What does the representation of war in computer games look like?
- 2) Why is it that games look like they do – what are the multiple determinants which affect their form?
- 3) What do games, through their procedural logic, teach us about warfare?
- 4) What is the consequence of this for understandings of warfare and the utility of force?¹⁵⁷
- 5) How do these understandings contribute to the new American militarism?

Each chapter of the thesis is based around the re-conceptualization of one or other of the central assumptions which have come to be associated with military computer games and which have characterized the debate concerning military computer games up to this point. The following section provides a preview and overview of the arguments which are presented in each chapter, whilst illustrating how these different arguments fit together to form the thesis as a whole.

One of the most fundamental misconceptions concerning military computer games has been promoted by the adoption and propagation of the phrase ‘war is like a computer game’ and the understanding of both games and war which

this phrase has encouraged. The use of the phrase ‘war is like a computer game’ was popularized in television news commentaries during the Gulf War in 1991 - a war which became known as ‘The Nintendo War’.¹⁵⁸ News coverage of the Gulf War was dominated by the depiction of precision guided missiles hitting their targets and strategic debates were centred on discussions of the use of unmanned aerial vehicles and smart weaponry. This understanding of the increasing automation of combat became the basis for claims that real war was increasingly similar to a computer game. But although this comparison of war and game made reference to changes in the nature of warfare, it was based largely on an ignorance of computer games and computer game content. It is true that war had been a feature of computer games since their inception, but at the time of the Gulf War, computer war games were far from the graphically advanced and popular genre that they are today. At the time of the Gulf War, the design of the first-person shooter, on which most of the modern war games are based, had not even been invented, and Nintendo, which was targeting an age group of 8-14 year olds,¹⁵⁹ (compared to the average age of 33 of a game player today¹⁶⁰) had just released the Super Nintendo Console in North America alongside its flagship game *Super Mario Brothers*. The game depicted an Italian plumber and his brother Luigi’s attempts to steer through the Mushroom Kingdom, eliminating the Koopa Troopa turtles in order to save Princess Peach. An analogy between the Gulf War and computer games would therefore seem far fetched, and clearly, this was not the intent of those who invoked the comparison of war

and games. In truth, this comparison had nothing to do with the content of games, as the medium was not considered worthy of critical attention; it was a comparison between the hardware and technologies involved in playing computer games (T.V. screens, hand held controllers, keyboards, computers) and those increasingly adopted in order to carry out certain aspects of warfare. But although this debate on the relationship between war and game was based largely on an ignorance of game content, it succeeded in introducing and perpetuating the understanding of computer games as purveyors of a vision of high-technology warfare. Not only this, but as the television news media's representation of the Gulf War became criticized as an exercise in military PR, so the representation of war in military computer games became associated not only with high-technology warfare, but propaganda, sanitization and distortion.¹⁶¹

The Gulf War had been seen by many military and political commentators as signaling the advent of the Revolution in Military Affairs (RMA) – a revolution, it was claimed, in which military high-technology had fundamentally revolutionized the way that war would be fought, inaugurating a form of 'new warfare' which would be more clean, clinical and precise,¹⁶² and which offered, as Steven Metz argues, the possibility of relegating 'the close-quarters clash of troops to history'.¹⁶³ For critics, the emergence of the discourse of new warfare and the Revolution in Military Affairs was simply an example of military propaganda which attempted to hide and sanitize the

realities of warfare. The news media came to be seen as complicit in this propagandist attempt, as critics pointed to the coverage of the Gulf War as an indication of the media's malleability in reproducing the rhetoric and false promises of the military, specifically in relation to the discourse of new warfare which surrounded the military's new arsenal of smart weaponry and precision strikes. But although this debate over news media representation and military propaganda appeared far removed from computer games, the use of the term 'videogame' as a critical descriptor not only drew games into the debate, but also succeeded in enforcing a particular perception and understanding of what military computer games were about.

In order to highlight the sanitized and simplified nature of the news media's coverage of the Gulf War, critics took to comparing news coverage with the vision of warfare presented in computer games,¹⁶⁴ whilst the military's own propagandist discourse of new warfare was also attacked when the Pentagon was accused of providing 'film that made the conflict look like a video game'.¹⁶⁵ As one commentator noted, the Gulf War was not an 'antiseptic Nintendo game...it was a slaughter'.¹⁶⁶ The use of the terms videogame and computer game within these analogies revealed that military computer games and their representation of warfare had taken on very definite and commonly accepted connotations: as their association with the RMA, new warfare, and the news media's representation of the Gulf War suggested, games were now commonly understood as purveying a high-tech, sanitized, simplified and

distorted vision of warfare. And despite the fact that these understandings rested on a complete lack of computer game analysis, they have not only survived, but flourished, providing the main impetus for current interpretations of the propagandist significance of military computer games.

Since the Gulf War in 1991, the use and sophistication of military high-technology has increased exponentially, whilst interest in military computer games has grown as a result of the military-entertainment complex. This military-computer game relationship has offered the increasingly intuitive possibility of drawing parallels between war and games. Whilst the U.S. military's claims for increasingly clean, clinical, and precision strike high-technology capabilities continue to be treated with suspicion, critics continue to argue that it is these highly sanitised and high-tech visions of warfare which inform the representation of war in computer games.¹⁶⁷ In 'War Play: Practising Urban Annihilation' (2007), for example, Stephen Graham argues that:

The complex links between virtual, filmic, and televisual representations of city-killing, and actual acts of urban war, are becoming so blurred as to be almost indistinguishable. At least amongst US forces, the real targeting of cities is increasingly being remodelled as a "joy stick war"...This operates through "virtual" simulations, computerised killing

systems, and a growing distancing of the operator from the sites of the killing and the killed. In the process, the realities of urban war – at least for some – start to blur seamlessly with the wider cultures of sci-fi, film, video games and popular entertainment... Take, for example, the unmanned, low altitude “Predator” aircraft that are already being used for extra-judicial assassinations of alleged “terrorists”... whilst being piloted from a Nevada air base... 8 or 10,000 miles away. For the US military personnel doing the piloting, this “virtual” work is almost indistinguishable from a “shoot-em-up” videogame.¹⁶⁸

But despite developments in military high-technology, policy, and military computer games, Stephen Graham’s argument, that the reality of “joy stick war” and of unmanned aerial vehicles being piloted from 10,000 miles away makes war ‘almost indistinguishable from a “shoot-em-up” videogame’ remains extremely questionable. Certainly Graham is correct to point to a parallel between military policy and the representation of war in computer games; but this parallel does not exist as he describes it. Graham’s conflation of current U.S. policy with ‘joystick war’ paints a picture of post-heroic warfare and human disengagement, but, as I argue in Chapter 1, not only does such a vision present an impossibly unsuitable form for the representation of war in military computer games,¹⁶⁹ it also ignores the propagandist appeal of

the vision of current U.S. policy. Whilst Graham emphasises the new military high-technologies of 'joystick war', he neglects to mention the increasing integration with Special Forces troops which has become a central facet of the current U.S. policy of military transformation. It is this combination of Special Forces and high-technology which has not only become emblematic of U.S. military transformation, but which has made the vision of military transformation so appealing for computer game representation. As Graham suggests, a parallel between computer games and American military policy does indeed exist; but this parallel is based around the vision of military transformation, and not joystick war. The purpose of Chapter 1 is therefore firstly to provide a corrective to the understanding of military computer games as presenting a vision of 'joystick war'; and secondly, it is to provide a complete re-evaluation of the understanding of the propagandist significance of games.

Up to this point, the propagandist significance of games has been understood in much the same way as it was in debates during the Gulf War in 1991; in relation to the recreation of a vision of high-tech war which sanitises and distorts the realities of warfare. This understanding, however, rests not only on an inaccurate characterisation of the content of military computer games, and an incomplete assessment of current U.S. policy, but also on a misunderstanding of the notion of propaganda itself. As Toby Clark has argued in *Art and Propaganda in the Twentieth Century* (1997), 'The word

“propaganda” has a sinister ring, suggesting strategies of manipulative persuasion, intimidation and deception;¹⁷⁰ and so it has been understood in relation to computer games. But in theorising propaganda purely in terms of distortion and manipulation, critics of computer games have ignored the most fundamental of questions concerning propaganda, and that is, as Linda Robertson has argued, ‘why is it to be believed?’¹⁷¹ As I argue in Chapter 1, the propagandist power of the vision of warfare presented in military computer games not only lies in its recreation of the ‘realities’ of the policy of military transformation; but also in the similarity of the vision of military transformation to existing and heroic cultural forms. Military computer games, as I show in Chapter 1, build on the appeal of military transformation as a representational form, and mold the representation of traditional hero narratives and modern military high-technologies around the realities of the policy of military transformation. It is this merger of real military policy and traditionally heroic cultural forms which lends military computer games their propagandist power.

But although military computer games can be said to recreate the ‘realities’ of the policy of military transformation – and by that, I mean that games recreate the model and vision of military transformation as it is described in policy documents and doctrine, and as it is promoted by military and political proponents; they do not recreate the reality of how this policy has fared when applied in real operational environments. In fact, as I argue in Chapter 2, the

representation of war in military computer games not only recreates the vision of military transformation, it also obscures transformation's strategic and operational vulnerabilities. As a result, whilst the recreation of the vision of military transformation can be seen as contributing to the realism of military computer games, the way in which these games obscure the vulnerabilities of military transformation also points to the limitations of computer game representations of war. These limitations, as I argue in Chapter 2, are most often revealed when military computer games depict the successful and unproblematic application of military transformation to contingencies such as Military Operations in Urban Terrain, cyber war, asymmetric warfare, and nation building – areas which in reality have posed significant challenges to the model of military transformation.

As critics have suggested, however, the limitations of the representation of war in military computer games extend beyond the obfuscation of the vulnerabilities of military transformation to their sanitisation of violence, their lack of political, historical, and social context, and their failure to represent the true horrors and complexities of war. In his article 'The Ultimate War Simulation' (2005), David Wong parodies the very idea of producing a genuinely realistic computer war game which reproduces the true complexities of warfare. As Wong writes:

I want a war simulation. *A real one*. I don't want little cartoon tanks jostling around in a video sandbox chewing down each other's health meters while a pre-teen opponent insults my sexuality using every key on his keyboard except the ones with letters. I want an RTS [Real Time Strategy] game that will give me a stress headache after an hour and an ulcer after a week. I want to identify experienced players on the street by their Thousand-Yard Stares.¹⁷²

David Wong's 20 point article identifies issues such as public support, the fog of war, and reaction to casualties, highlighting the complex and contradictory factors which combine to make real war so complex. Wong's article might provide a tongue in cheek critique of military computer games, but its central argument reflects what is a commonly held belief concerning military computer games: that they are too simplistic to represent the true complexities of combat. But whilst the representation of war in military computer games is indisputably limited in a number of different ways, these limitations, as I argue in Chapter 2, in fact reproduce the limitations of U.S. policy as they have been exposed in Afghanistan and Iraq.

Alongside suggestions that games present an unrealistic, sanitised and distorted vision of warfare have emerged criticisms of military computer games as unhistorical. In his discussion of military computer games, for

example, the historian Niall Ferguson describes his hatred of the first person shooters based on World War II: ‘Why do I hate *Medal of Honor*? The trouble is – and the same could be said of nearly all its competitors – it’s profoundly unhistorical’.¹⁷³ For Ferguson, the unhistorical nature of military computer games represents a lost opportunity to combat the historical ignorance which he believes has come to characterise political discourse and the process of policymaking in the U.S.:

There’s never been a more important time for people to play World War II games. For the last five years, politicians from the President down have been recycling the rhetoric of that conflict...And yet few of these politicians seem to have any real understanding of the strategic risks involved in global conflict.¹⁷⁴

For Ferguson, the unhistorical nature of games is therefore a reflection of the unhistorical nature of current U.S. policy. In particular, Ferguson claims, U.S. policymakers have failed to learn the lessons of the past and have carelessly used historical analogies in the formation of policy. In his article ‘This Vietnam Generation of Americans Has Not Learnt The Lessons of History’ (2005), for example, Ferguson attacks ‘the disturbing reality about the way Americans make policy’ and the way in which they use historical precedents in the process.

The lessons of history come a poor second, and only recent history – preferably recent American history – gets considered....For the time being US policy is in the hands of a generation who have learnt nothing from history except how to repeat other people's mistakes.¹⁷⁵

Ferguson's comments - which echo Santayana's 'aphorism' that 'those who do not know the past are condemned to repeat it' – recreate one of the most common criticisms to be levelled at the wars in Afghanistan and Iraq: the idea that the architects of these wars have failed to learn the lessons of the past, whether these be the lessons of Soviet intervention in Afghanistan in 1979, the British mandate of Mesopotamia following World War I, or, as is more commonly claimed, the lessons of the Vietnam War. The idea of the 'lessons of history' has therefore become a major part of the debate concerning intervention in Afghanistan and Iraq, and concerning the idea of international intervention more generally. But the very idea of taking lessons from the past raises a number of questions. Importantly, such lessons are not solely the reserve of the critics of current U.S. policy, and nor are the lessons and interpretations of past wars singularly accepted and objective truths. As Ernest May has argued in *"Lessons" of the Past: The Use and Misuse of History in American Foreign Policy* (1975), policymakers do in fact use history and historical analogy in the formation of policy; the problem is, there is no single

or definitive lesson that can be taken from a past event such as a war. Not only this, but the lessons and interpretations of past conflicts will vary over time in line with current perspectives, and policymakers will mold the image, interpretations and lessons of past conflicts in order that they support their current objectives. In "*Lessons of the Past*", May describes this process as 'cognitive dissonance'¹⁷⁶ – a form of historical analysis in which facts are forced to fit and complications are ignored. In this respect, current U.S. policy should not be seen as unhistorical in the sense that it is ignorant of all historical precedent; rather it should be seen as a product of the process of cognitive dissonance and selective analysis which Noon describes.

Military computer games, like current U.S. policy, have also been dismissed as being unhistorical; but like U.S. policy, it is not the case that they show a complete ignorance of past wars. Games such as *Conflict: Desert Storm*, *Conflict: Desert Storm II*, *Delta Force: Black Hawk Down*, *America's Army*, and *Delta Force: Task Force Dagger* are based on recent U.S.-led conflicts, and there are a plethora of games based on World War II and the war in Vietnam. All of these games contain elements which can be said to be historically accurate. But the representation of past wars in military computer games, like the drawing of lessons from the past, is also subject to a process of selective representation as a result of the influence of the multiple determinants of games. Rather than dismissing games as unhistorical, it is therefore more interesting to analyse in what ways the multiple determinants

of games have affected the representation of past wars in military computer games, and to analyse how these determinants have affected the understandings and lessons of past conflicts which these games promote. The purpose of Chapter 3 is therefore firstly to investigate in what ways the multiple determinants of games have affected the representation of past wars in military computer games; secondly, to analyse what ‘lessons of the past’ these games encourage; and finally, to examine what the consequences of such lessons are for understandings of warfare and the utility of force.

This overview has illustrated my intention to provide a complete re-evaluation of the understanding of the propaganda of games, the limitations of games, and also the notion of their unhistorical nature. The purpose of the rest of the thesis is to invite readers to recognise the growing relevance of these aspects of military computer games to the new American militarism.

CHAPTER 1

From Underdog to Overmatch: Computer Games, Propaganda and Military Transformation

The U.S. military has now identified and publically stated the potential of computer games as recruitment tools and as tools of propaganda. In 2000, the U.S. Defense Science Board described computer games as ‘perhaps the most popular means’ of disseminating information in support of psychological operations.¹ The U.S. Army spent over \$7 million developing *America’s Army* in the belief that the medium offered the opportunity of reaching a previously untapped audience. As Major Chris Chambers, Deputy Director of the Army Games Project explained: ‘What this means is that we make connections with Americans who might not have had a connection with the Army. We use the videogame to make that connection’.² As Colonel Wardynski, the director of the *America’s Army* project, explicitly explains in his article ‘Informing Popular Culture’ (2004), the purpose of the game is to frame ‘information about soldiering within the entertaining and immersive context of a game’,³ and to provide a means with which to disseminate information concerning the armed forces at a time when fewer and fewer people have direct experience of the military. In recognizing the power of computer games in shaping, informing and influencing people’s perceptions, the U.S. Army has attempted to garner this power as a means of providing information concerning military values and careers in the armed forces. The status of military computer games as propaganda is therefore not really open to debate; but it is the way in which

the propagandist vision of these games - and the notion of propaganda itself - has been conceived and explained, that needs readdressing.

Existing analyses of the propagandist significance of games have been based on two main supporting beliefs: firstly, the idea that military computer games recreate a vision of high-tech 'joystick war' which, in mirroring the military's own technophilic discourse of new warfare, sanitizes the realities of combat; and secondly, the fundamental understanding of propaganda as signifying sinister strategies of deception, distortion and manipulation. The purpose of this chapter is to challenge both of these understandings and to provide a reexamination of the content of games, as well as their propagandist potential.

An analysis of the structuring logic of military computer games reveals that they present a variety of different strategic visions and overall objectives. Whilst fighting during Operation Desert Storm in 1991 in *Conflict: Desert Storm* (2002) and *Conflict: Desert Storm II* (2004), you are dropped behind enemy lines and tasked mainly with the disruption of enemy communications, logistics, and the destruction of SCUD missiles. In *Call of Duty 4: Modern Warfare* (2007), you are thrown into a new Cold War in which you must prevent the possibility of nuclear proliferation and nuclear attack on the east coast of America which is threatened by civil war in Russia and Middle

Eastern attempts to get their hands on a nuclear bomb. In *Tom Clancy's Ghost Recon Advanced Warfighter* (2005), you fight to regain control of Mexico City in the face of an urban insurgency in 2013. In *Future Force Company Commander (F2C2)* (2006), you attempt to prevent the destabilisation of the government of Dalilar by its neighbour Sabalan. In *Full Spectrum Warrior* (2004), you must remove the murderous regime of the dictator Mohammad Al-Afad from Zekistan, whilst in *Full Spectrum Warrior: Ten Hammers* (2006), you attempt to pick up the pieces of the aftermath of the war, in which Zekistan has become a haven for terrorists and has fallen into the grip of civil war and insurgency. But although the missions to which you are assigned in these games are radically different, there is an almost complete uniformity to the force structures, assets and tactics which are used in order to achieve these radically different aims. Whether disrupting logistics behind enemy lines in the Gulf, fighting a new Cold War, or attempting to restore order in the face of a civil war, you play as a small squad of Special Forces soldiers who rely on high-technology in order to achieve success. Whilst the strategic objectives of these games differ, the vision and logic of how to achieve these objectives therefore remain the same: the combination of Special Forces and high-technology.

There are a number of determinants which have impacted on the production of military computer games and which have led to such a representational form. Take, for example, the games *Conflict: Desert Storm* and *Conflict: Desert*

Storm II which depict the war in the Gulf in 1991 through an S.A.S. and DELTA force squad. Such a representational form fits the technological foundation of the modern squad-based military shooter, which is designed to portray three dimensional close combat. The tactical squad based military shooter has been built on the back of the development of the first person shooter (FPS) in the early 1990s with games such as *Wolfenstein* (1992) and *Doom* (1993), which in turn followed increasingly sophisticated graphics, game engines and gaming technologies. Given the form of the first person or squad based shooter - normally based around the depiction of a four-man squad - and the popular movement away from the God-game perspective,⁴ the Special Forces narrative represents a perfect fit for the FPS form. But the first person or squad based shooter also presents certain limitations: for example, it would be impossible for an FPS game to depict the massed industrial conflict involving hundreds of thousands of troops which Desert Storm involved. The use of such a model to represent warfare therefore both exploits technological developments, whilst also revealing certain technological limitations.⁵

But the squad-based military shooter can also be seen as a form of remediation, as the practice of depicting warfare through following a small group of soldiers has been used not only in video games, but across media, particularly in film. Such a narrative form provides a means of developing characterization and of making industrial scale war human,⁶ and in this respect, media coverage of each war over the last century has followed such an

approach, each time giving birth to a new media hero: the flying aces of World War 1; the Marines at Iwo Jima of World War 2; the SAC pilots of the Cold War's nuclear war; and the Green Berets of Vietnam.⁷ In the case of the *Conflict* games, the Special Forces narrative allows the game to build on existing representations of the conflict, such as *Bravo Two Zero* (book 1994, film 1998) and *The One That Got Away* (book 1995, film 1996), which made the role of the S.A.S. famous. It also allows for the development of a recognizable hero narrative in which the outnumbered underdog overcomes the odds to triumph against a far larger force – a hero narrative popular in both military and non-military films. In this respect, the idea of a 'good' hero narrative also relates to the idea of a 'good' game. As Barry Atkins has argued:

More recent American-led conflicts, particularly the Gulf War that had so exercised Baudrillard, would have made a poor game at a strategic level because of their dependence on the doctrine of overwhelming military force, where the military machine renders the individual inconsequential. There is an absence of any significant doubt with regard to broad outcome. The "What if?" of this kind of counterfactual enquiry takes a point at which there is no inevitability of outcome.⁸

As the lead designer of *Conflict: Desert Storm* explains, in producing a game based around the Gulf War, the need to maintain the centrality of human action and avoid the overbearing influence of the 'military machine', leads to a certain form of historical revisionism.

It [*Conflict: Desert Storm*] is not a realistic portrayal of how that war was fought for most of the soldiers, because it predominantly was fought through air strikes...it wasn't a particularly good war in terms of gameplay because they didn't do a lot...Then these very exciting stories of Special Forces actions came out, basically we take that as a basis and then add on loads of stuff to make it more exciting. But it is a kind of hyper real version of reality if you like and if you want a war with modern weapons, modern equipment, that people recognize, then I think that is why that setting has been picked.⁹

To a certain extent, the representation of the Gulf War found in the *Conflict* games can therefore be seen as an attempt to escape the overbearing influence of military high-technology and airpower which the Gulf War conflict was seen as representing. Television news coverage of the war was dominated by press briefings in which Schwarzkopf fronted images of the technological marvel of precision guided munitions hitting their targets - an image so

familiar that it was parodied in the BBC's sketch show *Big Train*;¹⁰ and the understanding of the war as being dominated by high-technology and airpower - to the extent that human action was rendered redundant - was also recreated in *Jarhead* (book 2003; film 2005). The representation of the Gulf War in *Conflict: Desert Storm* and *Conflict: Desert Storm II* therefore represents an attempt to escape such a vision of the conflict. Rather than reproducing an image of the Gulf War which promoted the idea that the conflict was dominated by airpower and high-technology, and which showed human action to be redundant in modern warfare, 'The Desert Storm games are set in the "behind the lines" thriller scenario familiar to audiences from books and television series made from the memoirs of ex-S.A.S. personnel'.¹¹ These make for a far more exciting story line, a recognisable military hero narrative, and after all, 'everybody knows what SAS forces are'.¹² Contrary to suggestions that the increasing automation of combat has made war more like a computer game, or suggestions that computer games recreate a vision of joystick war, the *Conflict* games, as Jon Dovey argues:

Do not in any way actually echo the oft repeated cliché that the Gulf War was the first videogame war...There is little sense...of war by remote control, instead more of close-up engagements and a narrative of escape.¹³

In fact, contrary to the suggestions of some computer game critics, the multiple determinants of games ensure that games do not present a vision of joystick war. For a game in which the player controlled an avatar who was depicted sitting at a computer screen, conducting war using a remote control, would not make for a good game. Nor would it represent a recognisable form of warfare for the player, nor would it fit with the game engine developed for a first person or squad based shooter game designed not for war by remote control, but for action, 'close-up engagements and a narrative of escape'. The idea that the increasing automation of combat and the reduction of interpersonal combat mark a parallel between real war and the representation of war in computer games therefore ignores not only the content of games, but also the determinants which influence their form.

As the producers of the *Conflict* games suggest, the adoption of the Special Forces narrative was a direct response on the part of media producers to escape the dominance of airpower and high-technology and the deadening effect it had on popular representations of war. But what is interesting about the representation of war in computer games such as *Conflict: Desert Storm*, and military computer games more generally, is that they have increasingly come to incorporate military high-technology within their heroic narrative.

Traditionally, one of the hallmarks of the military hero narrative, as presented in films such as *Bravo Two Zero* and *The One That Got Away*, which use the same form of Special Forces narrative as *Conflict: Desert Storm* in order to

depict the Gulf War, is that they completely obscure any element of technological assistance.¹⁴ Much like in the *Rambo* films, these are Special Forces soldiers who survive on nothing but will, courage and guts. In this sense, military hero narratives have traditionally obscured any element of American technological military superiority, effectively reversing the role which might be expected in a war between America and any foe, by pitting the lead American hero as an underdog who relies purely on skill. The tagline of *The Sands of Iwo Jima* (1949), ‘Alone and outnumbered, they had one thing in their favor... the American dream’,¹⁵ largely sums up the approach of such media productions, and films such as *Rambo: First Blood Part II* (1985), *Bravo Two Zero*, and even *Top Gun* (1986) are illustrative in this respect.¹⁶

As a result of the need to maintain the imperatives of both a good game and a good hero narrative, media representations of war have tended to privilege episodes which fit into this pre-existing mold. And as I have argued, the *Conflict* games appear to be no different in this respect. But although the lead designer of *Conflict: Desert Storm* and *Conflict: Desert Storm II* explains that it was necessary to modify the image of the Gulf War to avoid the overbearing influence of airpower and technology, in both games, the use of laser designators and the calling in of airstrikes using A-10 tank busters or Multi Launch Rocket Systems (MLRS) is a prominent feature of the gameplay. In fact, in order to complete *Conflict: Desert Storm*, you call in a GBU-28 Bunker Buster air strike using a laser designator to kill General Aziz – the

head of the Iraqi Army – and end the war. What we see in the *Conflict* games, and in military computer games more generally, is the development of the hero narrative from one based around the idea of the underdog, alone, outnumbered, and without any form of technological support, to that of ‘overmatch’, in which the heroes are still outnumbered, but are supported by military high-technology. And in *Conflict: Desert Storm II* in particular, the synthesis of Special Forces and high-technology, and the reinvention of Desert Storm, represents not only an attempt to escape the reality of the policy of ‘overwhelming military force, where’, as Atkins describes, ‘the military machine renders the individual inconsequential’; but also the reinvention of Desert Storm in light of the policy of military transformation which was becoming so famous at the time of the game’s production, following the war in Afghanistan. In computer games, the development of the hero narrative from underdog to overmatch, and the representation of war which they present, has therefore mirrored developments in real U.S. military policy and the way in which the U.S. fights its wars. In fact, the reinvention of Desert Storm in the *Conflict* games replicates not only the development of U.S. military policy from overwhelming force to transformation and overmatch, but also the changing perspectives of Desert Storm upon which these changes in policy were based.

Military Transformation and Computer Games

Something occurred in the night skies and desert sands of the Middle East in 1991 that the world had not seen for three hundred years – the arrival of a new form of warfare.¹⁷

In many ways, particularly in terms of its application of military high-technology, Desert Storm was seen as revolutionary. But the Powell Doctrine¹⁸ of overwhelming force, massed troops, and long-build up periods upon which Desert Storm was based soon came to be seen as anachronistic. Following the end of the Cold War and the Gulf War in 1991, the U.S. was faced with a number of unconventional contingencies for which the model of overwhelming force adopted in Desert Storm seemed inappropriate. In particular, the failure to act swiftly in the Balkans was seen as illustrative of the overly restrictive parameters of the Powell Doctrine, and the inefficiency of a massive and lumbering military machine which needed to be far swifter and nimbler in order to face the challenges of the post-Cold War world.¹⁹ The disorder of the 1990s, as Andrew Bacevich argues, offered the officer corps two choices: either improvise a response to the highly unconventional contingencies they were faced with; or persist in refusing to venture beyond conventional operations, thereby admitting their own irrelevance to actually existing security concerns.²⁰ Just like the producers of the *Conflict* games who were tasked with reinventing Desert Storm in light of the multiple determinants of games, so those in charge of military policy set about

reinventing American military policy in response to the change in strategic outlook.

In his 1993 paper, 'Land Warfare in the 21st Century', Chief of Staff Gordon Sullivan identified the 'military-technical revolution', and argued for smaller, more dispersed and more mobile units.

Think of the manoeuvre possibilities that could be generated for ground and air commanders by very dispersed Special Operations forces or the potentially decisive effects these very small forces... have when equipped with secure satellite communications, laser designators, and position guidance systems.²¹

Following the wars in the Balkans, the new Army Chief of Staff Eric Shinseki pushed the transformational agenda further, calling for the creation of the Objective force, a truly transformational force, which would later develop into the Future Combat Systems and Future Force Warrior²² – systems which placed paramount importance on the influence and potential of high-technology. In 2002, the Office of Force Transformation was set up under director Arthur K. Cebrowski, and in an attempt to emphasize a break with past policy, Cebrowski announced, 'On Sept 11, America's contract with the Department of Defense was torn up and a new contract is being written'.²³ The Department of Defense paper, 'Military Transformation: A Strategic Approach (2003)' identified the development of stand-off precision strikes and lighter,

nimbler forces; tools for situational awareness and C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance); and increased investments in Unmanned Aerial Vehicles (UAVs), space based satellites, and Special ('de-massed') Forces.²⁴

This combination of high-technology and Special Forces troops became the hallmark of the U.S. invasion of Afghanistan in 2001, leading to a torrent of military commentary which proclaimed it a revolutionary new way of war.²⁵ A few hundred Special Forces soldiers had achieved what planners had believed would require 50,000 ground troops, with Special Forces on the ground using laser binoculars to pinpoint targets and the Joint Direct Attack Munition (JDAM) satellite guidance then directing bombs to their targets.²⁶ The Afghan Model – as it became known – seemed to illustrate the possibility of waging a major conventional conflict without mass conventional forces or extensive close combat, suggesting a revolutionary change in force structure and war-fighting doctrine. For Rumsfeld, the key lesson from Afghanistan was that the policy of overwhelming force, and the idea of massed industrial armies which it entailed, was obsolete. As Rumsfeld argued in testimony to the Senate Armed Services Committee in 2003: 'In the twenty-first Century, "over-matching power" – the ability to field a small but technologically superior force – is more important than "overwhelming force"²⁷ – beliefs which were promoted in the planning of the Iraq war in 2003²⁸ and which have been similarly promoted in computer games.

The representation of Desert Storm in the *Conflict* games, based around the combination of Special Forces troops and precision guided airpower, therefore points not only to the unsuitability of the policy of overwhelming force as a representational form for modern computer games, but also to the obsolescence of such a policy in reality, and the rise of military transformation and overmatch. The *Conflict* games do not simply seek to escape the influence of military high-technology altogether, as has traditionally been the case in representations of the underdog hero narrative; but to combine the Special Forces narrative with that of transformation and overmatch. As the Head of Audio at Pivotal Games reveals, when September 11th happened, ‘we were halfway through developing Desert Storm 1 which was ten years ago so we thought we were pretty safe, we thought it would be a good thing, you know get all the special forces with all the radio mics and all the new gear what a great environment to set a game around’.²⁹ The model of military transformation, and the combination of Special Forces and high-technology which had become prominent at the time of the game’s production, was therefore used to transform the representation of Desert Storm – a war that had taken place ten years earlier. And just as military transformation has become a vision of a revolutionary new way of war in reality, so it has come to dominate the representation of war in computer games, providing images of past, future and contemporary conflict along transformational lines.

In the multi-award winning *Call of Duty 4: Modern Warfare*, the vision of transformation and overmatch is given a big budget makeover, combining the Special Forces narrative involving S.A.S. and U.S Marine Reconnaissance Units with a narrative which invokes the feeling of a new Cold War and includes death scenes, torture scenes, and assassinations reminiscent of a Hollywood blockbuster. *Call of Duty 4* is perhaps the clearest example to date of the transformational synthesis of Special Forces and high-technology to be reproduced in computer games, as the game provides both the opportunity to fight as a Special Forces soldier on the ground, and also the opportunity to view the battlefield from above whilst commanding a high-technology targeting system. In ‘Death from Above’, a particularly unique (and eerily realistic) level for a first person shooter, you are given the opportunity to control the weapons system on an AC-130 Gunship, targeting enemy troops and vehicles using a thermal imaging operator in order to provide cover for the Special Forces troops on the ground. In ‘Death from Above’, your view of the battlefield exactly reproduces that provided by the news footage of precision guided munitions hitting their targets which was repeatedly shown in the U.S. during Desert Storm; but the true measure of the game’s realism is provided by a comparison with the actual video footage of AC-130 gunships at work in Afghanistan and Iraq which has begun to appear on the website *YouTube*. This footage - which is classified as sensitive material – has a warning attached: ‘NOTE: THIS IS NOT CALL OF DUTY 4!’³⁰

As if the gameplay of *Call of Duty 4* did not make the importance of high-technology and airpower within the new American way of war clear enough, the game is punctuated with “aphorisms” concerning combat, with one unattributed quotation reading: ‘if at first you don’t succeed, call in an air strike’. There is no question of high-technology obscuring the heroic activities of the Special Forces, however; as the tagline to the game explains: ‘wars change, weapons change, soldiers don’t’. This vision of high-technology and airpower therefore combines with a vision of the Special Forces narrative, building both on the media coverage which has surrounded British and U.S. Special Forces in films such as *Bravo Two Zero* and *Black Hawk Down* (2001), and also reflecting the more contemporary and revolutionary use of U.S. Special Forces in Afghanistan in 2001/2002 and perhaps the largest deployment of U.S. Special Forces ever in Iraq in 2003.³¹ In dramatic form, the game *Call of Duty 4* therefore recreates the vision of military transformation and its focus on high-technology and Special Forces as the means of winning wars.

In *Call of Duty 4*, real and current military weaponry and Special Forces units are depicted within an imagined geopolitical context - a new Cold War setting in which America is threatened by nuclear attack; in *Tom Clancy’s Ghost Recon Advanced Warfighter* and the Army’s new game *F2C2*, however, it is not current weaponry and Special Forces units, but real prototype military weaponry, which is placed within a speculative geopolitical setting in order to

provide a vision of future combat. It is in games such as these that the technological foundations of military transformation in relation to information technology, communication systems, and precision strike are promoted.

The concept of military transformation relies on a combination of high-technologies which facilitate the process of information gathering, processing, and exploitation. This integration of what Admiral Owens (Vice-Chairman of the Joint Chiefs of Staff 1994 -1996) has called the 'system of systems' - sensors, command and control, and precision strike, facilitated by information technology, communication systems, and precision weapons - allows for enhanced situational awareness and information dominance, which, coupled with precision strike capabilities, accurate long range weapons, and smaller land forces, ensures quick, clinical, low-casualty conflict with a reduced risk to troops on the ground and a reduction in collateral damage. In future wars, as Owens has argued,³² the American field commander:

Will have instant access to a live, three-dimensional image of the entire battlefield displayed on a computer screen...The commander will know the precise location and activity of enemy units – even those attempting to cloak their movements by operating at night or in poor weather, or by hiding behind mountains or under trees. He will also have

instant access to information about the US military force and its movements, enabling him to direct nearly instantaneous air strikes, artillery fire, and infantry assaults, thwarting any attempt by the enemy to launch its own attack.³³

This is a vision of future warfare which is perfectly recreated in the game *Tom Clancy's Ghost Recon Advanced Warfighter*. In *Tom Clancy's Ghost Recon Advanced Warfighter*, you fight as a member of the U.S. Special Forces in Mexico City in 2013 in order to regain control of the city in the face of an urban insurgency. Your success in the game is contingent on the use of military high-technology, specifically the Integrated Warfighter System (IWS), which includes a visor which acts as a computer screen, advanced communications which provide you with constant information on the battlefield, thermal imaging for night and day, UAVs (Unmanned Aerial Vehicles), and MULES (Multifunctional Utility Logistics and Equipment Vehicle) which provide you with medical supplies and ammunition. In the game, information from UAVs and satellites is downloaded to your Heads-Up-Display (HUD),³⁴ which then identifies enemy targets in red and 'friendlies' in blue, even when your own view of these targets is obscured by buildings. With your HUD linked up to the 'cross-com' system, you are able to command and control other assets such as heavy armour, sniper fire, airstrikes, UAVs, and artillery strikes. As the game website describes, the IWS 'Enhances

communication, control and situational awareness' – the very essence of military transformation.³⁵

The following information is taken from the Website of Tom Clancy's Ghost Recon Advanced Warfighter.

The Crosscom³⁶

The CrossCom is the technicians' baby. It is a next generation satellite communication device that gives you real-time reconnaissance in the field of battle. Look at the scheme on the bottom, which displays its key features. Once mastered, it will be key to your success.

CrossCom Monocle:



- - Advanced high-resolution display
- - Provides real-time data on the move
- - Enhances communication, control and situational awareness

You are in constant contact with your Ghosts and your support teams. You want the Apaches to execute an Air Strike? No problem, just give the order.

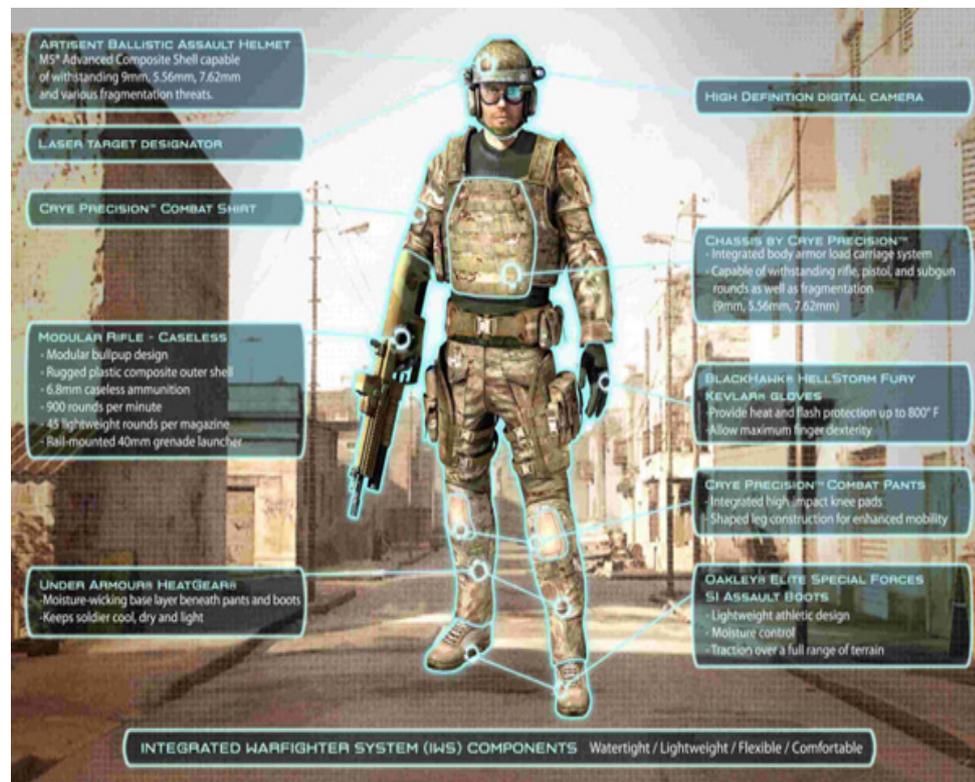
HUD Display:



Plan your next move, give orders, call on support and monitor what your team is seeing in real-time

The Integrated Warfighter System³⁷

The Integrated Warfighter System has been developed by the military to create a soldier centric force, making you more powerful, more flexible and more lethal than ever before. Remember, even with all this technology assisting you on the battlefield...you still need to survive!



The IWS is therefore more than just an abstract reference to the potential of high-technology weaponry. In fact, as the game website explains, ‘the Integrated Warfighter System is based on the Future Force Warrior program in development by the U.S. Military’;³⁸ this is the very same system that was introduced by Army Chief of Staff Shinseki in the 1990s as part of his transformational program. General Dynamics C4 systems, the company in charge of the development for the Future Force Warrior, describe it as ‘a high tech “system of systems” designed to provide every soldier with overmatch capabilities’. It is a system which allows ‘total battlefield visibility’ and ‘total

integration in the digital battlefield'.³⁹ In basing the gameplay around the Integrated Warfighter System, and promoting this prototype technological system as the means of military success, *Tom Clancy's Ghost Recon Advanced Warfighter* perfectly recreates the vision of military transformation as described by Admiral William Owens. In doing so, the procedural logic of the game instructs the player that military transformation is the key to winning wars. As the game website describes, 'Based on actual U.S. Army research, the Ghosts give gamers a realistic view of how war will be fought in the next decade'.⁴⁰

The Future Force Warrior depicted in *Tom Clancy's Ghost Recon Advanced Warfighter* forms part of the Army's Future Combat Systems (FCS) project, and it is the FCS which lies at the heart of the Army's new game, *Future Force Company Commander (F2C2)*. In *F2C2*, you take command of the Army's integrated Future Combat Systems (FCS) in order to prevent the destabilisation of the government of Dalilar by its neighbour Sabalan. The game, available for download from the Army Future Combat Systems website, comes with some familiar transformational rhetoric:

Future Combat Systems (FCS) will transform the U.S. Army's Current Force to a more lethal, agile Future Force to achieve battlespace dominance. The *F2C2* video game demonstrates the FCS wireless network-centric operating

system that seamlessly links advanced communications and networking systems with soldiers, platforms, weapons, and sensors.⁴¹

The game includes an encyclopaedia, which teaches the player about the potential of network centric warfare (NCW) in areas such as unmanned aerial vehicles, sensors, the soldier of the future, non-line of sight weaponry, and precision guided weapons, and it is in using these high technology capabilities that the player succeeds in their mission. Once again, the procedural logic of the game therefore instructs the player that military transformation represents the best means of winning wars.

The representation of warfare in games such as *F2C2* and *Tom Clancy's Ghost Recon Advanced Warfighter* therefore shows the clear influence of military transformation and transformational technologies. This process, of real military policy influencing popular media forms, has been theorised by Charles E. Gannon in *Rumors of War and Infernal Machines: Technomilitary Agenda-Setting in American and British Speculative Fiction* (2003), as the process of 'trickle-down' narrative influence.

In *Rumors of War*, Gannon conceptualizes the influence of military policy on literary 'techno-thrillers', but also the influence of literary techno-thrillers on military policy, through the idea of the 'trickle-up, trickle-down' model of

narrative influence.⁴² In interviews with engineers involved with classified technological military developments, Gannon was told that speculative ‘hard’ science-fiction, based around projections of future warfare and in particular future weaponry, has had a significant influence on the direction that real military technological projects have taken. In fact, the U.S. military has long employed future-war authors in high-level advisory capacities, raising the question of ‘whether such authors are predicting or making the future’.⁴³ Similar questions have been raised with reference to the modern manifestation of the military-entertainment complex, particularly following a meeting shortly after 9/11 at the Institute for Creative Technologies, in which ‘Die Hard’ screenwriter Steven E. De Souza, television writer David Engelbach (*MacGyver* 1989), and directors Joseph Zito (*Delta Force One* 1999; *Invasion U.S.A.* 1985; and *Missing in Action* 1984), Spike Jonze (*Being John Malkovich*; 1999) and David Fincher (*Fight Club* 1999; *Seven* 1995) were invited to brainstorm narrative scenarios in service of future U.S.-sponsored counter-terrorism efforts’.⁴⁴ According to Gannon, this stream of influence, from the realm of speculative media fiction, to that of real military policy, represents a form of ‘trickle-up’ narrative influence. But equally, as Gannon argues, this process also works the other way around, with details of genuine contemporary or near-future military weaponry, doctrine, tactics, and force structures finding their way from technical military experts into popular media narratives in the form of ‘trickle-down’ narrative influence. This is the case not

only with the literary techno-thrillers which Gannon analyses, but also with military computer games.

The narrative formulae of games such as *Tom Clancy's Ghost Recon Advanced Warfighter*, *Call of Duty 4*, and *F2C2*, hold much in common with the literary techno-thriller. As Gannon describes:

The technothriller is often little more than a primer on current military capabilities, given dramatic impetus by a single, speculative “what if-?” change in the international or technological identities of the current day. The political influence of such texts is therefore mostly of the “trickle-down” variety: a dissemination of new technological information; an investigation of one (or more) global flashpoints that could erupt into conflict, and the combat conditions and consequences that result when the aforementioned new technology is employed in the latter conflict.⁴⁵

In this trickle-down process, Gannon argues:

What begins as mathematical assessments by weapon designers and expert commentary by military professionals is

translated...into a non-specialised social discourse that surveys the potential effects of new weapons through the infinitely more accessible medium of vicarious experience.⁴⁶

In games such as *Call of Duty 4*, *Tom Clancy's Ghost Recon Advanced Warfighter*, and *F2C2*, we can clearly see the trickle down influence of the vision and rhetoric of military transformation from official policy documents produced by the Department of Defense and Office of Force Transformation,⁴⁷ or from statements released by current or former Secretaries of Defense,⁴⁸ politicians, and Presidents,⁴⁹ through articles and commentary in military journals, newspapers and magazine articles,⁵⁰ and into computer games. As game designer Wagner James Au describes with reference to *America's Army: Special Forces Overmatch*:

The latest version is very much a creature of current strategic policy. AA [*America's Army*] design has become directly related to the Secretary of Defense's theories on "transformation" – the high-tech merger between elite, front-line troops and the support network of air cover and cruise missiles instantly available by satellite phone and laser targeting. Specifically, the Department of Defense wants to double the number of Special Forces Soldiers, so essential did they prove in Afghanistan and northern Iraq:

consequently, orders have trickled down the chain of command and found application in the current release of America's Army...A policy that policymakers met with scepticism has become one of their most valued tools.⁵¹

Military computer games, as a result of the trickle-down influence of military policy, therefore recreate the vision and logic of military transformation and promote the belief – upon which transformation relies – in the combination of Special Forces and high-technology as the means of winning wars. Contrary to the suggestions of critics, however, this parallel between games and U.S. policy has not resulted in the recreation of a vision of 'joystick war'; in fact, such a suggestion not only mischaracterizes the content of military computer games, it also obscures the true propagandist and ideological power of computer games, and of transformation itself.

Military Computer Games and Propaganda

In *The Dream of Civilised Warfare: World War I Flying Aces and the American Imagination* (2003), Linda Robertson argues that the propagandist power of the flying ace was built on two factors: firstly, its perceived potential as a propagandist image for media promotion; and secondly, the perceived potential of airpower in reality as a military tool to break the stalemate of the murderous trench warfare of World War I. On the one hand, 'the glorious image of the ace originated in the dismal realities of the ground war',⁵² on the

other, it originated in the similarities which could be drawn between the story of the ace and existing conventions and expectations of the popular hero narrative. The image of the ace offered the opportunity of building on pre-existing myths and popular narratives concerning chivalry, knighthood, daring and military prowess, with the fighter pilots particularly adept at serving such a role given their compulsory status as volunteers (unlike regular conscript soldiers) and also the spectacularly dangerous nature of their missions. But the power of the ace did not derive purely from a romanticized image presented in propagandist production; it was the promise of airpower to offer a solution to the political, military, cultural and social needs of the moment which also lent it its power. Similarly, the power of military transformation as a propagandist vision lies both in its appeal in terms of media representation, and its promise as a military tool in reality.

Critics of military computer games have tended to conceptualize the propagandist significance⁵³ of military computer games in terms of their manipulation and distortion of reality. Contrary to the suggestions of critics, however, the propagandist power of games such as *Conflict: Desert Storm*, *Conflict: Desert Storm II*, *Call of Duty 4*, *Tom Clancy's Ghost Recon Advanced Warfighter*, and *F2C2* does not lie in their distortion and manipulation of reality; but rather in their claims to represent the realities of warfare and the realities of the vision of military transformation. Whether these claims for realism are presented through their representation of real

world conflicts as in *Conflict: Desert Storm* and *Conflict: Desert Storm II*; through their recreation of such photorealistic footage that it is almost identical to real front-line footage, as in the case of *Call of Duty 4*; or through the representation of real weaponry and military systems in *Tom Clancy's Ghost Recon Advanced Warfighter* and *F2C2*, these claims to realism are made explicit in military computer games, and they are much discussed by game players.⁵⁴ Across the board, these games present a vision of warfare which perfectly matches the vision of military transformation. Rather than seeing the propagandist significance of these games in terms of the distortion of reality, they should instead be seen in terms of their promotion of the vision of military transformation.

But the ideological and propagandist potential of games does not solely derive from their claims to realism. As Linda Robertson argues, 'A deeper understanding of propaganda depends upon its similarity to cultural discourses because it draws upon cultural myths, values, and beliefs as validating, interpretive frameworks'.⁵⁵ The appeal of representing warfare through the model of military transformation is that the synthesis of high-technology and Special Forces creates a recognizable representation of not only the realities of American military policy, but also well-established popular hero narratives and popular perceptions of war. In a game such as *Call of Duty 4*, the reality of military transformation is molded around a narrative and representation of warfare which draws upon past news footage, current internet footage, film,

and literature. In *Tom Clancy's Ghost Recon Advanced Warfighter* and *F2C2*, the complex detail of real military prototype weaponry finds its way from the engineering laboratory into the plot of a futuristic computer game. And in *Conflict: Desert Storm* and *Conflict: Desert Storm II*, real historical events from one time merge with the real military policy from another, to create a vision of warfare in line with military transformation and the Special Forces narrative. The reality of military transformation is therefore presented within an immersive framework of popular entertainment, signaling both the trickle down influence which Gannon highlights in *Rumors of War and Infernal Machines*, and also illustrating how the ideological message of military transformation is presented through the validating interpretive framework of popular culture, as Robertson describes.

The ideological and propagandist power of these games therefore lies not only in the fact that they represent the realities of American military policy; but, as Robertson suggests, that the reality of military transformation appears so similar to existing cultural forms, particularly the popular hero narrative. Jerome de Groot has described how games are 'interested in selling a heroic individuality within the broader sweep of history', and he identifies the tagline of *Medal of Honor* as a rhetorical support for this model: 'Can one man truly make a difference?' the game questions.⁵⁶ Well, according to Bob Andrews, the former head of the Pentagon's office for Special Operations and Low Intensity Conflict, the answer, in the age of military transformation, is 'yes'.

‘An American with a laser designator could kill 3,000 Taliban in an afternoon...In an almost Biblical sense, one man could bring down a whole bunch of the enemy’.⁵⁷ In the past, popular representations of warfare, such as those which portrayed Desert Storm, have used the Special Forces narrative in order to escape the deadening effect of representing the true realities of the policy of overwhelming force and the increasing mechanization which came to dominate representations of the conflict in the news and also in *Jarhead*. In this sense, such media representations owed more to purely media imperatives than to a consideration of the realities of military policy.⁵⁸ As the designers and producers of the *Conflict* games accept, these games showed that war – at least war fought along the lines of overwhelming force - was not like a computer game, as a game based around airpower and high-technology which obscured any element of human interaction was not suitable material for a computer game. With the movement away from overwhelming force and towards military transformation, however, the representation of the Special Forces narrative has combined with elements of military high-technology to satisfy not only the imperatives of media production, but also to reflect the reality of military policy. And it is in this sense that there has been a convergence between popular hero narratives and actual military policy, between the idea of an outnumbered heroic force and the idea of overmatch – a convergence which has become most pronounced in computer games.

For many military, cultural, and media commentators, the increasing automation of combat brought about by the use of military high-technology signals the inauguration of a form of ‘post-heroic’ warfare.⁵⁹ This idea, which was in fact voiced as early as 1862 by Nathaniel Hawthorne in his essay ‘Chiefly about War Matters by a Peaceable Man’ (which concerned the impact of mechanized warships on the redundancy of naval officers in the Civil War),⁶⁰ became particularly popular after the Gulf War’s showcase of military high-technology and encouraged a number of articles on the topic,⁶¹ as well as providing the material for *Jarhead* – a book and film which perfectly encapsulates this sense of post-heroic warfare (see footnote).⁶² It was this understanding of the Gulf War as a showcase of high-technology, and the unexamined belief that computer games shared such a high-tech vision, which led to the popularisation of the phrase ‘war is like a computer game’. These comparisons between war and game were further encouraged by the war in Iraq in 2003, following which commentators once again drew comparisons between the realities of an American way of war which has increasingly come to incorporate high-technology, and the vision of warfare presented in computer games. In the ‘Changing Face of War’ (2008), for example, Chris Ayres – following Stephen Graham’s description of ‘joystick war’ - argues that the real-life deployment of the Unmanned Aerial Predator ‘is practically undistinguishable from a video game’.⁶³ As an analysis of the content of military computer games has revealed, such a parallel misrepresents the content of military computer games, whilst also ignoring the multiple

determinants which affect the computer game form. But in its association of military transformation with post-heroic, joystick war, such parallels also obscure the appeal of military transformation in terms of media representation. It is not the case that the increasing utility of military high-technology has resulted in a form of post-heroic warfare; on the contrary, as an analysis of military computer games reveals, the combination of Special Forces and high-technology, upon which transformation is based, allows a traditionally heroic narrative to co-exist alongside the representation of high-technology. In this respect, Michael Sherry's description of the early American astronauts provides a particularly apt parallel for describing the appeal of military transformation in terms of media representation: like the early American astronauts which Sherry describes, the model of military transformation shows that 'new-found technological sophistication and old-fashioned individual heroism were still congruent, at least among Americans'.⁶⁴ And it was this sense of the combination of new-found technological sophistication and old-fashioned individual heroism which Defense Secretary Rumsfeld attempted to capture in his own description of the application of military transformation in the war in Afghanistan. In 'Transforming the Military' (2002), Rumsfeld sums up the essence of transformation in describing 'the first U.S. cavalry attack of the twenty-first century', a battle won by the 'combination of the ingenuity of the U.S. special forces; the most advanced, precision-guided munitions in the U.S. arsenal', and a handful of soldiers on horseback.⁶⁵ Rumsfeld's description of the war in Afghanistan, with its overtones and allusions to heroic and

seemingly mythical narratives, illustrates the clear propagandist appeal of the vision of military transformation, and its similarities with existing and heroic cultural forms. It is this appeal which military computer games build upon, taking traditional hero narratives and modern military high-technologies, and molding them around the 'realities' of the policy of military transformation.

Military Computer Games and the New American Militarism

Alongside the multiple determinants of games, military transformation has heavily influenced the representation of past, present and future war in computer games, encouraging the depiction of warfare using the model of military high-technology and Special Forces troops. The influence of military transformation, aside from the other determinants of games, can be seen in the development of the hero narrative from underdog to overmatch, and the increasing saliency of military high-technology which this development has entailed. But although this parallel between games and policy reveals the propagandist and ideological significance of games, in what sense does this relationship contribute to the new American militarism?

In 'Weapons of Mass Distraction' (2002), game designer Wagner James Au, *America's Army* art director Philip Bossant, *Delta Force: Black Hawk Down* producer Wes Eckhart, and Lieutenant Colonel Wardynski (who came up with the idea for *America's Army*), set out to answer what they perceive to be the main questions surrounding computer war games. Do these games cause

violence? No says Wardynski; despite bringing in 'Ph.D.s in behavioral science, political science, Army experts in training', he has yet to find one who believes this. Do they present a homogenized and demonized representation of the enemy 'other'? No says Eckhart, 'There's some blond white guys, there's some skinheads ... so it's not like we settled on any ethnic group or anything like that'. Do they present a sanitized version of combat? Well says Wardynski, 'We respect our audience [enough] to know that if we don't have that in our game, they're not dumb and they'll still know that [gore is] part of combat'.⁶⁶ There is no doubt that 'Weapons of Mass Distraction' offers a particularly cursory analysis of the criticisms which have been directed at military computer games. Nevertheless, the article accurately identifies those questions and issues which have come to utterly dominate the debate - distortion, sanitization, simplification, and media effects – and which have contained and constrained its parameters. The interesting question concerning computer games, however, lies in the subtitle of the article: 'A new breed of computer games is teaching today's teenagers how to wage, and win, the war against terror'. Military computer games, through their procedural logic, are instructing players that the best way of winning wars is through the model of military transformation and the combination of Special Forces and high-technology. And it is in this respect that the relationship between military computer games, military transformation, and the new American militarism should be seen.

Military transformation, as Tim Benbow has argued, ‘Offers a seductive answer⁶⁷ to the strategic dilemma imposed by America’s desire in the 90s, and especially after 9/11, to pursue an increasingly ambitious defense policy’ at an affordable cost, and with low casualties for political acceptance.⁶⁸ It points, as Lawrence Freedman has argued, to the possibility of civilized warfare,⁶⁹ to stand off weapons, less ground force involvement,⁷⁰ reduced dependence on logistics, quick and unequivocal results, and a distinction between combatants and non-combatants.⁷¹ Crucially, as Andrew Bacevich has pointed out, it also promises a more humane form of warfare.⁷² Like the flying ace of World War I, the power of military transformation as a form of propaganda therefore lies in its appeal as a model for media representation, but also its ability – or proposed ability – in responding to the cultural, political and social pressures which warfare imposes. The idea of the possibility of transformation offering a more humane and civilised form of warfare has rightly been challenged;⁷³ but of greater significance in considering the relationship between military computer games, military transformation, and American militarism, is the question of the true strategic and operational efficacy of military transformation, and the way in which this operational efficacy is represented in computer games. For critics of military transformation, the transformational experiment in Afghanistan has caused an increasing arrogance concerning the utility of force. As Newt Gingrich has argued: ‘There is a mindset of arrogance compounded by what they saw in Afghanistan that has led people to think that 3 JDAM’s [Joint Direct Attack Munitions] and five guys on horseback equal

an RG [Republican Guard] division'.⁷⁴ As I show in the following chapter, military computer games not only recreate the vision of military transformation; they also obscure its strategic and operational vulnerabilities, and as a result, they promote an overblown belief in transformational capabilities. The propagandist significance of military computer games should therefore be seen in relation to the recreation of the vision of military transformation; but it is the way in which military computer games encourage an overblown faith in the capabilities of military transformation which reveals their contribution to the new American militarism. In this respect, military computer games should be seen not simply as a media form which has been adopted for the purposes of recruitment to the military; but rather as a form which encourages recruitment to a particular understanding of how military force works as a tool for conflict resolution.⁷⁵

CHAPTER 2

The Limitations of Military Computer Games and U.S. Military Policy

From the destruction of SCUD missiles behind enemy lines in *Conflict: Desert Storm*, to the prevention of nuclear war in *Call of Duty 4*, and the tackling of urban insurgency in *Tom Clancy's Ghost Recon Advanced Warfighter*, military computer games promote the belief that the best way of winning past, current, and future wars is to insert a small group of Special Forces soldiers, and combine them with high-technology weaponry and reconnaissance tools, along with precision guided airpower. In so doing, military computer games reflect the real-life belief in the potential of military transformation to offer a solution to the challenges of current and future conflicts. In *An End to Evil: How to Win the War on Terror* (2003), for example, David Frum and Richard Perle argue that: 'Politically as well as militarily, precision-strike airpower together with Special Forces is the decisive weapon in the war on terror – and our future conflicts as well'.¹ This faith in military transformation is based not only on the belief in the efficacy of airpower and Special Forces, but also the belief in the potential of transformational technologies to provide enhanced situational awareness, information dominance, and precision strike capabilities. In this respect, the recreation of the vision of military transformation, and in particular, the recreation of real transformational technologies in games such as *Tom Clancy's Ghost Recon Advanced Warfighter* and *F2C2*, can be seen as contributing to the realism of military

computer games. As Dr Malcolm Davis - a lecturer in Defense Studies at King's College London - argues, the depiction of these transformational technologies and their strategic and operational capabilities represents a particularly realistic aspect of the representation of war in military computer games. Military computer games, Davis argues:

Stress networked forces on the battlefield, with infantry able to directly communicate with armoured vehicles, aircraft, artillery, and command centres on a real time basis...This is interesting because in the real military, there is a great deal of effort to bring such a capability about – it's called 'Network Centric Warfare' or NCW. NCW is seen as the basis for future military transformation and delivers a significant advantage to the networked force over the non-networked force.

For Davis:

The other aspect that is well represented are the combat environments - particularly the urban environment in games like *Ghost Recon*. Most warfare in the future will take place in complex urban environments, where house to house fighting, and the manner of engagements as portrayed in

movies like *Black Hawk Down* and of course the games mentioned above will be the norm.²

Davis identifies two ways in which the trickle down influence of military transformation has been made obvious in computer games. Firstly, the idea of Network Centric Warfare, a concept which is made particularly apparent in the rhetoric and gameplay of *Tom Clancy's Ghost Recon Advanced Warfighter* and *F2C2*; and secondly, the importance of the urban environment, as depicted in games such as *Full Spectrum Warrior* and *Full Spectrum Warrior: Ten Hammers*. But what is interesting about Davis' identification of these aspects of military computer games is not that he recognizes the parallel between military transformation and the representation of war in computer games, but that he identifies two areas in which the potential of military transformation has been heavily contested. For whilst proponents of military transformation argue that the combination of Special Forces, airpower and military high-technology will deliver a new form of fast and decisive warfare, critics have identified a number of key strategic and operational vulnerabilities in relation to military transformation, including the challenges presented by cyberwar, asymmetric warfare, military operations in urban terrain (MOUT), nation building, and military operations other than war (OOTW). As a result, whilst proponents of military transformation might claim that in representing network centric warfare and military operations in urban terrain, computer games present a realistic portrayal of contemporary combat fought along military

transformational lines, critics of transformation might suggest that in showing the successful application of military transformation to challenges such as military operations in urban terrain, the representation of war in computer games obscures the limitations of military transformation in relation to its strategic and operational vulnerabilities. In this respect, whilst military computer games can be said to recreate the 'reality' of the vision of military transformation – and by that, I mean that games recreate the model and vision of military transformation as it is described in policy documents and doctrine, and as it is promoted by military and political proponents - they do not recreate the reality of how this policy has fared when applied in real operational environments, and nor do they reflect the vulnerabilities of military transformation as highlighted by critics. The purpose of the first section of this chapter is therefore to re-analyze the trickle-down influence of military transformation in order to show that military computer games not only recreate the vision of military transformation, but also obscure its strategic vulnerabilities.

Military Computer Games and the Vulnerabilities of Military Transformation

The basis of the game *Tom Clancy's Ghost Recon Advanced Warfighter* as a promotional poster for military transformation was laid out in Chapter 1. The details of the game are re-analysed here in order to show not only how the game promotes the concept of network centric warfare (NCW), but also to

show how it both points to, and marginalises, the strategic vulnerabilities of NCW in relation to asymmetric warfare and cyberwar.

Through his literary work, Tom Clancy has become famous within the U.S. military for his thorough knowledge of U.S. military capabilities and also for the accuracy of his projections of future warfare. On occasion, these projections have appeared so accurate that senior members of the U.S. military have suggested that he has been leaked information of classified military projects.³ In branching out into military computer games,⁴ Clancy has transferred the essence of his literary work, maintaining the framework of the literary techno-thriller and its concentration on investigations into the potential of current or near future military weaponry (see Chapter 1). As described in Chapter 1, the game *Tom Clancy's Ghost Recon Advanced Warfighter* displays the clear influence of military transformation in its representation of warfare. The game specifically illustrates the benefits of Network Centric Warfare through the depiction of the 'cross-com' system; a system which allows you to communicate with artillery, airstrikes, and armoured support, whilst using your heads-up-display to access interactive maps of the area you are fighting in. The depiction of the cross-com system in the game serves as an illustration of the potential of Network Centric Warfare in removing the fog and friction of war and offering enhanced situational awareness and battlefield visibility – two of the most vaunted benefits of military transformation. But what is

interesting about the representation of war in *Tom Clancy's Ghost Recon Advanced Warfighter* is not only that it displays the trickle-down influence of military policy, but that it also points to what are perceived as two of the main strategic vulnerabilities of military transformation: namely, the threat of cyberwar and asymmetric warfare. Broadly speaking, cyberwar can be described as attempts to disrupt weapons, communication, and command and control systems using technological means; whilst asymmetric warfare might be described as the means by which the 'weak' attack the 'strong' using unconventional tactics (the strong being the side with preponderant material resources in terms of conventional military power). More specifically, asymmetric warfare is the means by which adversaries 'are likely to seek advantage over the United States by using unconventional approaches to circumvent or undermine our [America's] strengths while exploiting our vulnerabilities'.⁵ Both of these forms of warfare are represented in *Tom Clancy's Ghost Recon Advanced Warfighter*.

In *Tom Clancy's Ghost Recon Advanced Warfighter*, the rebel General Ontiveros, who was trained in the U.S., has led a coup to overthrow the Mexican government, and has managed to acquire a piece of U.S. black-ops communications and espionage equipment called Guard Rail IX which was shot down over Nicaragua. It is Ontiveros' intention to hack into NORAD (North American Aerospace Defense Command) and trigger a nuclear war with China and Russia, thereby derailing the planned North American Joint

Security Arrangement (NAJSA). Using Guard Rail IX, Ontiveros is able to disrupt the Integrated Warfighter System and cross-com network thereby nullifying the benefits of network centric warfare and leaving you, as the game describes, 'blind'. As a player, the initial impact of losing contact with the operations centre, and therefore losing the information stream to your HUD (Heads-Up-Display), is significant. Having been following the directions using the interactive map, calling in airstrikes, artillery, and snipers using your cross-com system, and having enemy targets highlighted in red as you approach them, you are now denied all of these facilities, making the game significantly more difficult and offering an interesting observation as to both the benefits of NCW (Network Centric Warfare) and also its vulnerabilities. Ontiveros' disruption of U.S. technological and communications equipment, his use of American equipment to do so, his deliberate targeting of a perceived strength of the U.S. – high-technology – and his exploitation of this strength as a weakness, all point to the vulnerabilities of transformational technologies and NCW in relation to the twin threats of cyberwar and asymmetric warfare. And whilst the game depicts these vulnerabilities as emerging in response to a purely speculative and fictional set of circumstances, the vulnerabilities which it identifies closely reflect genuine strategic concerns.

Many U.S. strategists now assume that as a result of the unparalleled dominance of the U.S. in terms of military high-technology and weaponry, no nation will attempt or can afford a symmetrical challenge to U.S. capabilities.

The most likely form of attack on the U.S. is therefore an asymmetrical response which attempts to disable or disrupt U.S. military information systems⁶ - just as *Tom Clancy's Ghost Recon Advanced Warfighter* suggests. This form of asymmetric cyberwar has been identified by NATO and the U.S. as a key strategic vulnerability.⁷ Dr John Arquilla, one of the RAND Corporation researchers who helped come up with the idea for the Future Combat Systems – on which the technological systems depicted in *Tom Clancy's Ghost Recon Advanced Warfighter* and *F2C2* are based – accepts that, ‘Advanced information technology makes us tremendously efficient, but it also may make us tremendously vulnerable’.⁸ Indeed, the dependency of military transformation on high-technology, Carl Conetta argues, ‘will become the military’s most obvious Achilles heel.’⁹ The representation of war in *Tom Clancy's Ghost Recon Advanced Warfighter* therefore identifies two of the key vulnerabilities of military transformation and network centric warfare, as well as highlighting the problems of an over-reliance on high-technology.

But although the actions of Ontiveros in *Tom Clancy's Ghost Recon Advanced Warfighter* point to the vulnerabilities of military transformation and network centric warfare, ultimately it is the technologies of transformation and NCW which allow the player to successfully complete their mission and restore order in Mexico City. Ontiveros’ cyber attack therefore proves only a temporary inconvenience, and having destroyed the jamming signal emanating from Guard Rail IX, you are able to complete the game with the aid of your cross-

com system. As the game progresses and your technological systems regain their full operational capabilities, the incident of Ontiveros' cyber attack recedes into the background and the gameplay reaffirms the centrality of high-technology, network centric warfare, and military transformation to the process of winning wars. In this respect, the failings of transformation and NCW do not lead to the subsequent rejection of these high-technology systems, or a rejection of the idea of overmatch in favour of the more traditional underdog hero narrative (see Chapter 1).¹⁰ On the contrary, once Ontiveros' cyber attack has been dealt with, the utility of military transformation, military high-technology, and NCW is reaffirmed, and these systems once again become central to the game. The incidence of cyber war therefore serves more as a plot twist than a dedicated critique of military high-technology or the vulnerabilities of network centric warfare, and as the tagline to the game suggests, 'with the technology of 2013, you may live to see 2014', *Tom Clancy's Ghost Recon Advanced Warfighter* remains a promotional poster for military high-technology, military transformation, network centric warfare, and specifically the Future Force Warrior.

Whilst *Tom Clancy's Ghost Recon Advanced Warfighter* offers the opportunity of investigating the potential of military transformation within future combat scenarios, in *Full Spectrum Warrior* and *Full Spectrum Warrior: Ten Hammers* - games produced by the Institute for Creative Technologies (ICT)

as both military training tools and commercial products – the player tests the potential of transformation in what appears to be a broadly similar geopolitical context to that of Iraq. These games are important for two reasons: firstly, they emphasise the application of military transformation to real and current geopolitical settings such as regime change and post-war insurgency (unlike the more speculative settings of *Tom Clancy's Ghost Recon Advanced Warfighter*, *Call of Duty 4*, and *F2C2*); and secondly, they place a great emphasis on depicting the urban environment in which these missions are set – one of the aspects of games which Davis highlighted as particularly realistic, but also an environment in which the efficacy of military transformation and transformational technologies have been challenged.

The understanding of the primary importance of urban conflict is an example of how military doctrine has been transformed in the post-Cold War and post-9/11 world. Where cities were avoided during the Cold War as a matter of doctrine, the perception of the changing threats to the U.S. has precipitated the idea of the 'urban turn', with senior officers arguing that the force structure and doctrine of the U.S. military must be optimized for fighting in urban areas.¹¹ In response, the idea of military operations in urban terrain (MOUT) has emerged as a key element of military transformation, and this change has been reflected in popular culture, specifically computer games.

With the exception of *Full Metal Jacket* (1987), it is hard to think of a Cold-War war film in which urban combat is depicted. In the computer games of today, however, as urban warfare becomes the default medium for fighting in reality, so it has become the default setting for operations in computer games, and in games such as *America's Army: Special Forces Overmatch* and *Full Spectrum Warrior*, you first complete MOUT training before beginning actual operations. The reason that the application of transformational technology to the challenges of MOUT in military computer games is interesting, however, is that military operations in urban terrain are seen as one of the primary vulnerabilities of transformation and network centric operations.¹² As the U.S. Defense Research Agency (DIRC) has argued, 'the urban environment negates the abilities of present U.S. military communications equipment resulting in dead spots, noise, [and] signal absorption...which severely undermine the principles and technologies of network centric warfare'.¹³ This is something which the game *Full Spectrum Warrior* both suggests and ignores.

The introduction to the game *Full Spectrum Warrior* depicts a ground commander in conversation with the reconnaissance pilots above. He asks: 'Anything come up on the recon flights', to which the pilot replies: 'Intel reports your sector is sympathetic to the U.S. and friendly'. The pilot then turns to his co-pilot and says, 'but if it's all the same to you I'm glad I joined the fucking Air Force'. The ground commander responds to this information by sarcastically saying to himself, 'Oh well as long as intel say they're all

friendly we're alright then'. Such cynicism concerning reconnaissance technology is followed up throughout the game by incidents of incomprehensible radio transmissions, to which the ground commander at one point responds, 'let's hope we didn't miss any vital information'. In this respect, *Full Spectrum Warrior* serves as a challenge to the more quixotic promises of military transformation, and in particular, to the idea that transformational technologies will allow soldiers to cut through the fog and friction of war and achieve total battlefield visibility. But whilst the game seems to offer some sort of challenge to transformational ideas, this challenge is ultimately overwritten by its prescribed solution to the issues presented by MOUT and urban insurgency. Ultimately, the only way of completing the game, and thus defeating a murderous dictatorial regime guilty of concealing mass graves, is to paint the car of Dictator Mohammad Al-Fahad with a hand-held laser guided designator, before calling in an air strike. Ultimately, the model of a transformed military is still presented as the means of meeting the challenges of MOUT, and more besides.

From the disruption of logistics behind enemy lines in *Conflict: Desert Storm*, to the prevention of global nuclear fallout in *Call of Duty 4*, to the tackling of urban insurgency in *Full Spectrum Warrior*, military computer games suggest that the model of military transformation can be successfully applied across a full range of military contingencies. Within the U.S. military, this capability

has been described as full spectrum dominance – the idea, laid out in the Army’s doctrinal blueprint *Joint Vision 2010*, that U.S. forces must be able to defeat any adversary and control any situation across the range of military operations. It is after this concept that the games *Full Spectrum Warrior* and *Full Spectrum Warrior: Ten Hammers* are named.

In *Full Spectrum Warrior*, this notion of full spectrum dominance is reflected in the introduction to the game which begins with a quote from Marine General Charles C. Krulak (incidentally, the man who made the use of computer games for training part of Marine Doctrine):¹⁴

In one moment in time. Our service members will be feeding and clothing displaced refugees – providing humanitarian assistance. In the next moment. They will be holding two warring tribes apart – conducting peacekeeping operations. Finally, they will be fighting a highly lethal mid-intensity battle. All on the same day. All within three blocks. It will be what we call the three block war.

Although this description is taken from *Full Spectrum Warrior*, in which you fight to liberate Zekistan from the dictatorial rule of Al-Afad, the most obvious example of the ‘three block war’ comes in the sequel *Full Spectrum Warrior: Ten Hammers*, in which your mission is to end the insurgency and civil war

which have followed the liberation of Zekistan and which have been fuelled by long-suppressed ethnic hostilities. As the game manual describes:

The regime of Al-Afad had made Zekistan a haven for terrorists, but a determined effort led by a coalition of Western forces brought Al-Afad down. The short-lived joy of his deposing has faded, replaced by civil unrest as various insurgencies fight against the Western forces and long-suppressed ethnic hostilities erupt into violence.

In the introduction to *Full Spectrum Warrior: Ten Hammers*, a U.S. Army Private explains: 'When we first came here, it's us against the bad guys. Then suddenly there's the Muj, this Anser Al-Ra'id mother fucker, then there's the militia. Who knows who the fucking bad guys are anymore?' Yet the increasingly complex situation does not require a more nuanced response. Despite the backdrop of graffiti such as 'Leev America' and 'Stop killing innocents', the response is the same as in the original game, as you control your two squads (with occasional assistance), using laser sights attached to your rifle, laser designators, and air power. The game therefore recognises the increasing complexities of an urban insurgency, yet still seems to posit a standard response. Despite the invocation of Krulak's 'three block war', the *Full Spectrum Warrior* games therefore obscure the problems of tackling

complex post-war urban insurgencies, and simply promote a standard transformational response.

In reality, the tackling of urban insurgencies using a transformational force based around military high-technology and a reduced number of troops on the ground has been faced with two major problems. Firstly, contrary to the depictions of war in *Tom Clancy's Ghost Recon Advanced Warfighter*, it is very difficult to identify the enemy using reconnaissance technology in an insurgency situation. As General John Defreitas II, the top U.S. Army Intelligence Officer in Iraq described: 'insurgents don't show up in satellite imagery very well'.¹⁵ Secondly, as military commentators have repeatedly argued, reconstruction, peacekeeping, and nation building exercises, which are often characterized under the acronym of OOTW – Operations Other Than War - require a large number of troops on the ground.¹⁶ In this respect, the games *Full Spectrum Warrior* and *Full Spectrum Warrior: Ten Hammers* offer particularly interesting perspectives on the force structures required to tackle urban insurgencies, not only because they purport to offer a realistic vision of contemporary warfare, but also because they belong to the genre of the strategy game, rather than that of the first person shooter. The reason that *Full Spectrum Warrior's* status as a strategy game is relevant is that strategy games typically avoid the limitations associated with the first person shooter's inability to represent massed armies. The perspective of a first person or squad-based shooter game provides the player with an immediate view of

warfare as if they were a soldier engaged in combat. Such a perspective exploits modern graphics and provides an immersive view of combat, but it also means that the player can view and control only his immediate squad, precluding the possibility of a broader view which would allow the player to act as a commander who can view and control massed armies. Traditionally, military strategy games avoid such limitations in adopting a 'God-game' perspective which provides a bird's eye view from above of a two-dimensional map upon which the player's troops, materiel and resources are illustrated using abstract icons. The player controls and directs operations by moving and selecting these abstract icons. In this respect, although graphically and visually inferior, these games are not technologically restrained in the same way, and a strategy game based around the representation of contemporary combat would be free - in theory - to reject the model of the squad based shooter and to reject the model of military transformation and to portray the response to an urban insurgency in terms of the mobilization of hundreds of thousands of troops. Although classed as strategy games, however, *Full Spectrum Warrior* and *Full Spectrum Warrior: Ten Hammers* do not resemble the God-games of the past, and nor do they reject the model of the squad based shooter or of military transformation. In these games, you adopt a third person perspective, as if hovering just behind your squad of troops, and you command only a squad of four soldiers - or two squads of four - rather than the whole armies associated with strategy games of the past (see screen captures below).

Screen Capture taken from the first person shooter *Call of Duty 4: Modern Warfare* showing the player's perspective in a first person shooter game.



Screen Capture taken from the game *Full Spectrum Warrior* showing the view of the player in this new breed of strategy game. The perspective of the player suggests that they are hovering behind the troops under their command.



Compare this to the more traditional ‘God-game’ perspective of a strategy game such as *Making History: The Calm and the Storm* (2007).



This new breed of strategy game reflects three changes: firstly, the development of gaming technologies and game engines which has allowed the development of the first person and squad based shooter; secondly, the development of increasingly photorealistic graphics in modern computer games and the corresponding desire to exploit these by providing a third-person, more immersive, more engaging perspective which also appears more ‘realistic’ in an immediate and visual sense – a desire which has been encouraged by the emergence of the military-entertainment complex; and finally, the development of military policy away from massed armies and overwhelming force and towards military transformation. As we have seen, the model of military transformation not only provides the opportunity for far

more compelling computer game narratives, but as a result of its reliance on a small number of Special Forces troops, it also presents an ideal model for representation using the squad based military shooter. In terms of the representation of war in computer games, these influences have proved mutually reinforcing, and just as the policy of overwhelming force has come to be seen as obsolete in the post-Cold War world, so traditional strategy games have ceased to depict modern combat. Contemporary warfare, modern computer games suggest, no longer resembles the mass mobilization of troops and materiel which the God-games of the past depicted; but rather the coordination of a small number of ground troops with military high-technology and precision guided airpower. As a result, strategy games which depict modern warfare look more like *Full Spectrum Warrior* than the God-games of the past, and victory in these games is achieved not by the mass mobilization of men and materiel, but by the coordination of Special Forces, airpower, and military high-technology.

In reality, however, the application of military transformation to the post-war insurgencies in Afghanistan and Iraq has proved that in many ways the blueprint of military transformation does not match the missions with which the U.S. has been faced.¹⁷ This, in fact, was an issue which President Bush had identified during campaign speeches in 1999, when he was very careful to distance himself from any suggestion that the military should be used in Operations Other Than War (OOTW). Bush's vision of military

transformation was accompanied by a very specific vision of how a transformed military should be used. In the very same breath that he was arguing for military transformation, he was also arguing against the use of a transformed military for the purposes of nation building and peacekeeping. In direct contradiction to Krulak's explanation of the three block war in *Full Spectrum Warrior*, President Bush had warned that 'The problem comes with open-ended deployments and unclear military missions... We will not be permanent peacekeepers, dividing warring parties, this is not our strength or our calling'.¹⁸ Following 9/11, however, these restrictions were put to one side, and in a particularly explicit snub to the restrictions which had been placed on the use of force by the Powell Doctrine,¹⁹ Rumsfeld announced: 'Forget about exit strategies, we're looking at a sustained engagement that carries no deadlines. We have no fixed rules about how to deploy our troops'.²⁰

In Afghanistan and Iraq, the U.S. military find themselves engaged in precisely those missions which Bush had sought to avoid. The result, as the Phase IV planning group for post-war Iraq had predicted, was a 'campaign [which] would produce conditions at odds with meeting strategic objectives'.²¹ It identified the need to seal the borders, protect infrastructure and gather Iraqi troops – objectives which were unable to be met due to the number of troops on the ground. It was ultimately opposition to Rumsfeld's transformational agenda from retired Army generals which led to his resignation.²² As General

Paul Eaton, a retired Army general who had been in charge of training the Iraqi army described:

Rumsfeld has put the Pentagon at the mercy of his ego, his Cold Warrior's view of the world and his unrealistic confidence in technology to replace manpower. As a result, the U.S. Army finds itself severely undermanned – cut to 10 active divisions but asked by the administration to support a foreign policy that requires at least 12 or 14.²³

But just as President Bush swept away his concerns about the uses of a transformed military following 9/11, so games such as *Tom Clancy's Ghost Recon Advanced Warfighter* and *Full Spectrum Warrior: Ten Hammers* both identify and ignore the apparent incompatibility of a transformed force with missions such as peacekeeping and nation building. The competing discourses concerning military transformation revealed in such games therefore offer a fairly accurate reflection of the debate in reality. There is certainly considerable dissent, but it seems that military transformation marches on. On December 5th 2005, for example, Rumsfeld gave his version of lessons learned:

I think if I had to pull out one lesson that we've learned over the past four or five years, it would be that in the twenty-first

century we're going to have to stop thinking about things, numbers of things, and mass, and think also and maybe even first about speed and agility and precision.²⁴

The 2006 Quadrennial Defense Review (QDR) continues to promote the means of military transformation, putting forward plans for the Special Forces to receive an extra \$9 billion over the next five years, as well as an increase of 13,000 personnel.²⁵ Alongside the increased size and scope of the Special Forces is an increase in high-technology weaponry, with plans for the establishment of a Special Forces unmanned aerial vehicle squadron and the doubling of the number of Predator and Global Hawk unmanned aerial vehicles.²⁶ And whilst the review takes a slight step back in admitting that 'operational end-states defined in terms of "swiftly defeating" or "winning decisively" against adversaries may be less useful for some types of operations', it also envisions increasing demands on the military in the areas of irregular warfare and nation building – those areas where transformation has proved disastrous.²⁷ In this way, in games and in reality, the technological supports of military transformation are being identified as both the source and the solution to the problems that the U.S. military is facing. Much like the 2006 QDR, military computer games encourage an unrealistic and misleading belief in the potential of transformational technologies to provide a solution to complex contingencies such as nation building, insurgency and civil war, whilst obscuring the vulnerability of these technologies to cyberwar,

asymmetric warfare and military operations in urban terrain. Military computer games therefore not only recreate the vision of military transformation, they also obscure the shortcomings of military transformation and its strategic and operational vulnerabilities, thereby encouraging an overblown belief in the utility of force and specifically the transformational model of Special Forces and high-technology. In its obfuscation of the vulnerabilities of military transformation, the representation of war in military computer games can therefore be said to contribute to the misunderstandings and misconceptions concerning warfare which characterize the new American militarism.

As critics have suggested, however, the limitations of the representation of war in military computer games extend beyond the uncritical representation of the capabilities of transformational technologies to the sanitization of violence, the lack of historical, political and social context, and the failure to capture the true complexities of war. More specifically, however, the multiple determinants of games - as I illustrate in the following section - ensure that military computer games always end in victory; that they always depict victory as resulting from combat action; and that they always depict successful combat action as the result of the destruction of men and materiel. These limitations, as I argue in the following section, can not only be traced back to the influence of the multiple determinants of games; they can also be linked to some of the key misunderstandings and misconceptions which have come to inform U.S.

military policy itself. The purpose of the following section is therefore firstly to show that the limitations of the representation of war in military computer games cannot simply be explained by the Military Industrial Media Entertainment Network (MIMENET), but can in fact be traced back to the influence of the multiple determinants of games. And secondly, to show that the limitations of military computer games in many ways reflect the limitations of U.S. military policy itself.

The continuing development of the military-computer game relationship has lent a certain credibility to the idea that the representation of war in military computer games can be explained purely as a result of the Military Industrial Media Entertainment Network, particularly when one considers the case of a game such as *Future Force Company Commander (F2C2)*.

Unlike *Full Spectrum Warrior* or *Tom Clancy's Ghost Recon Advanced Warfighter*, the Army's new game, *F2C2*, makes no attempt to represent the potential problems of military high-technology. In fact, in *F2C2*, the imperatives of pushing the potential of military transformation and military high-technology come close to violating the rules of a good game; not as a result of depicting a policy of overwhelming force, but as a result of the overmatching potential of the Future Combat Systems. In *F2C2*, you take command of the Army's integrated Future Combat Systems (FCS) in order to

prevent the destabilisation of the government of Dalilar by its neighbour Sabalan. But despite the apparently bewildering interface which requires a 12 chapter tutorial for orientation, it is incredibly easy to overcome the enemy even if you spend only a minute devising your plan. The website describes how:

You'll experience an exciting range of real-time missions while equipped with the full spectrum of FCS [Future Combat Systems] capabilities. *F2C2* shows the sophisticated sensors linked among the 18 different FCS systems, and how the FCS network quickly disperses tactical intelligence enabling soldiers to pre-empt enemy attacks and mount offensive assaults.²⁸

But in *F2C2*, the very systems, sensors and weaponry which provide the possibility for pre-emption preclude the possibility of the enemy presenting any sort of challenge, and therefore deny *F2C2* the more evenly matched forces required for a good game. The imperatives of pushing the potential of military transformation therefore trump those of developing a good game or of accurately reflecting the complexities and potential problems with such technological systems. As Mark Long, the co-CEO of Zombie, where the game was built under contract, reveals: 'They [the Army] didn't ask for hole punchers. High tech has all kinds of low-tech vulnerabilities and they didn't

want the vulnerabilities programmed in'.²⁹ The game *F2C2* therefore seems to offer an irrevocable example of the MIMENET system at work. SAIC, the producers of the actual weapons system known as Future Combat Systems (FCS), then develops a computer game *F2C2* which represents the functioning of FCS in a combat environment, but which deliberately ignores and obscures the vulnerabilities of such a system. At the same time, the potential of FCS is being pushed at a political level by those with links to the weapons industry and the political elite, but also with links to the development of the computer game. William Owens, for example, the former Vice Chairman of the Joint Chiefs of Staff who championed the idea of the 'system of systems', sits on the board of five companies that received more than \$60 million in defense contracts in 2002. Previously, Owens was president, chief operating officer, and vice chairman of SAIC - the co-lead developer of the Future Combat Systems portrayed in the game *F2C2*, as well as the co-producer of the game itself.³⁰ Such inter-relationships have encouraged theorists to view the military-entertainment complex as both an extension and an integral part of the military-industrial complex. Games such as *F2C2*, and their production contexts, which link them with weapons manufacturers, the military, and the political elite seem to validate such criticisms. But whilst these analyses offer particularly beguiling and conspiratorial perspectives on the production and purposes of military computer games, they cannot fully or adequately explain the reasons behind the limitations of the representation of war in computer games. In fact, as I illustrate in the remainder of this section, the limitations of

the representation of war in military computer games are the product of a complex interaction between the multiple determinants of games. These determinants, which include the influence of agency, interactivity, computer game convention, player expectation, perspective, and narrative structure, act together, or against each other, to influence the representation of war in military computer games and also to define its limitations.

Agency and interactivity are two of the elements which are seen as making computer games unique, allowing the player the freedom to investigate the game world and carve out their own personal narrative pathway – a very different process to that of the more passive experience of watching a film or reading a book. But the qualities of agency and interactivity also present significant challenges for game producers in relation to the development of coherent, linear narratives, and also in relation to how they depict defeat and insurmountable or unavoidable setbacks. This has a significant impact on how games represent warfare.

There are a number of practical factors which limit the genuine interactivity of games. Technologically, in a three dimensional first person or squad based shooter, it would be impossible to offer the player complete freedom to act as he or she liked, as this would require the construction of an infinite three dimensional world.³¹ Instead, the gameplay in military computer games is

restricted and directed in a number of ways in order that the player follows the desired narrative pathway. Take, for example, the almost universal practice of breaking down the representation of war in computer games into missions and objectives. As a player, at each level you are set a new series of objectives which you must achieve in order to proceed with the game. You are not free to ignore these objectives, or to pursue a different course in order to complete your mission; instead, the attainment of these objectives becomes the basis around which the narrative of the game, and your progress within it, is defined and constructed. The representation of mission briefings and objectives in military computer games therefore serve to limit the interactivity of games and also the agency of the player, thereby directing the narrative in a preordained sequence. As Lev Manovich has argued, games therefore follow a ‘closed interactivity’ which belies the more quixotic idea of game players as authors.³² In fact, as Marie-Laure Ryan suggests, military computer games achieve narrative coherence precisely by working against the interactive potential of the medium; the player’s options are restricted in order ‘to channel these options toward a goal that gives meaning to users’ actions’.³³ In order to achieve a meaningful narrative coherence, the interactivity of military computer games, and the agency which the player is allowed, is therefore restricted.

This need to restrict the agency of game players, however, presents a number of problems for game developers and places specific restrictions on the

representation of war in computer games. As Sharon Ghamari-Tabrizi argues, the problem of balancing agency with the need for restrictive gameplay is one of guiding players ‘without creating the suspicion that he or she is being manipulated’.³⁴ In some instances, military computer games achieve this by disguising the restrictive elements of games under the cloak of realism and authenticity. In this respect, game producers encourage the understanding of mission briefings, aims and objectives not as limitations placed on the interactive potential of the game, but rather as examples of the realistic recreation of military procedures and protocols. In the same way, as I show in the following section, game producers encourage the idea that the rules of military computer games in relation to the death of squad members or civilians contribute to a more realistic depiction of warfare, when in fact they might also be seen as restricting the realism of the game.

One of the major criticisms of military computer games has been the idea that they sanitize war, and in simply allowing the player to ‘re-spawn’ after they have been killed, to completely eradicate any sense of the consequence of death and casualties. Games have attempted to mitigate these criticisms in a number of ways. In games such as *America’s Army*, *Black Hawk Down*, *Full Spectrum Warrior*, and *Close Combat: First to Fight*, for example, incidents of friendly fire bring the game to an end, as does the killing of civilians, or the loss of too many squad members. In the online version of *America’s Army*, if you consistently break the military’s rules of engagement (ROE), you will be

removed from the game.³⁵ These restrictions on gameplay are presented as a means of making the representation of combat more real; but at the same time, they mark a very clear restriction on the interactive potential of games and also on the breadth of their representation of warfare. Wagner James Au, for example, has claimed that:

[Game] Developers are seeking to convey, if not the horror, the strategic implications of violence...So in *America's Army*, the server keeps tabs on your fealty to the military's strict rules of engagement (ROE) - crossing them too often gets you removed from the game, thrown into a virtual depiction of Fort Leavenworth prison. (Multiplayer games are usually anarchic, free-fire zones.)³⁶

Au suggests that the imposition of these rules has increased the realism of military computer games through encouraging considerations of the strategic implications of warfare. But contrary to Au's claims, the restrictions which games place on civilian casualties and friendly fire do not make these games more realistic in terms of encouraging consideration of the strategic impact of such events; rather they prevent the consequences of such events being seen at all. In reality, civilian casualties caused by U.S. military action have been exploited by al Qaeda and the Taliban for recruitment purposes. In military computer games, however, because the game immediately ends if you shoot a

civilian, the consequences of your actions are not shown. Instead, you are forced to restart the game or level and replay it without injuring any civilians, losing too many squad members, or committing acts of friendly fire. In this respect, military computer games are less like a simulation tool in which you can investigate the consequences of your actions, and more like a training tool which, as Sharon Ghamari-Tabrizi argues, limits the player's 'range of actions in order to enforce pre-established routines'.³⁷ John Keegan has argued that the fundamental purpose of military training 'is to reduce the conduct of war to a set of rules and a system of procedures – and thereby to make orderly and rational what is essentially chaotic and distinctive'.³⁸ The descriptions presented by Ghamari-Tabrizi and Keegan concerning the structure of military training might also be applied to military computer games. The structure of games, based around mission briefings and fixed objectives, ensures that computer game narratives follow a 'pre-established routine', whilst these missions and objectives, along with the rules of military computer games in relation to civilian and military casualties, preclude the possibility of the representation of war in computer games spilling out into something 'chaotic and distinctive'. In this respect, the structure and rules of military computer games - despite claims that they make games more realistic - not only limit the interactivity of games, they also preclude the possibility of games accurately reflecting the true chaos and unpredictability of warfare, and the consequences of unintended actions such as civilian deaths and collateral damage. In this

respect, the limitations of military computer games challenge the idea of games as a performative interactive form.³⁹

In 'Quest Games as Post-Narrative Discourse' (2004), Espen Aarseth maps out what he considers to be the distinction between narrative and simulation. Narrative looks backward and presents again from the perspective of the outcome, whereas simulation looks forward and is performative. For Aarseth, games are performative because the meaning of a game is suspended and will only become available when the quest is achieved and players look back retrospectively at their performance, piecing together the different parts of their performance.⁴⁰ Following this line of argument, it is only when you look back at the path of the narrative that you have created, and all the interactive decisions that you have made, that the game will make sense, and that you will be able to construct a coherent and linear narrative of your game experience. But Aarseth's analysis has limited applicability as it relates to military computer games for a number of reasons. Firstly, as we have seen, both the technological limitations of games, and the way in which the computer game narrative is structured around missions and objectives, limits this sense of simulation and performance. As a player, you progress through the game following objectives which are set in pre-level briefings and your success is measured against the attainment of these objectives which in turn drives the progression of the narrative. In this respect, these objectives ensure that the narrative is preordained. But the other way in which Aarseth's conception of

the performative nature of games is inappropriate to military computer games is revealed by the way in which military computer games adhere to computer game narrative conventions, and specifically the fact that military computer games always culminate in victory. Aarseth's conception of games as simulation suggests that the meaning of a game and its narrative coherence is suspended until the quest is achieved and the player looks back retrospectively at their performance. In the case of military computer games, however, it is not the case that narrative meaning is suspended; notwithstanding changes in specific settings, missions, and objectives, the broad narrative framework of these games is known before the player begins, since it is always the same. As a U.S. soldier, you must fight your way through a series of missions of increasing difficulty whilst attaining set objectives until you reach the final level and come face to face with the leader of the opposition. Once you have disposed of the 'big boss', victory is guaranteed.⁴¹ As Jerome de Groot has argued, there is a form of 'narrative teleology' at work here,⁴² as the end game is well known by the player before he starts, contrary to the model of simulation which Aarseth suggests.

The idea of games inevitably culminating in victory – providing the player meets the necessary aims and objectives along the way - seems like a naturalized convention of military computer games which responds to players' expectations. Players do not play the game for hours on end, battling through ever harder scenarios only to find that they have lost the war or failed in their

mission. But the emergence of the idea of inevitable victory as a military computer game convention has also been encouraged by the technological, interactive, and narrative determinants of games, and can be explained in relation to a number of factors. The limitations of technology, which require that the interactivity of the game be limited, necessitate the structure of military computer games around missions and objectives. The structure and narrative of military computer games is therefore based around the idea of the successful attainment of objectives, which leads to the successful completion of missions, which in turn ultimately results in the successful completion of the game and victory. These restrictions are also required in order to give the game narrative coherence, whilst the narrative teleology of games and their culmination in victory also responds to computer game convention and player expectation. But this sense of narrative teleology and inevitable victory is also a result of the problems which computer game developers face in maintaining the player's agency whilst attempting to depict insurmountable setbacks and defeat.

The agency that we have when playing a game, as opposed to reading a book or watching a film, requires that the means of delivering set backs and defeat must be different. When playing a computer game, if the player is continually failing and feels there is nothing they can do about it, or that it is impossible to proceed, then they are going to be unhappy, since this violates their expectations of the game and also their sense of agency. It would not be much

fun to play a game which held out no possibility of victory or which randomly terminated your game for no apparent reason. This is a point well illustrated by the in-game messages which appear in *Brothers in Arms: Earned in Blood* (2005). If your squad is continually wiped out as you attempt to complete a particular section of the game, an in-game message appears: 'War sometimes isn't fair. But a video game should be. Would you like to heal your squad?' As *Brothers in Arms: Earned in Blood* suggests, the expectation that computer games will be 'fair' clearly distinguishes their representation of combat from the realities of warfare; but this in-game message also points to the fact that military computer games must always offer the player the possibility of success, even when they are faced with failure. A game in which the player cannot avoid losing or which holds out no possibility of success will not only be seen as unfair, but as failing to meet player expectations and computer game conventions, and as robbing the game player of their agency. On another occasion in *Brothers in Arms: Earned in Blood*, for example, as you helplessly watch the bridge which you were defending get blown to smithereens, the 'Objective Failed' message is quickly followed by the explanation: 'The Objective Failure could not have been avoided. Find Doyle for a new objective'. As the gameplay of *Brothers in Arms: Earned in Blood* suggests, setbacks in games must be a result of player action and they must point the way to a solution. It is therefore necessary to maintain a clear correlation of cause and effect. If you step into the open, you will get shot; if you shoot civilians, the game will end; if you drive over a mine, you blow up. But these

setbacks must also point to the possibility of success: use cover more effectively and you will survive; don't shoot civilians and you will proceed; don't drive over the mine and you won't blow up. These links between cause and effect and failure and success are fundamental to the agency and expectations which players of computer games enjoy.

This understanding of agency, however, returns us to the problem which Sharon Ghamari-Tabrizi describes: 'how to guide the participant without creating the suspicion that he or she is being manipulated'.⁴³ Compare the film *Black Hawk Down* and the game *Delta Force: Black Hawk Down*, for example. Both these narratives are based around a similar real-life plot in which a Black Hawk helicopter is shot down over Mogadishu. In the film version, such an event can simply be represented as it happened in reality; but in the game version, how can the producers be sure that this event will take place – be sure that the player will be shot down – without restricting the player's agency? What if the player manages to avoid the RPGs (Rocket Propelled Grenade) which have been fired at the helicopter? In a genuinely interactive, unlimited and completely free game world, this would be a perfectly acceptable chain of events, and the game would then proceed along a different narrative pathway. But this is not the case with military computer games. Technological restrictions require that the narrative – and the player's actions - are restrained and directed down a particular narrative pathway in order that the game achieves a narrative coherence and reaches its preordained

conclusion. In order to achieve this, whilst avoiding the problems of violating the player's agency, games often present such pivotal events and setbacks through non-interactive filmic sequences in which the player relinquishes control and simply watches as they would watch a film. As Ben Schneider describes: 'The earliest, simplest method of creating dramatic setbacks in games would be the cut scene...It's safe. You are not likely to think you failed in a scene you had zero control over, especially as they tend to take the form of rewards for completing a section of the game'.⁴⁴ Once again, games therefore resort to non-interactive elements in order to maintain the narrative coherence of the game, whilst attempting to avoid the sense that they are violating the agency of the game player.

But although cut scenes can be used to represent setbacks along the narrative pathway of games, it is quite another thing to represent defeat and failure as the ultimate and final culmination of the game, since this runs counter to many of the principles of computer game narrative, structure, interactivity, agency, convention and player expectation. As I have argued, military computer game narratives are structured around the successful attainment of objectives, which lead to the successful completion of missions, and ultimately and inevitably, the successful completion of the game and victory. The expectations of the player and the conventions of the military computer game also define the goal of gameplay as the successful completion of the game and therefore the inevitable attainment of victory. And the need for the game to maintain the

agency of the player precludes the possibility of imposing defeat or insurmountable setbacks without the prospect of victory and success. As a result, it seems impossible for military computer games to represent insurmountable obstacles or to depict defeat without violating one or more of these principles. In this respect, the multiple determinants of games guarantee victory in military computer games, and preclude the possibility of representing defeat.

But the multiple determinants of games not only ensure the depiction of inevitable victory in military computer games, they also promote a very limited conception of how victory should be understood. Critics have often pointed to the fact that military computer games fail to provide any sort of political, historical, or social context in their depictions of warfare. This lack of context, however, cannot be explained purely by politicized arguments which claim that games deliberately recreate the simplistic, Manichean and nationalistic discourse of President Bush. Instead, the lack of political, historical, and social context in military computer games is the result of the restrictive perspective of the first person and squad based shooter forms.

Whilst the perspective of first person and squad based shooters has allowed the production of games which appear ever more realistic in a graphical and visual sense, and which therefore respond to the desire of game players for ever more realistic and immersive gaming experiences, the perspective of first person and squad based shooter games has reduced their ability to provide any sort of non-

combat orientated context or indeed to consider any non-combat related factors in their representation of warfare, their depiction of victory, and their representation of how victory is achieved.⁴⁵

In military computer games, victory is achieved once the last shot has been fired, the final level completed, and the toughest and most infamous member of the enemy has been relinquished. In *Close Combat: First to Fight*, you fight as a U.S. Marine in Beirut in order to restore order in the face of the power struggles between Syrian and Iranian backed militia which are taking place in the absence of the Lebanese prime minister. As you progress through the game, you kill and capture more and more of the high value targets depicted in the game's deck of cards. The game culminates in a fight against the ace of spades, General Badr, a former Yemeni general who is in command of the Syrian forces in Beirut. On killing Badr, you complete the game, and victory is announced via the in-game news network which proclaims that Lebanon has been returned to the Lebanese. All is now well. In *Call of Duty 4*, you fight to save the world from the threat of Russian and Middle Eastern attempts to trigger a nuclear apocalypse. The ending to the game is dramatic, as you watch – unarmed and stunned – the Russian Zakhaev and his bodyguards execute a number of your colleagues. Your commander Captain Price, as he lies dying, slides a revolver over to you just in time for you to kill Zakhaev and the remaining enemy troops. Once again, victory comes with this final military act. In *Conflict: Desert Storm*, the game begins with your commander

instructing you to ‘Mount up boys; we’ve got a country to liberate’. It ends with you bombing General Aziz, the supreme commander of the Iraqi military. ‘That’s that men. We’ve won. Time to go home’. In military computer games, victory in combat is therefore equated with overall strategic victory.

A number of determinants converge here to provide a very particular representation and understanding of warfare and the nature and meaning of victory. The agency, interactivity and conventions of military computer games ensure that the game ends with victory; but the perspective of the first person and squad based military shooter, which is confined to the representation of combat and ignores non-military considerations, also ensures that your overall strategic victory in restoring order in Beirut, liberating Kuwait, or preventing a nuclear apocalypse, is shown as the direct, immediate and logical result of a successful combat operation. Even games such as the *Full Spectrum Warrior* series,⁴⁶ which point to the emergence of a ‘three block war’ – wars as much about combat as nation building and peacekeeping – are unable to represent non-combat considerations, given the perspective of games, their status as combat action games, and the expectation and desire of game players for an immersive, visually realistic combat experience. As a result, despite the fact that the *Full Spectrum Warrior* games acknowledge the complexities of post-Cold War combat, they simply reaffirm a purely military response, and ignore non-combat considerations in their representation of war. In military computer games, victory in combat is therefore conflated with overall strategic victory –

a process, as I argue later in the chapter, which encourages a number of misconceptions and misunderstandings concerning warfare, especially when considered in relation to the operations in Afghanistan and Iraq.

But it is not only the conception of victory which games encourage, but also the logic of winning wars which they promote, which is important to considerations of the influence of military computer games on understandings of warfare. In military computer games, the success of the player is measured, quantified, and characterized after each level using the after action review (AAR). The AAR is in effect a table of statistics which is presented to the player following the successful completion of a level within the game. It is on the basis of the AAR that you are awarded points and medals in relation to certain key performance indicators: for example, the number of enemy troops killed, the number of enemy troops captured, the number of enemy vehicles destroyed, the number of civilians killed (a negative score), and so on. In this respect, the AAR serves as an illustration of how it is that success is calculated and quantified in the game, and how it is that the logic of the game suggests that victory is attained – a very important aspect in relation to the representation of war in computer games. The use of the AAR, however, privileges ‘hard’ and quantifiable military measurements such as the number of enemy troops killed and the amount of enemy armor destroyed, over ‘soft’ factors such as the attitude of the indigenous population towards the invading force, which has now become commonly characterized as ‘hearts and minds’.

Whilst games such as *Full Spectrum Warrior* make reference to the hostility of the population of Zekistan towards the U.S. military in the in-game graffiti which reads 'Leev America'; ultimately, the purely combat-orientated logic of the game ignores any consideration of such factors when presenting the logic of liberating Zekistan or indeed of overcoming the post-war insurgency. Not only this, but in promoting the logic of winning wars based around the destruction of men and materiel, the AAR privileges a very conventional understanding of winning wars which – as we shall see - is inappropriate to post-Cold War conflicts such as those in Afghanistan and Iraq. In this respect, the quantitative basis of the AAR, along with the limited perspective of games, reinforces the focus of military computer games on purely combat orientated factors and on purely combat orientated understandings of victory.

The multiple determinants of games therefore ensure that the representation of war in military computer games inevitably culminates in victory; that victory in combat is equated with overall strategic victory; and that the means of attaining victory are represented purely through the destruction of troops and materiel. In all these respects, the representation of war in military computer games can be seen as limited and misleading, and as failing to capture the true complexities of wars such as those in Afghanistan and Iraq.

In the Introduction to the thesis, I argued that the phrase 'war is like a computer game' emerged from the belief that the increasing automation of

combat made war increasingly similar to a computer game; more often than not, however, this phrase is now adopted by critics of computer games as a starting point from which to utterly refute the idea that war is like a game.⁴⁷ In March 2003, for example, Colin Powell, the former Secretary of State, responded to a question concerning the problems in Iraq by arguing that ‘People have to understand that this isn’t a videogame. It’s a war. A real war’.⁴⁸ But whilst the representation of war in military computer games is undoubtedly limited in a number of key respects, it is interesting to note how closely these limitations reflect the limitations of actual U.S. policy. The purpose of the following section is therefore to show how the limitations of games and their representation of inevitable victory; their ignorance of non-combat orientated considerations; and their promotion of a very conventional logic for winning wars, reflect the limitations of real U.S. military policy.

The fact that the representation of U.S. military operations in computer games inevitably culminates in victory can be seen as one of the ways in which the representation of war in computer games is limited and simplistic. But this belief in the inevitability of U.S. victory has come to inform not only military computer games, but current U.S. military policy and also public understandings of U.S. military capabilities. This belief in the inevitability of U.S. victory has been encouraged by a number of factors: firstly, the fact that the U.S. now spends more than the next twenty largest defense budgets

combined, and is responsible for nearly half of the world's defense spending.⁴⁹ Such enormous expenditure and huge military advantage has encouraged the belief that the U.S. can dominate in any military confrontation.⁵⁰ Secondly, the increasing influence of neoconservative ideals on the Bush administration's foreign and military policy, which builds on this belief in the unbeatable nature of the U.S. military, and encourages the increasing use of military force as the decisive means of solving geopolitical problems and of meeting strategic aspirations.⁵¹ And finally, the influence of military transformation, which has encouraged the belief that the U.S. can now wield its military might in a far more precise, quick, and less costly manner – an understanding that has encouraged the adoption of neoconservative and interventionist ideals. As Stefan Halper and Jonathan Clarke have argued in *America Alone: The Neo-Conservatives and the Global Order* (2004), neo-conservatism is 'particularly important in an age when a dramatic revolution in military technology has taken place. America's power-projection pre-eminence is now the nation's main comparative advantage, much increasing the temptation to utilize military force as an early policy option'.⁵² Together, these influences have encouraged an increasing arrogance concerning the utility of military force and its ability to deliver victory. On the 20th September 2001, President Bush introduced the war on terrorism to Congress by explaining that 'The course of this conflict is not yet known, yet its outcome is certain'.⁵³ In April 2003, following the end of 'major combat' operations in Iraq, he felt confident enough to announce that 'By a combination of creative strategies and

advanced technologies we are redefining war on our terms'.⁵⁴ And on the 1st May 2003, President Bush announced 'mission accomplished', signaling the end of the major combat phase in Iraq and also – ostensibly - victory. In carrying out Operation Iraqi Freedom, the U.S. military took 26 days to conquer the country with less than 100,000 troops, and at a cost of 'only' 139 casualties.⁵⁵ It appeared a resounding success, and an illustration of the potential of a transformed military. But Bush's announcement suggested a confused understanding of the strategic complexities involved in the mission in Iraq, and a very limited understanding of victory. Just like the understanding of warfare encouraged by military computer games, President Bush's understanding of victory relied on the equation of combat success in the major combat phase of the war with overall strategic victory. This fundamentally misconstrued the nature of the war in Iraq. As Major General Jonathan Bailey of the British Army argued: 'If the intent of operations in Iraq in 2003 was merely "regime destruction", which it was not, then the short, decisive warfighting operation of March and April 2005 might in itself have constituted success... In all other respects it might have been counterproductive'.⁵⁶ This is a point reiterated by U.S. Lieutenant Colonel Antulio Echevarria in 'Toward an American Way of War' (2004):

The recent campaigns in Afghanistan and Iraq...are examples of remarkable military victories. However, those victories have not yet culminated in strategic successes. As

one scholar pointed out, the center of gravity in conflicts in which the strategic aim is regime change, “lies not in the destruction of the old system, but in the creation of the new one.”⁵⁷

In this respect, just like the representation of victory in military computer games, which is based purely around combat success, the belief that success in the major combat phase in Iraq would be followed by overall strategic victory ignored all other non-combat considerations, separating the idea of the major combat phase of the war from its aftermath. As Martin Shaw argues, “The success of the new Western way of war depends partly on its success in separating “major” combat phases from other phases of war, and representing this alone as “the war”.”⁵⁸ But this practice also represents a serious problem for U.S. military policy. As Frederick Kagan has argued, it will “continue to be a problem that the military defines war and war planning in a particular way that focuses first on defeating the enemy’s armed forces and only then on pursuing the political objectives of the war.”⁵⁹ And here we see a clear parallel between the limitations of computer game representations of war and the limitations of U.S. military policy. As a result of the multiple determinants of games, including the influence of technology, convention and game perspective, military computer games present a vision of victory which conflates and confuses military victory in the major combat stage with overall strategic victory, and which ignores any non-combat or post-war

considerations in its representation of victory. In the same way, U.S. policy in Iraq, in separating the major combat phase from the aftermath, effectively ignored post-war, non-combat considerations in its conception of victory.

But the problems which the U.S. has faced in Iraq have not only been encouraged by the marginalisation of non-combat orientated factors in their conception of 'victory', but also by misconceptions concerning what the military campaign itself would involve. From the very earliest days of the war in Iraq, there were indications that the U.S. was involved in a very different conflict than anticipated. The first U.S. Marine killed was killed by an Iraqi in civilian clothes firing from a pickup truck, and there are numerous reports from American soldiers expressing surprise at the enemy they were facing. Major Tim Desjardin, reporting on an attack outside Nasiriyah, explained:

So it was a long day. The first day that I had seen the enemy and realised we were fighting a different force. They weren't in uniform. They were civilian individuals that were running around with weapons, people dressed as civilians that were engaging our forces from that site.⁶⁰

As Lieutenant Colonel Terry Ferrell put it: 'There's no tanks, there's no BMPs [a Russian infantry fighting vehicle], there's no uniforms. This is not anything we planned to fight'.⁶¹

Since the ‘major combat phase’ of the war in Iraq was declared over, the true nature of the war has become ever more apparent, with the military embroiled in a fight against an insurgency using guerrilla tactics such as road side bombs, suicide car bombs, and ambushes, often in the guise of civilians - a long way from the initial appearance of the war as a fight against the conventional, uniformed and massed armies of the Republican Guard. In this respect, U.S. military policy was geared towards fighting the wrong sort of war and the wrong sort of enemy; a misconception which encouraged the overblown belief in the inevitability of U.S. victory. And here, another parallel can be drawn between military policy and the representation of war in military computer games. As I have argued, the After Action Review in military computer games privileges the depiction of hard factors such as the destruction of troops, tanks and military hardware as a measure of the player’s success. The use of such measures of success, however, provides a very conventional view of military operations, and in its simple distinction between soldiers and civilians and also the simple prescription for the destruction of troops and materiel as the means to victory, one that ultimately encourages a misleading perception of what the post-Cold War conflicts in Afghanistan and Iraq have involved. Despite the claims of games such as *Full Spectrum Warrior*, *Full Spectrum Warrior: Ten Hammers*, and *Tom Clancy’s Ghost Recon Advanced Warfighter* to represent the realities of modern urban insurgencies, the view of warfare which they present is restricted to a more conventional perspective of uniformed, heavily

armored troops. Some critics have suggested that the failure of military computer games to truly depict a post-war insurgency situation is the result of the desire on the part of game producers to avoid such a politically undesirable picture of combat.⁶² This may be true to a point, but there are far more fundamental reasons for the avoidance of such a vision. Since the end of the major combat phases in Afghanistan and Iraq, these wars have moved further and further away from the vision of warfare which is traditionally associated with computer game representations of war. Instead of pitched battles between troops on opposing sides, and clearly identifiable missions with clearly identifiable successes, these conflicts have become protracted engagements in which the Taliban and al-Qaeda have relied on Improvised Explosive Devices and roadside bombs and have avoided directly confronting U.S. forces in the hope that the incremental increases in U.S. casualties will force their eventual withdrawal. As critics have suggested, this may represent a politically undesirable picture of combat; but more importantly, it presents a vision of combat which fails to meet the requirements of the multiple determinants of games, and precludes the possibility of representing warfare through a series of missions, based around the attainment of set objectives, which result in definitive victory at the end of the combat stage. As a result, whilst games such as *Full Spectrum Warrior*, *Full Spectrum Warrior: Ten Hammers*, and *Tom Clancy's Ghost Recon Advanced Warfighter* claim to depict the functioning of military transformation within contemporary contingencies such as post-war urban insurgencies and military operations in urban terrain, the

visions of warfare which they present more closely resemble interstate, conventional, industrial scale total war than the post-Cold War conflicts experienced in Afghanistan and Iraq. In this respect, military computer games encourage misunderstandings concerning the true complexities of modern warfare, equating military victory in the major combat phase with complex strategic victory, and the destruction of troops and materiel as the means of attaining such complex victories. As retired British General Sir Rupert Smith has argued: ‘the media stories or depictions are a strong reason we still see conflicts within the interstate industrial model, since they are usually told from the perspective of the conventional military forces sent in by nation states’.⁶³ Smith describes current post-Cold War unconventional conflicts as examples of ‘war amongst the people’. As he argues, media representations which attempt to present such unconventional warfare through conventional models of conflict are illustrative of ‘desperate attempts to use the framework of interstate war to interpret war among the people’ and of attempts to restructure ‘a new reality...around an old paradigm’.⁶⁴ For Smith, however, interstate, conventional, total warfare no longer exists: ‘war as cognitively known to most combatants, war as battle in a field between men and machinery, war as a massive deciding event in a dispute in international affairs, industrial war – such war no longer exists’.⁶⁵ This conventional vision of total warfare, however, is precisely the vision of warfare which military computer games promote, ensuring that military computer games inherit and propagate the deceptive legacy of media representations of war which Smith describes. But

this conventional vision not only occupies the representation of war in military computer games, but also appears to have occupied U.S. military policy and planning in Iraq. President Bush's announcement of 'mission accomplished' following the major combat phase in Iraq, the separation of major combat and aftermath in planning for strategic victory, and the military's surprise at the true identity of the enemy all suggest that – like computer games – U.S. military policy was geared towards a vision of conventional total warfare, rather than the complexities of an Iraqi insurgency.

Military computer games, as many critics have suggested, do therefore present a limited representation of warfare in a number of key ways, and these limitations, and the misconceptions and misunderstandings of warfare which they encourage, mark their contribution to the new American militarism. However, the limitations of military computer games cannot simply be explained by the existence of an insidious relationship between the military and the computer game industry or by the inherent triviality of the computer game form. On the contrary, the limitations of military computer games are the product of the complex interactions between the multiple determinants of games. And whilst Colin Powell and others have used the common understanding of games as simplistic to draw distinctions between the representation of war in computer games and the complexities of real warfare, it is interesting to note how strong the parallels between the limitations of games and those of military policy have become, raising the question of

whether it is the games that are simplistic, or the military policy which they represent. Bush, Rumsfeld, and the neoconservatives have endured a barrage of criticism concerning the handling of the war in Iraq, and as a result, they have become characterized as militaristic, warmongering, ignorant and arrogant. But just as the limitations of military computer games cannot be explained purely through recourse to an evil ideological network, but must instead be seen in relation to the multiple determinants which affect the computer game form, so American military policy and military transformation should be seen not simply as the product of a warmongering cabal, but as the product of its own set of determinants. Practically, the end of the draft, the introduction of an all volunteer force, the increase in wages and expenditure that this necessitated, the promise of reduced budgets at the end of the Cold War, as well as a reduced number of troops,⁶⁶ all pointed towards a transformed military.⁶⁷ But as Martin Shaw has argued, military transformation developed not only in relation to these practical, political and economic factors, but also in an attempt to respond to cultural and social concerns. Unlike industrialized total warfare, which dominated and structured the economy, polity and culture, Shaw describes contemporary warfare as ‘global surveillance war’,⁶⁸ in which the waging of war must take into account a significant number of issues. Modern wars must be limited in risks for Western polities, economies and societies, to avoid political, economic and social disturbance; anticipate problems of global surveillance, such as the media, public opinion and law; be time limited wars; minimize casualties to

Western troops through casualty aversion, and the use of airpower, proxies and private security firms; distinguish between combatants and non-combatants to minimize non-combatant casualties and collateral damage; and maintain legitimacy through the use of precision weapons and advanced technologies.⁶⁹

As Shaw argues, after World War I and II, the:

Automatic social support for the military that had built up in the period of total wars began to fade away. People might find it easy to support military preparations that didn't seem to affect them...But when wars or weapons impinged on people's lives, as they did over Vietnam and at points of tension in the Cold War, opposition could be strong.⁷⁰

The development of military transformation therefore represents an attempt to manipulate war to satisfy practical, political, economic, cultural, and social imperatives (see Chapter 1). But these attempts to redesign war have not only led to certain strategic limitations, they have also encouraged an overblown belief in the utility of military force. As shown in Afghanistan and Iraq, whilst a transformed force based around military high-technology and a reduced number of highly skilled troops on the ground can yield remarkable success in the more conventional major combat phases of war; such a force is ill-suited to face the actual strategic imperatives presented by post-war insurgencies and intra-state war. As a result, despite the massive technological and financial

advantages which the U.S. enjoys, the operations in Afghanistan and Iraq have shown that in many ways, the force structures employed by the policy of military transformation do not match the missions to which they have been applied. As Lawrence Freedman has argued, ‘The main question is not overall US capacity, which on all pertinent measures remains impressive, but its application in practice and its relevance to the challenge of the coming decades.’⁷¹ The determinants of military transformation have therefore sculpted not only its shape, but its limitations, and the influence of the multiple determinants of military transformation and the multiple determinants of military computer games have led to a convergence between the limitations of U.S. policy and the limitations of the representation of war in games. In this respect, as critics of military computer games have claimed, the representation of war in military computer games is limited; but so is the military policy which it reflects.

CHAPTER 3

Military Computer Games, Historical Analogy, and the 'Lessons' of the Past

Alongside criticisms of games as limited and simplistic, and of policy as militaristic and arrogant, have emerged criticisms of both games and U.S. policy as unhistorical. The unhistorical nature of military computer games is seen as arising from their simplification and manipulation of past wars; whilst the unhistorical nature of military policy is said to be the result of the way in which policymakers have ignored the 'lessons' of the past in the formation of current policy. The idea of the 'lessons of history' has become a major part of the debate concerning intervention in Iraq, with critics claiming that the U.S. could have avoided the problems with which it has been faced had policymakers learnt the lessons of the past. But the very idea of taking lessons from history is problematic. For a start, the lessons and interpretations of past wars are not singularly accepted and objective truths, and as a result, as David Hoogland Noon has argued, all historical analogies and historical lessons can be seen as 'fallible in one sense or another because they emphasize some aspects of the past while suppressing others to achieve the right fit'.¹ In fact, it is not the case that policymakers ignore all historical precedent in the formation of policy. As Ernest May has argued in *"Lessons" of the Past: The Use and Misuse of History in American Foreign Policy* (1975), policymakers do use history and historical analogy in the formation of policy, but in doing so, they mold the image, interpretations and lessons of past conflicts in order

that they are seen to support current policy. In this respect, current U.S. policy should not be seen as unhistorical in the sense that it is ignorant of all historical precedent; rather it should be seen as the product of lessons learned, 'mislearned', and ignored from past conflicts.

Military computer games, like American military policy, have been dismissed as unhistorical. But like U.S. military policy, it is not the case that the representation of war in military computer games displays a complete ignorance of historical events; rather, just as policymakers mold the past in order that it appears to support current policy, so military computer games provide a selective representation of past wars in order that these representations satisfy the multiple determinants of games. For policymakers, references and analogies to past wars are intended to provide a lesson in how contemporary policy – and contemporary warfare – should be conducted, and also to encourage specific understandings concerning the utility of military force, its necessity, and its capabilities. In the same way, the representation of past wars in military computer games not only encourages specific understandings and interpretations of the wars being depicted, but in encouraging the player to draw specific lessons from these conflicts, and to draw specific understandings of how U.S. military force has worked in the past and what it has achieved, these games also influence understandings of the utility of contemporary warfare and the capabilities of the U.S. military. As I reveal, the desire on the part of policymakers to mold interpretations of past

wars, and the influence of the multiple determinants on the representation of war in military computer games, have led to a convergence between the lessons of the past promoted by policymakers, and those promoted by military computer games.

Rather than dismissing games as unhistorical, the representation of war in military computer games should be analyzed in order to reveal what lessons of the past these games are promoting, and therefore, what the representation of past wars in military computer games teaches players not only about past wars, but about contemporary conflict. The purpose of this chapter is therefore firstly to analyze in what ways the multiple determinants of games have affected the representation of historical wars in military computer games; secondly, to analyze the understandings and lessons of past conflicts which these games encourage; thirdly, to illustrate the parallel that exists between the understandings of historical conflicts which are encouraged by computer game representations, and the understandings and lessons of past conflicts which are drawn upon by policymakers in the formation and promotion of military policy; and finally, to show how the lessons of the past encouraged by both games and policymakers have contributed to the new American militarism.

Although there have been hundreds of military computer games produced, the number of actual wars that have been represented in squad based and first

person military shooters remains relatively small. There are a number of games which represent the Gulf War in 1991, such as *Conflict: Desert Storm* (2002) and *Conflict Desert Storm II: Back to Baghdad* (2004). The game *Delta Force: Black Hawk Down* (2005) represents the conflict in Somalia in 1993; *Delta Force: Task Force Dagger* (2002) the war in Afghanistan in 2001; and *KumaWar* (2004) and *America's Army: Special Forces* (2003) the War on Terror. There have also emerged a number of games based around the war in Vietnam, including five major titles released in 2004.² However, the overwhelming majority of first person and squad based shooters which depict actual wars are based on World War II. The following section investigates why this is, and what the consequences are for understandings of warfare.

In Chapters 1 and 2, the influence of military policy, the popular hero narrative, agency, interactivity, convention, narrative, technology, perspective, and player expectation were considered in detail in relation to the representation of war in computer games. But the most important influences to consider in relation to the choice of which wars are represented in military computer games, and which are not, are those relating to remediation and intertextuality. In his article, 'Why Am I in Vietnam? The History of a Videogame' (2007), Jon Dovey sets out to investigate how it is that the game *Conflict: Vietnam* came about, and more specifically, why it is that the producers of the game decided to base it around the war in Vietnam. The developers at Pivotal Games, where the *Conflict* game was produced,

explained that a major factor in their choice was the need to develop a game based around a recognizable war. As a designer at Pivotal Games argued, 'There are an inordinate number of wars that have happened in the world, but picking a war that the American market is going to be aware of then becomes the question'.³ Given that the majority of people have no first hand experience of combat, audience awareness of historical wars is almost exclusively related to the amount of media exposure that these wars have attracted. The need to develop a recognizable war therefore privileges the representation of wars which have already been frequently represented in the media. As the Technical Director of Pivotal Games explains with reference to the game *Conflict: Vietnam*:

Vietnam:

It is Vietnam, people immediately go, 'I know what Vietnam was about, I have seen *Apocalypse Now*', they know what that is, they have set the scene, twenty pages of the book have already been read for us, and that is great. So we are in familiar territory already.⁴

As the Technical Director at Pivotal Games suggests, military computer games therefore aim to build on existing media representations of past conflicts in order to develop representations of warfare which are immediately recognizable to game players. In this respect, the game *Conflict: Vietnam* encourages the player to draw intertextual links with existing media

representations of the war in Vietnam. Broadly speaking, *Conflict: Vietnam* recreates the jungles, rivers and temples of *Apocalypse Now* (1979); but it also makes more specific references to other Vietnam War films. As you administer first aid, you bark at the wounded soldier to 'take the pain' just like Sergeant Barnes in *Platoon* (1986); and after being captured, you manage to shoot one of the guards whilst playing Russian Roulette and escape from the semi-submerged prisoner of war camp, just as in *The Deer Hunter* (1978). In this respect, elements of the gameplay, narrative and setting in *Conflict: Vietnam* can be seen as the result of the need to develop a recognizable war based around the principles of remediation and intertextuality. But what this reliance on intertextuality signifies more generally is not only that the wars that military computer games choose to represent will already have been frequently represented elsewhere in the media, but also that computer game representations will seek to recreate the image of the conflict which these previous media representations have developed. The games *Conflict: Desert Storm* and *Conflict: Desert Storm II*, for example, recreate the S.A.S. behind-the-lines thriller which had earlier been used to depict the Gulf War in the books and films *Bravo Two Zero* (book 1994, film 1998) and *The One That Got Away* (book 1995, film 1996); and the game *Delta Force: Black Hawk Down* places the emphasis on the representation of the U.S. Special Forces during Operation Restore Hope in Somalia in 1993, just as the book and film *Black Hawk Down* (book 1999, film 2001) had done. As the examples of *Conflict: Desert Storm*, *Conflict: Desert Storm II*, and *Delta Force: Black*

Hawk Down suggest, the selection of which wars are represented in military computer games, and which are ignored, is also closely related to the possibility that each war presents for representation using some form of the military hero narrative. Although the S.A.S. missions in Iraq in 1991 and the DELTA Force missions in Somalia in 1993 around which these books, films and games were based were disastrous in many ways, they did offer the opportunity of representation using the hero narrative, specifically based around Special Forces and high-technology, which provided a powerful and compelling form of representation and also reflected the vision of the policy of military transformation as it was being played out in Afghanistan and Iraq at the time of the games' production. Equally, the war in Afghanistan, whilst increasingly controversial and consistently underrepresented in the popular media, offered the opportunity of illustrating the model of military transformation in games such as *Delta Force: Task Force Dagger* (2002)⁵ at a time when the U.S. led operation was still being talked about as a revolutionary new way of war. With the exception of *Delta Force: Task Force Dagger*, and a handful of games such as *KumaWar* and *America's Army: Special Forces*, however, military computer games have steered clear of representing the ongoing wars in Afghanistan and Iraq. Rather than attracting controversy, games such as *Full Spectrum Warrior* and *Full Spectrum Warrior: Ten Hammers*, whose depiction of warfare appears a barely disguised representation of Iraq, provide fictional settings such as Zekistan. And whilst the title of *Conflict Desert Storm II: Back to Baghdad*, which was released in

2004, suggests that it was a representation of the Iraq War of 2003, it was in fact described as being set in 1991. This allowed the game producers to capitalize on the publicity that the recent war encouraged, whilst also ensuring a less controversial and 'safer' depiction of combat.⁶

It can therefore be argued that the main determinants which influence the selection of which wars are represented in games, and which are ignored, relate to remediation, intertextuality, the popular hero narrative, and the question of how controversial a given war is seen to be. Given these determinants, it is not hard to see why the representation of World War II has come to dominate military computer games. Not only has the 'Good War' been recycled over and over across different media⁷ platforms, developing a stock of recognizable and iconic images, settings and missions perfect for remediation and intertextuality; but the reason behind the constant recycling of World War II is its status as an uncontroversial, heroic, and definitively victorious war, making it a perfect match for the multiple determinants of games. The scale of World War II, and the differing campaigns and theatres of war which it involved, also offers endless opportunities for narrative adventure. As a result, military computer games based around World War II show clear signs of remediation and intertextuality. In *Medal of Honor: Allied Assault* (2002) – a game created by Steven Spielberg – you begin the game with the assault of Omaha Beach, just as in Spielberg's film *Saving Private Ryan* (1998). In *Medal of Honor: Pacific Assault* (2004), you fight as a U.S.

Marine in the Pacific theatre as depicted in the film *Flags of Our Fathers* (2006), but the game also begins with the bombing of Pearl Harbor, as shown in the film *Pearl Harbor* (2001). *Medal of Honor: European Assault* (2005) – written by John Milius, the writer of *Apocalypse Now* – depicts operations in North Africa, the Soviet Union and also Europe, and the more recent *Medal of Honor: Airborne* (2007) follows up on the recent concentration on paratrooper activity encouraged by the HBO series *Band of Brothers* (2001), and follows the 82nd Airborne Division. The influence of *Band of Brothers* is even clearer in the game *Brothers in Arms: Earned in Blood* (2005), in which you follow the 101st Airborne on an almost identical storyline to that of the HBO series. The music, credits, production, and use of interviews to link chapters in the game are also reminiscent of the HBO production. Whilst World War II, a war based around massed forces and conventional warfare, might initially appear ill-suited for representation using the first person and squad based computer game forms; narratives such as those presented in *Band of Brothers* and *Saving Private Ryan*, which follow a small squad of elite troops across a broad range of military campaigns, have developed a vision of the war which is ideally suited for representation and remediation in military tactical shooters. In this respect, World War II games are able to present the war through the model of a squad based or first person shooter, whilst also drawing associations between this restricted perspective and the broader understanding of World War II as a heroic and victorious war of epic proportions.

Over the years, both critics and game players have suggested that perhaps the representation of World War II in military computer games has reached saturation point⁸ and have called for a diversification of subject matter. But despite this, recent World War II games such as *Call of Duty II* (2005), *Brothers in Arms*, and *Company of Heroes* (2005) have been voraciously snapped up, alongside their filmic and televisual counterparts. Given the number of computer games based around World War II, an in-depth analysis of their historical representation of the war would require an entire book to itself. But when considering the influence of World War II games on contemporary understandings of warfare, what is most important is not an analysis of their representation of the landings at Omaha Beach, their depiction of Operation Market Garden, Pearl Harbor, or the Pacific Theatre; it is more important to understand why World War II has dominated media and computer game representations; what World War II has come to mean and signify through these media representations; and what the consequence of the continuing dominance of computer games based on World War II is for overall understandings of warfare, past and present.

As Michael Sherry has argued, World War II alone offers 'the attractive combination of giant scale, moral clarity, American unity, and total American victory'⁹ which make it perfect for media representation. Take a game such as *Call of Duty II*, for example. The game covers the Russian stand at Stalingrad, the British Desert Rats' operations in North Africa against Rommel, and an

impressively chaotic representation of the U.S. landings at Omaha beach on D-Day, which includes the Rangers' cliff assault at Pointe du Hoc and their destruction of German artillery, before moving on to show their capture of Hill 400. The game, which includes archival documentary footage of World War II from the Military Channel, begins its section on D-Day with Eisenhower's rousing D-Day address,¹⁰ and ends with footage – as the in-game narrative describes – depicting 'Victory in Europe Day', the 'unconditional surrender' of the Germans, and the 'defeat of Nazi Germany and the fall of the Third Reich'. In the game, this documentary ending is preceded by the more rambunctious congratulations of your commanding officer: 'We took on the best soldiers Germany had to offer and we sent them running for their mommas and their poppas down the Rhine'. The game therefore draws not only on visual intertextual links – with the gameplay of the player's landing at Omaha beach almost exactly replicating the dazed and blurred vision of Captain Miller in *Saving Private Ryan*; but also on the associations which, as already mentioned, have become inextricably linked with World War II: giant scale, moral clarity, American unity, and total American victory. In this respect, the game emphasizes not only the idea of World War II as 'the great crusade' and the 'great and noble undertaking' against 'Nazi tyranny', as Eisenhower describes in his speech; but in continually describing the Germans as 'fascist/Nazi bastards', the game emphasizes this sense of moral clarity and a clearly identifiable enemy. The ending to the game, which depicts the unconditional surrender of the Germans and the fall of the Third Reich, provides the absolute

and total victory which the determinants of games require, and which Eisenhower demanded.

The historian Niall Ferguson has pointed to the shortcomings of computer game representations of World War II in terms of their historical inaccuracy.¹¹ Clearly, the representation of World War II in military computer games is of primary significance in considering the impact of military computer games on understandings of World War II. But in considering the impact of World War II games on understandings of *contemporary* warfare, the most important factor to consider is the continuing association of modern warfare with the 'lessons' and beliefs of World War II which the ongoing representational dominance of World War II games encourages. In particular, games based on World War II promote the belief that warfare can act as a massive deciding event which opens the way for total victory and the absolute resolution of political disputes – an understanding which is inappropriate to contemporary post-Cold War conflicts and which ignores many of its complexities.¹² In this respect, World War II games might paint a historically inaccurate picture of World War II, but more importantly for understandings of contemporary conflict, their continuing dominance, and the continuing dominance of the vision of warfare which they present, encourages a misleading understanding of what modern warfare involves.

In fact, the distorting influence of the dominance of World War II in terms of media representation was commented upon as early as the Vietnam War by U.S. General Creighton Abrams. Abrams argued that the media have 'got to get it [the war] into sort of a World War II context. Otherwise, you can't report it. And that's not what's going on over here. It just isn't. And this movie on Patton you see it comes at the wrong time. It just reinforces all that.'¹³ As Abrams suggested, the complications of the Vietnam War tended to be obscured by the continuing prominence of films such as *Patton* (1970), and the need to present warfare through the prism of World War II. And the same can be said of modern military computer games and the influence of the multiple determinants which affect them. The multiple determinants of games have encouraged the continuing dominance of World War II in terms of representation, and as a result, the representation of war in military computer games - and the media more generally - has never escaped or rewritten the dominant perceptions and understandings of warfare which the repeated representation of World War II has inscribed. But this process is encouraged not only by the influence of the multiple determinants of games in selecting which wars are represented, but also which are ignored. Whilst World War II has dominated the representation of warfare in military computer games, post-Cold War conflicts such as those in the Balkans in Bosnia and Kosovo during the 1990s, which represent intensely complex, controversial, unconventional post-Cold War conflicts, have been totally ignored. Whilst the political, historical, cultural and ethnic complexities of the Balkan conflicts made them

representative of the sort of conflicts that could be expected in the post-Cold War world, none of these aspects made the Balkans an appealing topic in any way for military computer games since the conflicts there failed in relation to every one of the multiple determinants of games. The complexities of the Balkan conflicts, which led to processes of ethnic cleansing and reverse ethnic cleansing, denied any simple division of good versus evil, and made it far less obvious for U.S. politicians and public to recognize not only on whose side the U.S. should be fighting, but also how and why. As James Baker, the U.S. Secretary of State from 1989-1992 under George Bush described, 'We don't have a dog in that fight'.¹⁴ And whilst President Clinton was finally forced to intervene in the war in Kosovo in 1999, he refused to commit ground troops, instead relying on airpower in support of European peacekeepers. Although some argued that the war in Kosovo was revolutionary in that it illustrated that wars could be won by airpower alone, this fact, along with the grim realities of the war, contributed to the war's image as a form of post-heroic warfare. In *War in a Time of Peace: Bush, Clinton and the Generals* (2001), David Halberstam sums up the Bush-Baker attitude to the Balkans and also to the turbulent post-Cold War world: 'a place that was so messy, with so few choices that were positive rather than negative, that it was better, all in all, simply to ignore them'.¹⁵ As we shall see later in the chapter, such complex contingencies were therefore to be ignored not only by game producers, but also by those in charge of formulating policy.

As a result of the multiple determinants of games, military computer games have therefore privileged representations of World War II, and the associated understandings of total victory which World War II carries with it, whilst completely ignoring conflicts such as those in the Balkans in the 1990s, and the complexities and ambiguities which these conflicts reflect. But the multiple determinants of games affect not only which wars are represented in military computer games, and which are not, but also the way in which selected wars are represented. The purpose of the following section is therefore firstly to analyze in what ways the multiple determinants of games have affected the representation of the Gulf War in 1991, Operation Restore Hope in Somalia in 1993, and the Vietnam War of the 1960s and 1970s; and secondly, to examine what lessons and understandings these games encourage.

The Multiple Determinants of Games and the Representation of Past Wars

Operation Desert Storm (1991) was initiated in response to the Iraqi invasion of Kuwait in 1990. At the time, it was seen as a great - even revolutionary - success.¹⁶ The ground campaign, which had taken only one hundred hours, saw U.S. and coalition forces expel the invading Iraqi military from Kuwait, liberate the country, and destroy a significant section of Iraqi military forces, thereby reducing Saddam Hussein's capability to cause trouble in the region. The campaign was backed by a unanimous Security Council resolution supporting the use of force (one of only two occasions in the history of the U.N. when this has occurred),¹⁷ and involved a multinational coalition of thirty

four nations.¹⁸ The U.S. campaign was characterized by the Powell Doctrine and the policy of overwhelming force, featuring a huge number of U.S. ground troops – 543,000; significant levels of air support – over 100,000 sorties and 60,000 tons of bombs;¹⁹ and the setting of restrictive strategic objectives. Although U.S. forces entered Iraq, for example, it was never their intention to oust Saddam Hussein, and ultimately, the war ended with a negotiated peace settlement which left Saddam Hussein in power and parts of the Iraqi military intact. As President Bush admitted at the time, this left him without a 'feeling of euphoria'. 'It hasn't been a clean end...there is no battleship Missouri surrender. This is what's missing to make this akin to WWII'.²⁰ As Bush argued, in World War II 'there was a definitive end to that conflict'.²¹ More notoriously, however, the peace settlement which brought Operation Desert Storm to an end also allowed Saddam Hussein and the Iraqi military to maintain a number of attack helicopters, ostensibly for use in transporting politicians, which were subsequently used to crush the Shiite uprising which the U.S. had in part been responsible for encouraging.²²

The 'lessons' which were taken from Desert Storm were therefore numerous, contradictory, and subject to change over time. There were those who pointed to Desert Storm as an illustration of the ability of airpower to win wars on its own;²³ others pointed to the benefits of a truly multilateral and multinational coalition; and yet others argued that the success of the operation showed the efficacy of the Powell Doctrine which ensured the application of

overwhelming force and a restrictive set of strategic objectives. Some, however, pointed to Saddam Hussein's crushing of the civilian uprising after the war as evidence that the U.S. operation had been too limited,²⁴ and also as evidence that the negotiated settlement had allowed Saddam Hussein to retain too much military power. And others argued that the Powell Doctrine's insistence on massed troops and long build up periods was inappropriate to the post-Cold War world. We have seen already (see Chapter 1) how the games *Conflict: Desert Storm* and *Conflict Desert Storm II: Back to Baghdad*, as a result of the multiple determinants of games, recreate the vision of Desert Storm in light of the policy of military transformation which was prominent at the time of the game's production. The influences of technology, perspective, remediation, the popular hero narrative, and military transformation, ensured that the game avoided the representation of massed troops, long build-up periods, and overwhelming airpower which characterized the U.S. operation in reality, and replaced these with a vision based around the combination of Special Forces and military high-technology. In this respect, the representation of the war in *Conflict: Desert Storm* and *Conflict Desert Storm II: Back to Baghdad* denied any possibility of seeing the conflict as a lesson in the benefits of overwhelming force; but the multiple determinants also ensured that the war would not be seen as a lesson in the setting of attainable and limited strategic objectives - as it had been by some political and strategic commentators at the time. Given the need for military computer games to end on a definitively victorious note, the idea of presenting the war as a limited

campaign which left Saddam Hussein in power and parts of the Iraqi Army intact was never a representational possibility. The descriptions on the back of the boxes of *Conflict: Desert Storm* – 'No diplomats, no negotiation, no surrender' – and *Conflict Desert Storm II: Back to Baghdad* - 'four men return to take care of some unfinished business' – distance the games further from any sense of a negotiated or limited victory, and also from any sense that the war had involved U.N., diplomatic, or multilateral involvement. In *Conflict: Desert Storm* and *Conflict Desert Storm II: Back to Baghdad*, therefore, the Gulf War of 1991 is transformed from a mission characterized by overwhelming force, limited objectives, and a negotiated surrender, into a war based around the model of military transformation and the representation of total victory.

Only a year after Desert Storm, the U.S. became involved in the United Nations operations in Somalia. The U.N. operations, which initially came under the auspices of UNOSOM 1 (United Nations Operation in Somalia) and UNITAF (Unified Task Force), were authorized by the United Nations in response to the famine in Somalia, the effects of which were being both exploited and exacerbated by the complex Civil War being fought out by a number of warring factions. The purpose of the mission was to create a secure environment in which humanitarian relief could be provided. Former President George Bush had been careful to spell out the strategic parameters and limits

of the mission. In a speech addressed to the Somalis in 1992, he explained:

‘We do not plan to dictate political outcomes. We respect your sovereignty and independence... We come to your country for one reason only, to enable the starving to be fed’.²⁵ This the mission achieved. From here, however, as power shifted from Bush to Clinton, the mission was expanded into UNOSOM II; a mission, which, as Secretary of State Madeleine Albright described, was ‘an unprecedented enterprise aimed at nothing less than the restoration of an entire country as a proud, functioning and viable member of the community of nations’.²⁶ This extended mission and increased level of political interference agitated the leading Somali warlord Mohamed Farad Aidid, and in June 1993, Aidid’s militiamen from the Somali National Alliance killed twenty four Pakistani peacekeepers. In response, Clinton ordered the deployment of the elite Special Forces contingent Task Force Ranger in an attempt to capture Aidid and restore order.²⁷ The operation, however, became a political and military disaster, and after eighteen members of this elite military unit had been killed in the ‘Battle of Mogadishu’ in October 1993, Clinton called an end to the mission and the withdrawal of U.S. troops.²⁸

Despite the controversies associated with the mission, Operation Restore Hope became the basis for the game *Delta Force: Black Hawk Down* (2003). The game was produced in conjunction with Special Forces and Delta Force,²⁹ and one of its stated aims, as a publicist described, was to provide a corrective to existing understandings of the conflict: ‘it wasn’t a failure. To a certain degree

it's about setting the record straight'.³⁰ The game 'sets the record straight' in two different but interconnected ways: it blames any perception of the failure of the mission on political interference; but at the same time, it denies that the mission was a failure at all, suggesting that the mission in fact opened the way for the restoration of Somalia, just as Albright had described.

The most significant aspect of the game in terms of its influence on understandings of the conflict is the way in which the game ends. The final level of the game allows the player the opportunity to re-enact the Battle of Mogadishu which took place in October 1993. Following completion of this level of the game, the narrator - over mournful music and images of a war torn Somalia - explains:

In the years that followed the mission in Mogadishu, little effort was made to understand it. Sensational news stories pushed public opinion to call it a failure; but they were wrong...we still completed the mission to capture Aidid's lieutenants...When politics took over, we were pulled from Somalia...Today Somalia is still trying to unify and control of Mogadishu is contested by warring clans.

The perspective of this filmic sequence, as suggested by the use of 'today', is set at the date of the game's production in 2003. Looking back at the events of

the war and its aftermath, it presents a far more somber and ambiguous conclusion than the more victorious endings normally associated with computer games. The in-game narrative provides an explanation for this ambiguous conclusion to the mission. As the narrative describes, the limited success of the mission can be explained by the political interference which led to the premature withdrawal of U.S. troops – a situation which, the game suggests, encouraged the continuation of fighting between warring clans. But the concluding narrative also rejects the idea that the mission was a failure at all, since the military still captured a number of Aidid's lieutenants. The only reason that the mission was incorrectly perceived as a failure, suggests the in-game narrative, is that sensational news stories pushed public opinion towards this understanding. And it is this understanding of the conflict which the ending to the game seeks to revise.

As it turns out, the final 'official' mission of the game - in which the Battle of Mogadishu is reenacted - is not in fact the game player's final action in Somalia. Following the last level of the game, set in Somalia in 1993, and the filmic sequence, which suggests a change in perspective to the date of the game's production in 2003, the player is then given the opportunity to carry out a black-ops mission to return to Somalia and kill Aidid. On completion of the black-ops mission, you are congratulated by the commander: 'Good job. I imagine the entire population here would thank you'. The game therefore offers a solution to the ambiguity and ongoing suffering in Somalia which

were signaled by the concluding filmic sequence, and suggests that the black-ops mission to kill Aidid offered the solution to Somalia’s problems, opening the door to the restoration of the country. In reality, the assassination of Aidid had taken place seven years before the production of the game in 2003, and the intermittent years (between his death in 1996 and the production of the game in 2003), showed that this had had no effect in terms of the stabilization or restoration of the country. The temporal restructuring of the game, however, means that the assassination of Aidid in the game not only fuels the rumors that the CIA were involved in his assassination in reality, but also encourages the understanding of this assassination as the victorious resolution to the problems in Somalia (see diagram below).

Temporal Restructuring of Events in <i>Delta Force: Black Hawk Down</i>		
Real-Life Chronology		
1993	1996	1996 – Present Day
Battle of Mogadishu	Assassination of Aidid	Ongoing war, political and social upheaval in Somalia shows limited impact of Aidid’s assassination.
Game Chronology		
1993	2003	Post-2003
Battle of Mogadishu	Production of game and implied date of retrospective film presented at conclusion of game which depicts ongoing unrest in Somalia. A situation blamed on political interference.	Black-Ops mission to assassinate Aidid opens door for restoration of Somalia ‘The entire population here would thank you’.

Here we see how the multiple determinants of games have influenced the representation of a historical war, and as a result, how they have influenced the understandings and lessons of the war in Somalia which the game encourages. The perspective of the first-person shooter and the technological restrictions of the FPS form, restrict *Delta Force: Black Hawk Down* to the depiction of purely military objectives. The influence of computer game convention, interactivity, and narrative teleology, requires that the game depicts the war as a battle of increasing difficulty culminating in a face-off with the ‘big boss’ Aidid and a sense of definitive victory. Together, these determinants encourage the depiction of the assassination of Aidid as the victorious resolution to the conflict in Somalia. The intertextual influence of the film *Black Hawk Down*, and its depiction of the conflict as an example of the bravery and professionalism of U.S. Special Forces, is also made obvious in the game, not least in its use of ‘Delta Force’ in the title. But in addition, as the input of the military in the production of the game, and the intent of the game producers ‘to set the record straight’ suggests, the representation of the war in *Delta Force: Black Hawk Down* was also influenced by a particular political and military vision of how the war should be depicted and also who was to blame for its complications. The testimony presented in the in-game film - ‘we still completed the mission to capture Aidid’s lieutenants... When politics took over, we were pulled from Somalia’ – firmly positions the game on the side of the military and against the politicians involved. And in this respect, the gameplay of *Delta Force: Black Hawk Down* offers one final reason for the

problems experienced in Somalia: the incompetence of U.N. troops. One of the missions in the game is to go out into Mogadishu in order to save a cohort of Pakistani and U.N. troops who have come under attack from Aidid's militia. When you arrive at their location, you find them cowering behind their armored vehicles, and they offer you no assistance as you fight the enemy off. As we shall see, this is an aspect of the game which resonates particularly strongly with the way in which the problems of the conflict in Somalia subsequently came to be viewed by policymakers.

The representation of Operation Restore Hope in *Delta Force: Black Hawk Down* is therefore the product of the multiple determinants of games: technology, perspective, convention, interactivity, narrative teleology, remediation, and political/military influence. The consequence of these influences on the representation of Operation Restore Hope, however, is that the game equates a purely military victory – in this case the assassination of Aidid – with a far more complex strategic accomplishment, privileging the depiction of military action, whilst ignoring the complex political, cultural and historical context of the war in Somalia. The killing of Aidid in the game, like the successful capture of Saddam Hussein in Iraq, therefore becomes synonymous with a far broader and more complicated strategic success. The decision to extend the strategic objectives of the mission from peacekeeping to nation building was met by disaster; but rather than serving as a lesson in the dangers of setting overly ambitious military objectives, the game recreates

Operation Restore Hope as a lesson in the brilliance of U.S. Special Forces, the successful restoration of Somalia, the consequences of self-imposed political restrictions on the use of force, and the incompetence of U.N. troops.

Operation Restore Hope was in many ways a controversial mission, but the potential which the conflict offered in terms of being depicted as a heroic example of the bravery and professionalism of Special Forces troops – an image of the conflict which had already been made famous by the film *Black Hawk Down* – ensured its representation in computer game form. The war in Vietnam, on the other hand, might be seen as something of an anomaly when considered in relation to the multiple determinants which affect which wars are selected for computer game representation. Of all the wars that the U.S. has been involved in, the war in Vietnam is typically seen as the most controversial and the least successful, encouraging a legacy of critical media representation which has frequently depicted the conflict as one of political betrayal, and drug-fuelled, anarchic, barbaric, murderous, and meaningless military action – a far cry from the qualities which have made World War II so popular. Films such as *Apocalypse Now*, *Full Metal Jacket*, *Platoon*, and *The Deer Hunter* have played a massive part in shaping interpretations and perceptions of the conflict. These films, as Rasmussen and Downey have argued, have offered a vision of warfare based around 'dialectical disorientation' in which 'the traditional mythologies of war...are

undermined'.³¹ Not only have these films encouraged the perception of the war as a purposeless, drug-fuelled aberration devoid of heroism, victory or ending, but also as a war without iconic battles or victories along the way.³² None of these qualities add up to the definitive victory or heroic narrative normally required of a military computer game. Indeed, as media and military commentators have noted, the Vietnam War did not lend itself to such narratives or forms of representation. As William O'Neill has argued, 'The very nature of the Vietnam War makes it impossible for artists to create a plausible narrative'. It was a war, as Tony Williams has argued, with 'no center, [and] no decisive battles'.³³ The game *Conflict: Vietnam*, however, manages to combine these different intertextual, cultural and political associations in its representation of the war in such a way as to satisfy the multiple determinants of games.

In the game *Conflict: Vietnam*, the initial training level of the game allows you to become familiar with the skills you will require to complete the game. But during this training level, you are also initiated into the cultural and political context in which the war is being fought. As the Rolling Stones play, the in-game narrator delivers a summary of the situation which could have come straight from Oliver Stone's *Platoon*, as you are drafted, told 'this place is fucked up', and 'it don't mean a thing'. This understanding of the war is supported by the introduction in the game manual where you are told that 'you will soon start to realise the whole sorry mess don't mean a thing... It's a

brutal, dehumanising war'.³⁴ The ending to the game presents a similarly politicized note. Having finished the final level, the in-game epilogue depicts you and your squad members dancing with Vietnamese hookers whilst the voiceover explains that Junior – another member of the squad, and a member of the Black Panthers who has returned home - has been shot by the C.I.A.: 'All that fighting in Vietnam just to be shot by your own government'. The game therefore not only capitalizes on some of the cultural associations which have been developed in films relating to the war in Vietnam – for example, showing the troops dancing with prostitutes - but in inserting this political comment on the killing of Junior, the game also capitalizes on the belief that the troops were betrayed by their own government not only when fighting in Vietnam, but also when they returned home – an understanding supported in the *Rambo* films and also *The Deer Hunter*. Not only this, but in alluding to the Black Panthers, and the killing of Junior, the game makes reference to the racial and civil rights movements which were such a major part of the political, cultural and social landscape of the 1960s and 1970s. In this respect, the game attempts to present itself as a political, social, and cultural critique which fits in with the prevailing image and attitudes towards the war in Vietnam presented in other media productions.

But although the game plays with these intertextual, political and cultural references during introductions, epilogues, cut scenes and filmic interludes, there is no way, given the multiple determinants of games, that the actual

gameplay can recreate the same sense of meaningless, purposelessness, and futility characteristic of the 'dialectical disorientation' of Vietnam War films. The producer of *Conflict: Vietnam* may have mentioned *Apocalypse Now* as a reference point for the game, but a game in which the player wandered aimlessly through the jungle in a psychedelic haze with a squad high on acid, as Captain Willard does in *Apocalypse Now*, would in no way work as a computer game. Not only would a game in which the player wandered without direction and purpose fail to encourage hours of investment in terms of gameplay, but the very structure of military computer games, based around missions, objectives, and progression towards a definite goal deny the possibility of such an unstructured narrative. As a result, whilst the introduction, epilogue, and cut scenes play with subversive intertextual references to the more controversial aspects of the Vietnam War and its cultural and political context, the actual gameplay, structured around missions, objectives, and after action reviews, reinstates a very conventional understanding of the conflict, the way in which the war was fought, and the purpose of the fighting.

Conflict: Vietnam depicts the Tet Offensive of 1968 during the Vietnam War. This represents an interesting choice of subject matter in itself, since the offensive encouraged contradictory responses from the military, political and media establishment, as well as the American public. The Tet Offensive saw the North Vietnamese and Vietcong suffer massive losses and they were

quickly defeated everywhere except Saigon and Hue.³⁵ Ostensibly, the Offensive therefore represented a crushing military defeat for the North Vietnamese and a clear military victory for the U.S.; but the fact that the North Vietnamese were still able to support such a massive offensive after years of U.S. combat operations was seen as evidence that the military strategy of the U.S. was failing to make progress and also that the military and the political establishment had been selling unrealistically rosy assessments of the war to the media and American public. In this respect, the Tet Offensive represented an extremely ambiguous ‘victory’ for the U.S. In the game *Conflict: Vietnam*, however, this sense of ambiguity over Tet is lost.

Conflict: Vietnam ends with the fighting in Hue - one of the hardest and longest battles of the Tet Offensive (along with Saigon) in which the North Vietnamese lost 33,000 killed in action.³⁶ In doing so, however, the game obscures any sense that the battle in Hue, or the fighting of the Tet Offensive more generally, point to an ambiguous military victory in which the limited success of U.S. operations up to this point, and the likelihood of a long war ahead, is revealed. On the contrary, the final level of the game, entitled ‘Citadel’, suggests that your victory in Hue ensures victory for the U.S. overall. As the level objective entitled ‘NVA Command’ explains to the player, ‘The General for the 4th NVA Regiment is using the Citadel as his Command Post. If the General and his staff are taken out of the equation, the chain of command for the North Vietnamese Army in Hue will break down,

making U.S. victory certain'. The producers of *Conflict: Vietnam* therefore use the Tet Offensive as a means of developing a representation of the Vietnam War which allows the game to culminate in U.S. victory, whilst avoiding the sense in which Tet came to be seen as a setback for the U.S. operation in Vietnam overall. Contrary to the claims of Tony Williams, who argued that the Vietnam War had 'no center, [and] no decisive battles', the battle in Hue becomes the central, definitive, and climactic battle in the representation of the war in the game *Conflict: Vietnam*. This allows the game to create a linear and coherent narrative from a war, which by its very nature, as William O'Neill has argued, 'makes it impossible for artists to create a plausible narrative'. In this respect, the game develops a representation of the war which satisfies the multiple determinants of games, but manipulates the understanding of the role that the Tet offensive played in the context of the Vietnam War as a whole. Rather than suggesting that Tet marked a turning point in terms of a reduction in support for the U.S. operation in Vietnam, the game suggests that it opened the way to U.S. victory.

Once again, the influence of the multiple determinants of games becomes apparent. Computer game convention and player expectation dictates that the game will end in victory, and the structure of the game based around progressive missions and objectives ensures that each mission must be successfully completed before moving onto the next. Inevitably then, the representation of the Vietnam War in *Conflict: Vietnam* takes the form of a

series of victories in individual missions and battles which culminates in victory overall. In this respect, the game rejects the sense of 'dialectical disorientation' characteristic of Vietnam War films, and their representation of endless, meaningless conflict without victory, and instead uses the Tet Offensive to recreate the Vietnam War as a conventional conflict characterized by central, decisive battles which can be represented through a coherent, linear narrative. In so doing, the game denies the possibility of seeing the Tet Offensive within the overall context of the war, or indeed, the possibility of representing the complexities which the Vietnam War involved.

But the multiple determinants of games encourage not only the representation of the Tet Offensive as a victorious military campaign in *Conflict: Vietnam*; they also encourage a very conventional understanding of how this victory was achieved. As with many other military computer games, success in the game is defined and measured in relation to the After Action Review and the attainment of concrete military objectives. Points are awarded for the number of enemy killed and captured, and the number of weapons destroyed. But although the After Action Review represents a common means of measuring success in military computer games, it has particular resonance when it comes to the representation of the war in Vietnam, as its logic almost perfectly matches that of the Military Performance Indicator Charts which were adopted during the Vietnam War. During Vietnam, the Military Performance Indicator Chart acted like an account ledger for success, crediting body counts, the

capture of POWs (prisoners of war), and the capture of weapons; and debiting accidents, wounded and killed.³⁷ The system came to be seen as a complete failure and was subsumed within the general perception of the war as one dominated by the faulty quantitative analysis of Defense Secretary McNamara. By 1967, even McNamara was informing Lyndon Johnson that 'the war cannot be won by killing North Vietnamese'.³⁸ After taking over command from Westmoreland in 1968, General Creighton Abrams went a step further in arguing that 'I don't think it makes any difference how many losses he [the North Vietnamese] takes. I don't think that makes any difference'.³⁹ Westmoreland's policy had been based on attrition, and the belief that in causing intolerable casualties, the U.S. would force the North Vietnamese beyond the 'crossover point' – the point at which the U.S. were killing more soldiers than the enemy could replace.⁴⁰ Abrams introduced a fundamentally different perspective, emphasizing the idea of 'the one war concept'⁴¹ – a concept which focused not just on military operations in the sense of body counts, but on an integrated political, military, economic, and psychological campaign of pacification and reconstruction. In a cursory reference to such non-military considerations, the After Action Review of *Conflict: Vietnam* does include an entry entitled 'hearts and minds' – an entry measured on the basis of bonus points earned by preventing the death of Vietnamese civilians; but aside from this attempt to add complexity to the formula and logic of the gameplay, the game reinforces the belief that the logic of winning wars is based around the number of North Vietnamese soldiers, weapons and vehicles

you can kill, capture or destroy. During the Vietnam War, Abrams had warned that the media were attempting to force the representation of the war into a World War II framework; in the same way, the structure and logic of *Conflict: Vietnam* encourages an understanding of the war based around the principles of conventional, industrial scale total war, and the destruction of men and materiel.

The complications of representing the Vietnam War, combined with the influence of the multiple determinants of games, results in *Conflict: Vietnam* reflecting a peculiar amalgamation of political, cultural and military influences. But whilst it makes token references to the subversive representations of Vietnam War films, and to the complexities of winning hearts and minds, the multiple determinants of games ultimately ensure that the game presents a very conventional, coherent and linear vision of the Vietnam War which suggests that the Tet Offensive represented a comprehensive victory for the U.S. and that this victory was based around the principles of conventional industrial warfare. As a result, the game not only challenges understandings of the Vietnam War as a war which represented a lesson in the absolute limits of military force, but it also obscures Abrams' lesson in the need for a 'one war' concept, and his belief that complex wars such as those in Vietnam could not be won by conventional combat alone.

In many ways, the representation of the Vietnam War in *Conflict: Vietnam*, the representation of the Gulf War in 1991 in *Conflict: Desert Storm* and *Conflict: Desert Storm II*, and the representation of Operation Restore Hope in Somalia in 1993 in *Delta Force: Black Hawk Down*, can be seen as manipulative and unhistorical. The selective history which is presented by military computer games, which privileges the representation of wars such as World War II, whilst ignoring the representation of wars such as those in the Balkans, further distorts the collective picture of past wars which is painted by military computer games. But although the representation of war in these games can be dismissed as unhistorical, the understandings and lessons of past conflicts which these games encourage in many ways reflect the way in which these wars have been interpreted and understood by policymakers when invoking historical analogies in the formation and promotion of current U.S. military policy. The purpose of the following section is therefore to show how the lessons and understandings of past conflicts which these games encourage reflect those which have been promoted by policymakers when invoking historical analogy, and also to show how these lessons have contributed to the formation of current policy, and the problems which this policy has been faced with when applied in Afghanistan and Iraq.

The Multiple Determinants of Games, Cognitive Dissonance, and the 'Lessons' of the Past

As a result of the multiple determinants of games, military computer games have privileged the representation of World War II, whilst ignoring the

conflicts in the Balkans which took place in the 1990s. The following section shows how this pattern of representation reflects the emphasis placed on World War II and the Balkan conflicts by current U.S. policymakers when invoking the lessons of the past in support of current policy.

There is one war in particular which has served as an enduring political and military analogy for the current Bush administration, and that war is World War II.⁴² George W. Bush has associated the war on terrorism and 'Islamofascism' with that against Nazism: 'We have seen their kind before. They are the heirs of all the murderous ideologies of the twentieth century...they follow the path of fascism, and Nazism and totalitarianism'.⁴³ In August 2006, Defense Secretary Rumsfeld made a speech arguing that the opponents of the policy in Iraq were like the appeasers of Nazi Germany, describing the war on terror as a fight against 'a new type of fascism'.⁴⁴ And as Stefan Halper and Jonathan Clarke have argued in *America Alone: The Neo-Conservatives and the Global Order* (2004), the neoconservative ideology which has so underpinned the Bush administration's foreign and military policy, has drawn on the lessons of World War II as a major source of historical support. The neoconservative understanding of the power of military force, and of the relative bankruptcy of diplomatic attempts, is very much informed by the historical analogies which neoconservatives draw between the global threat of terrorism in the 21st Century, and the global threat of fascism

in the 1930s. As Halper and Clarke have put it, the neoconservatives embrace the lessons of Munich, Nazism, appeasement, and World War II for what they teach about the relative merits of military force, whilst ignoring any lessons in the limits of military power.⁴⁵ Through its use in political analogy, World War II has therefore come to stand as a lesson in the dangers of diplomacy and appeasement, and the necessity of military force, and it is these lessons which the Bush administration has chosen to invoke in support of current military policy.

But whilst the Bush administration and the neoconservatives have sought to associate their policies with the lessons of World War II, they have also sought to disassociate themselves from the operations in the Balkans during the 1990s. For whilst World War II stood for moral clarity, total American victory, and the need for American military power, the Balkans, at least for the Bush administration, came to represent all that was wrong with U.N. intervention and the nation building exercises of the past. Defense Secretary Rumsfeld, alongside neoconservatives such as Frum and Perle, argued that the worst thing that could happen in Iraq or Afghanistan would be to see them fall under the control of the United Nations or the international community, as had happened in Bosnia and Kosovo.⁴⁶ In 'Beyond Nation Building' (2003), Rumsfeld dismissed the nation building exercises in the Balkans as a lesson in how not to operate, whilst citing the example of the post-World War II operations in Japan as a more favorable example of how things should be

done. Rumsfeld's transformational plans for Afghanistan and Iraq were intended to move beyond the traditional idea of nation building, and the massed troops and lengthy reconstruction and stability operations over which the U.N. had presided in the Balkans. As he argued 'Long-term stability comes not from the presence of foreign forces but from the development of functioning local institutions'.⁴⁷ Rumsfeld saw the Balkan operations as characteristic of U.N. micromanagement, interference and bureaucracy, and as illustrations of the problems associated with committing too many troops for too long.⁴⁸ For Rumsfeld, the Balkan operations therefore indicated the need for small and swift military missions. According to RAND research, however, the reduced troop levels in Afghanistan and Iraq – in comparison to the Balkans - encouraged significantly less stable reconstruction operations.⁴⁹ In fact, in this respect, Rumsfeld's invocation of World War II in support of his argument that 'long-term stability comes not from the presence of foreign forces' was somewhat disingenuous, since post-World War II operations had involved millions of troops, billions of dollars, and the presence of foreign troops for many years.⁵⁰ Equally, whilst Rumsfeld was quick to dismiss U.N. operations in the Balkans, the situation there did highlight some of the complexities of post-Cold War conflict, and also the need for troops on the ground. As Thomas Donnelly has argued, military transformation was therefore in part a 'product of lessons mislearned from the experience of the Balkans in the 1990s'.⁵¹ In terms of the lessons of past conflicts, and the use of

these lessons in the formation of policy, the Balkans therefore served simply as an example of what not to do.

Just like the representation of past wars in military computer games, the Bush administration has therefore repeatedly reaffirmed the lessons of World War II, whilst dismissing the Balkan conflicts as an example of what not to do. The continuing dominance of the representation of World War II in military computer games, and the continuing invocation of the 'lessons' of World War II in political analogy, mean that the war now stands not only as a war of moral clarity and total American victory, but as a lesson in the weakness of diplomacy and appeasement, and the absolute necessity of the use of force. In the late 1970s, as critics used the example of World War II to criticize President Carter's 'appeasement' of China, the *New Yorker* magazine responded: 'our history book contained accounts of but one event – the Munich agreement in 1938...from which we drew but one lesson; namely, that the use of force is always the best solution to intractable difficulties in our foreign affairs'.⁵² Over thirty years later, the lessons of World War II continue to dominate the historical analogies which politicians draw in formulating, justifying and promoting current policy. As a result, many of the strategic complexities of post-Cold War conflict have been obscured. In particular, the association of World War II with contemporary conflict has encouraged ongoing associations between modern warfare and industrial scale total war, and the lasting belief that military force can achieve total victory and a

comprehensive resolution of political or cultural disputes. Such beliefs, as I have argued, are inappropriate to understandings of contemporary conflict. These beliefs, however, have been encouraged not only by the dominance of the lessons of World War II and by the dismissal of the complications of conflicts such as those in the Balkans in the 1990s, but also by the fact that policymakers have manipulated interpretations of other Cold War and post-Cold War conflicts in order that they are seen to support current policy. The following section therefore considers how the lessons of the past which policymakers have promoted in relation to the Gulf War in 1991, Operation Restore Hope in 1993, and the Vietnam War of the 1960s and 1970s, mirror the lessons which are encouraged by computer game representations of war, and how together, these lessons have been used to justify and promote current U.S. military policy.

At the time of the Gulf War in 1991, Dick Cheney, who was the serving Secretary of Defense, argued that the reason they had been successful in Desert Storm was that the war was defined by very 'clear-cut military objectives'. 'Liberate Kuwait...Destroy Saddam Hussein's offensive capability' and then withdraw.⁵³ In particularly prophetic fashion, Cheney went on to describe what could have been expected if they had aimed at more complicated strategic objectives such as regime change. As he asked:

Once...we'd gotten rid of Saddam Hussein and his government, then we'd have had to put another government in its place. What kind of government? Should it be a Sunni government or Shia government or a Kurdish government or Ba'athist regime? Or maybe we want to bring in some of the Islamic fundamentalists? How long would we have had to stay in Baghdad to keep that government in place? What would happen to the government once U.S. forces withdrew?⁵⁴

The lessons Cheney drew at the time of Desert Storm were therefore in the importance of setting limited strategic objectives and of the political, religious, and cultural complications that could be expected following any attempt at regime change. Twelve years later, however, with Cheney now serving as Vice-President within the Bush administration, these lessons had changed, and in a speech following the announcement of the end of major combat operations in Iraq in 2003, Cheney explained that military transformation had fundamentally altered the parameters of military intervention.

With less than half of the ground forces and two-thirds of the military aircraft used 12 years ago in Desert Storm, we have achieved a far more difficult objective ... In Desert Storm, it usually took up to two days for target planners to get a photo of a target, confirm its coordinates, plan the mission, and

deliver it to the bomber crew. Now we have near real-time imaging of targets with photos and coordinates transmitted by e-mail to aircraft already in flight. In Desert Storm, battalion, brigade, and division commanders had to rely on maps, grease pencils, and radio reports to track the movements of our forces. Today, our commanders have a real-time display of our armed forces on their computer screen.⁵⁵

For Cheney, Desert Storm no longer signaled the lessons of setting attainable strategic objectives; looking back from the perspective of Operation Iraqi Freedom, it served simply to show how far the transformational program had advanced U.S. military capabilities, and how obsolete the vision and restrictive objectives of Desert Storm had become. The lessons of Desert Storm therefore developed from those of overwhelming force and the need to set restrictive strategic objectives, to the lessons of military transformation and unlimited military potential. As Cheney suggests, with new military transformational technologies, the limitations which had been placed on the use of force in the Gulf in 1991, and the need for overwhelming force, no longer pertained. As General Tommy Franks, who later took charge of the invasion of Iraq in 2003, argued with reference to the war in Afghanistan 'the doctrines that existed for our armed forces several years ago really don't apply to the first war of the twenty-first century'.⁵⁶ Just as in the games *Conflict: Desert Storm* and

Conflict: Desert Storm II, therefore, the idea that Desert Storm should stand as a valuable lesson in the setting of restricted objectives was rejected by the current Bush administration; and just as in *Delta Force: Black Hawk Down*, so were the more cautionary lessons associated with Operation Restore Hope in Somalia in 1993.

From the experience of Operation Restore Hope, critics, military officers, and politicians developed their versions of lessons learned. The media had likened the war in Somalia to that in Vietnam. An editorial in the Boston Globe, for example, read: 'The intervention in Somalia has the appearance of a small scale Vietnam. The United Nations should avoid the American mistakes of the 1960s and consider extricating itself from the country'.⁵⁷ The association of the operation in Somalia with the war in Vietnam led to the nickname 'Vietmalia',⁵⁸ and these critical associations attempted to promote the war in Vietnam, and by extension, the war in Somalia, as lessons in the absolute limits of military power and the pitfalls of military intervention. To a certain extent, these lessons were codified in what became known as the 'Clinton Doctrine'; a doctrine which recognized that ground combat in cities such as Mogadishu represented a high risk strategy which forfeited the U.S. technological edge, as did a fight at close quarters against a well armed enemy who were willing to die for the cause.⁵⁹ Given the challenges of the War on Terror, however, these lessons became somewhat superfluous, and as we have seen, rather than avoiding urban combat, Military Operations in Urban Terrain

subsequently became one of the central doctrines of military transformation. Ultimately, the blame for the problems with the operation in Somalia came to be placed elsewhere.

As James Dobbins has argued in *The UN's Role in Nation Building: From the Congo to Iraq* (2005), one of the major problems with U.N. operations is the problem of unequal force capability,⁶⁰ and this proved particularly acute in Somalia. The military contingent of the United Nations operation in Somalia was made up of personnel from two dozen armies - a grouping which retired Army Major Andrew Bacevich described as a 'motley crew'⁶¹ - and the U.S. was unconvinced by the military capabilities of their accompanying allies. As a result, the failures of the mission came to be blamed on the problems of U.N. and multilateral incompetence and not on the fact that the U.S. had committed itself to unattainable military objectives. As Mitch McConnell, a Republican Senator argued: 'Creeping multilateralism died on the streets of Mogadishu'.⁶² Rather than a lesson in the limits of force, both games and politicians therefore came to promote the idea that the conflict in Somalia should stand as a lesson in the dangers of multilateral action and U.N. incompetence - a lesson which only fuelled neoconservative opposition to the U.N and multilateral action, whilst encouraging support for unilateralism.⁶³ In their interpretations of Desert Storm and Operation Restore Hope, policymakers have therefore cast aside the restrictive lessons of these conflicts; and a similar process has begun to occur in relation to the war in Vietnam.

In criticisms of the current war in Iraq, it has become common to invoke the example of the war in Vietnam in support of the idea that the Bush administration has not learnt the lessons of the past. The understanding of the Vietnam War on which these criticisms rest is of a war which illustrated the absolute limits of the utility of military force. For a long time after the war had finished, this remained the dominant understanding of the conflict,⁶⁴ but alongside this understanding of the war there have developed a number of other interpretations.⁶⁵ In particular, President Reagan did much in the 1980s to promote the idea that the war in Vietnam had been unsuccessful not because of the inherent limitations of force, but because of the self-imposed political restraints which were placed on U.S. military operations. On awarding a Medal of Honor to Roy Benavise for bravery in Vietnam, Reagan argued that: 'They came home without a victory not because they were defeated, but because they were denied a chance to win'.⁶⁶ In the 1980s, Reagan therefore encouraged the understanding of the Vietnam War as a lesson in 'self-imposed restraints' in an otherwise 'noble cause'.⁶⁷ More recently, this has developed into one of the more prominent interpretations of the war in Vietnam; the understanding not that the war inevitably ended in failure as a result of the limitations of force, but that the war could and should have been won, and that victory was well within the United States' grasp.⁶⁸ In academic literature, this argument has been most comprehensively made by Lewis Sorley in *A Better War: The Unexamined Victories and Final Tragedies of America's Last Years*

in Vietnam (1999). Through his analysis of primary documents and intelligence from within the U.S. and North Vietnamese governments, Sorley reveals that it was not only General Creighton Abrams, Nixon, and Kissinger, who believed that the U.S. could win the war, but also the government of North Vietnam, who according to their own intelligence assessments, believed that by 1969 the war had effectively been lost.⁶⁹ Sorley's work, as the cover reviews suggest, has been seen as a major contribution to revising the accepted wisdom concerning the war in Vietnam. For example, on the inside cover of the book, General Schwarzkopf, the head of Allied operations in the Gulf War in 1991, writes: 'It is the first to set the record straight concerning the outcome of that conflict'. And James R. Schlesinger, the former Secretary of Defense describes it as: 'a powerful antidote to the self-justifying myth that the Vietnam War was "unwinnable" '. This emergent interpretation of the Vietnam War has now become part of contemporary political discourse, and whilst critics of the war in Iraq have drawn analogies with the war in Vietnam in order to illustrate how both wars signify lessons in the absolute limitations of force, President Bush has built on the emerging understanding of the Vietnam War as a war which was winnable in order to argue that the U.S. must stay the course in Iraq, and not withdraw as they did in Vietnam.⁷⁰ This interpretation of the Vietnam War as a war which was winnable is one that chimes with the representation of the Vietnam War promoted in *Conflict: Vietnam*. Sorley's argument, however, is not simply that the U.S. would have won the war had it stayed the course. It is that the radical change in strategy

which Abrams introduced – which shifted the focus of U.S. policy away from attritional destruction and towards pacification, reconstruction, and the 'one war strategy' - allowed the U.S. to gain a position from which it could win the war. Despite Sorley's argument that the Vietnam War was winnable, therefore, critics of the U.S. operation in Iraq could still argue that the Bush administration has failed to learn the lesson of Abrams' 'one war strategy'. As strategic commentators have noted, one of the major problems with U.S. military policy in Iraq was that it separated the major combat phase from the aftermath and concentrated on purely combat orientated issues to the detriment of other considerations. In this respect, like the representation of war in *Conflict: Vietnam*, U.S. policy in Iraq ignored Abrams' instruction and supported a conventional and overly combat-orientated approach. It is interesting to note, however, that in this respect, the Bush administration *did* take lessons from the Vietnam War; like military computer games, however, the promotion of a particular set of lessons led to the ignoring of certain others.⁷¹

The representation of past wars in military computer games, and the lessons which these games promote, therefore reflect the lessons and understandings of past conflicts which policymakers have promoted when drawing analogies from history in support of current policy. Looking back from the perspective of Operation Iraqi Freedom in 2003, one can see how these 'lessons' have

helped formulate and support the policy in Iraq, and also how they have led to certain problems. World War II continues to stand as an illustration of the necessity of force, the weakness of diplomacy, and the inevitability of total U.S. victory. The complications of the Balkan conflicts, on the other hand, and their illustration of the need for a large number of troops on the ground, have been dismissed. The war in Vietnam is no longer seen as a lesson in the absolute limits of force, but rather as a war which could and should have been won. The Gulf War no longer represents the lessons of setting restrictive strategic objectives, but rather stands as an illustration of the anachronism of such restrictions. And finally, the conflict in Somalia does not show the limitations of the application of Special Forces and high-technology to a nation building exercise; rather, it reveals the restrictions placed on U.S. military capabilities by U.N. incompetence.

The lessons of the past which military computer games promote, however, obscure other more cautionary lessons. Whilst World War II is seen as illustrating the potential of military force to achieve total victory, the movement away from total industrial scale conventional wars such as World War II, and towards more complex post-Cold War conflicts such as those in the Balkans, is ignored. Whilst the belief that the Vietnam War could have been won is used to inform current policy, Abrams' lesson in the need for a 'one war strategy' is not. The advances in military capabilities signaled by military transformation have encouraged the belief that the U.S. can tackle far

more ambitious strategic objectives, but the fact that past U.S. successes have been based on the setting of restrictive objectives to which U.S. capabilities are more suitably matched has been lost. As a result, the lessons of the past which military computer games promote encourage a number of misunderstandings concerning the utility of force; and it is in this respect that the representation of past wars in military computer games contributes to the new American militarism. Military computer games, however, should not simply be seen as unhistorical; rather, acting under the influence of the multiple determinants of games, they should be seen as reflections of lessons learned, 'mislearned' and ignored from past conflicts.

CHAPTER 4

Directions for Future Research: Military Computer Games and The Discourse Surrounding Warfare

This thesis has been intended as a fundamental revision of many of the assertions and existing understandings which surround military computer games. But in some respects, its conclusions appear to reaffirm existing beliefs concerning military computer games. In Chapter 2, for example, I argued that as a result of the influence of the multiple determinants of games, the representation of war in military computer games was inevitably limited in a number of ways, particularly in terms of its critical inability to represent defeat and insurmountable setbacks. And in Chapter 3, I argued that games such as *Conflict: Vietnam*, whilst making token intertextual references to films such as *Platoon* and *The Deer Hunter*, were unable to recreate the same critical and subversive representations of warfare as their filmic counterparts. Both of these understandings, of the limitations of games, and of the relative freedom of film, have become commonplace beliefs concerning the computer game form.¹ Recently, however, there have emerged a number of games which have attempted to challenge the idea of the limited potential and uncritical nature of games. The purpose of this chapter is to investigate one of these games, *September 12th: A Toy World* (2003), whilst also providing a very brief investigation into the idea that films present a more critical vision of warfare, through an analysis of the films *Three Kings* (1999) and *Jarhead* (2005). It is

worth noting that the purpose of this chapter is to raise questions for further research, and not to reach any sort of conclusion.

In 'Ephemeral Games: Is It Barbaric to Design Videogames after Auschwitz?' (2000), Gonzalo Frasca investigates the very possibility of producing 'serious' computer games. As Frasca argues, there are certain computer game design conventions which appear to preclude the possibility of games dealing with serious content. For example, games present only a binary set of outcomes, the possibility of either winning or losing; they allow the player to save and restart the game and to 're-spawn' after dying; and they are goal oriented, relying on rules to define whether the player is winning or losing. Taking the subject of the Holocaust as an example, Frasca argues that these design conventions preclude the possibility of developing a serious game based on this subject, and argues that any such attempt would be met with derision and accusations of simplification and trivialization. In this respect, Frasca's argument concerning the restrictive design conventions of games is similar to my own argument concerning the influence of the multiple determinants. Frasca, however, has investigated ways in which these restrictions might be overcome, not only in principle, but in practice. As a solution to the limitations of computer games, Frasca proposes creating games which players can play only once and in which actions are irreversible. Following Frasca's advice, games would be scheduled for a specific time and date, at which point players would

log on and play the game in a single sitting. There would be no chance to save, re-spawn, or replay the game. This format, argues Frasca, would encourage the possibility of games dealing with more serious content in a more serious way.

Clearly, as Frasca was only too aware, such a model raises serious commercial issues, and whilst it would certainly encourage a change in attitudes towards games on the part of game players, it is not altogether clear how it would actually transform the way in which computer games visually represent events such as warfare. Whilst a military computer game which ended when the player died for the first time would certainly make the game more like real warfare, the changes which Frasca suggests would not provide a solution to the other representational shortcomings which are caused by the multiple determinants of games. It would not, for example, allow games to provide a wider perspective of warfare, or allow them to represent 'soft' factors when depicting how wars are won. In this respect, the player might only have the opportunity to play the game once, and would have their game permanently terminated if they were to die; but despite these changes, for as long as the player survived, the actual representation of warfare in military computer games, the logic of winning wars which they encouraged, and the gameplay which they presented, would remain the same. As a result, to a large extent, so would the understandings of warfare which these games encourage. Not only this, but these changes would violate the conventions of games and the expectations of game players to such an extent, that it is likely that any such

experiment would simply be ignored by the majority of game players – at least for now. Frasca, however, correctly highlights the structural limitations of games, and attempts to find possible solutions; and in 2003, he put some of these theories into practice in producing the game *September 12th: A Toy World*.

*September 12th: A Toy World*² seeks to challenge the logic of the war on terror, the logic of military intervention more generally, and the logic of warfare presented in military computer games. As Frasca explains:

The basic idea behind *September 12th* can be described as “violence generates more violence”. As you try to kill the terrorists, you will always kill civilians (“collateral damage”). Other civilians will mourn their dead and turn into terrorists. After a couple of minutes of play, the screen is full of terrorists.³

The interface of *September 12th* presents the player with a two-dimensional representation of a ‘Middle Eastern’ urban setting. Amongst the buildings walk dozens of civilians, but also a number of terrorists – identifiable as a result of the fact that they are carrying guns. A set of crosshairs hovers over the town, and as a player, you are able to move these crosshairs, target the

terrorists, and then click on the mouse to release a rocket (see screenshot below).



Each time you send in a rocket in an attempt to wipe out the terrorists, however, you also kill civilians and damage buildings, and in response, mourning civilians gather round the corpses of the dead, and as they kneel sobbing, morph into terrorists themselves. Essentially, as many analysts have argued with reference to Iraq, *September 12th* suggests that U.S. military intervention has served as a promotional poster for terrorist recruitment, and has therefore exacerbated the terrorist threat, rather than offering a solution to it. *September 12th* can therefore be seen as escaping the representational restrictions of more conventional military computer games, and as offering a more critical perspective concerning warfare. In its depiction of the consequences of civilian deaths and collateral damage, *September 12th* moves

beyond the restrictions which are normally placed on the representation of war in games such as *Black Hawk Down* or *Close Combat: First to Fight* in which you are forced to restart the level or game if you accidentally kill civilians. As I have argued (see Chapter 2), these rules and restrictions are promoted as a means of making games more realistic, but in fact, they obscure the consequences of players' actions and therefore restrict the interactive and investigative potential of games. In addition, they also ensure that the representation of warfare in military computer games adheres to a strictly preordained and linear narrative pathway, in which the player's actions are directed by set objectives and rules, preventing the representation of war from spilling out into anything disorderly or chaotic, such as the mounting insurgency depicted in *September 12th*. But although *September 12th* seems to offer a less restrictive and more critical view of warfare than traditional military computer games, it does so at a cost. In terms of its graphical realism and playability, the game obviously pales in comparison with squad based urban shooters such as *Full Spectrum Warrior*. Not only does it present a graphically simplistic, two dimensional model of warfare, but the gameplay is restricted to the simple process of targeting and firing rockets, and the player is unable to investigate the urban environment beyond the boundaries of the screen. Like a still picture, the interface and background is fixed in place. To be fair, *September 12th* clearly does not aspire to be like other military computer games. As the instructions describe:

This is not a game. You can't win and you can't lose. This is a simulation. It has no ending. It has already begun. The rules are deadly simple. You can shoot. Or not. This is a simple model you can use to explore some aspects of the war on terror.⁴

The ability of *September 12th* to offer a more critical perspective concerning warfare therefore relies on the fact that it is a simulation and not a game. Its status as 'non-game' frees *September 12th* from the restrictions of the multiple determinants and allows it to escape the traditional logic of military computer games and their suggestion that strategic victory inevitably follows from a combat campaign. But although the critical potential of *September 12th* arises from its rejection of computer game conventions, this rejection also limits its critical power. Conceptually, *September 12th* might be seen as offering a critical perspective concerning the war on terror, but the fact that there is no possibility of winning or losing, that there is no narrative adventure, no direction, and no vicarious or immersive experience, alongside the fact that the graphical interface is so unrealistic, all greatly reduce the playability of the game and also its impact. Although it can be seen as challenging the logic of the war on terror, and challenging the limited and uncritical representation of warfare presented in military computer games, as a result of its shortcomings as a game, it is unlikely to attract and maintain a large enough and dedicated enough audience to provide anything like a challenge to the understandings of

warfare which are encouraged by the representation of war in commercial military computer games.⁵

Frasca himself has argued that *September 12th* is not intended to serve as a conventional game: ‘We see the concept...as a 21st century equivalent to traditional printed political cartoons: short, controversial satirical pieces that convey biased ideological messages’.⁶ But this argument raises another serious question concerning games such as *September 12th*, and other games which form part of the ‘games for change’⁷ movement, which aims to promote the production of games with real critical and social impact. And the question is this: are games such as *September 12th* really encouraging more complex understandings of the war on terrorism and the geopolitical issues which the U.S. faces today, or are they simply reflecting their own ideological biases in what might be seen as an equally simplistic fashion to traditional military computer games? Military computer games, as I have argued, encourage an overblown faith in the utility of force, and completely ignore non-combat oriented issues in their depiction of conflict. In this respect, they can be seen as simplistic. But do games such as *September 12th* simply invert this bias in proclaiming that ‘war is not the answer’? Is this not an equally simplistic approach to considerations of the problems and solutions to conflict? Whilst military computer games promote combat considerations to the exclusion of all others, games such as *A Force More Powerful* (2005) – ‘the game of non-violent strategy’⁸ - for example, consider political and economic factors,

ethnicity, religion, media and communications, but completely obscure and ignore any considerations of combat. Whilst the avoidance of warfare and the attainment of peaceful resolutions to world conflicts is clearly the most desirable course of action, are not these games, in encouraging the belief that purely peaceful resolutions can be found to global conflicts, encouraging an equally simplistic and obfuscatory perspective concerning the true complexities of global geopolitics? As Oliver Kamm has argued, 'Diplomacy has a limit, quite as much as force does'.⁹ It is certainly the case that all media productions display an ideological bias in one form or another, and that simplification and selection are inherently part of the media production process and the need to create coherent and limited narratives from potentially limitless and incredibly complex material. In this respect, media representations are intrinsically selective, limited, and simplistic when compared with the realities which they depict. Nevertheless, as things stand, both military computer games and games of non-violent strategy present solutions to global conflicts which are overly simplistic and encourage a dichotomous understanding of force and statecraft which does nothing to help more complex and holistic understandings of contemporary conflict. More recently, there have emerged a number of games which attempt to present more serious content. *Peacemaker* (2006), for example, offers the player the opportunity to find a solution to the Israeli-Palestinian problem. There remains a feeling, however, as Frasca highlighted in his article, that the design conventions and limitations of computer games leave them ill-equipped to deal

with such complex material. The question of the ability of computer games to represent the true complexities of conflict therefore remains, and is a question which requires further study, especially as games evolve and become ever more sophisticated. Alongside the 'games for change' and 'serious games'¹⁰ movements, there are of course a great many strategy games and Massive Multiplayer Online Role Playing Games (MMORPGs) which this thesis has not considered. As I argued at the outset, the reason that I have not considered these types of games is that there is an almost complete absence of such games which represent the more recent conflicts and more recent military policy with which this thesis is primarily concerned. MMORPGs and strategy games, however, offer a very different perspective of conflict than tactical shooters, and they are massively popular. As a result, they exert an equally important influence on understandings of warfare as tactical shooters, and represent a fertile area for research.¹¹ Another area to consider in this respect is the ability of non-U.S. produced games to offer resistance to the militaristic vision which U.S. games present. The emergence of games produced by Hezbollah, al-Qaeda, the Iranian Revolutionary Guards, and the Global Islamic Media Front such as *Counter Strike*, *Special Force*, *UnderAsh*, *UnderSiege*, and *The Night of Bush Capturing* are often cited as examples of resistance to American cultural imperialism.¹² As Ed Halter argues, these games exist as a 'riposte to an American-based game culture that disavows the biases of its own game content'.¹³ Halter's argument essentially recreates the arguments presented by the game producers themselves, and the idea that these games are recreated in

order to offer an alternative to ‘Western games where Arabs and Muslims are portrayed as terrorists’.¹⁴ David Machin, on the other hand, questions whether these games make any effort to challenge what the game producers describe as the problem presented by U.S. games – the habituation of ‘teenagers to violence, hatred and grudges’.¹⁵ As Machin questions, do these games resist U.S. cultural imperialism and the militaristic vision of U.S. games, or do they, in fact, ‘privilege US discourses about the problems in the world and the solutions available to deal with them?’¹⁶ This is another area which requires further investigation.

The ‘games for change’ movement, developments in computer game technology, experiments with design conventions, and the evolution and maturation of the medium of the computer game, all point to the possibility that computer games will develop into a more critical and complex form. As things stand, however, it remains the case that computer games are commonly perceived as unable to represent the true complexities of conflict, and that the multiple determinants of games restrict their representational potential. It is interesting to note, for example, that aside from military computer games, the visual media more generally has not exploited the opportunity that the model of military transformation, and the combination of Special Forces and high-technology, offers in terms of media representation and heroic military narratives. CBS’s fictional T.V. series *The Unit* - produced by former Delta Force operator Eric Haney, and based on his book *Inside Delta Force* (2003) -

and ABC's failed documentary series *Profiles from the Front Line* (2003) - which followed U.S. Special Forces operations worldwide - are really the only examples of major T.V. productions which have attempted to exploit and reflect the rise in Special Forces operations. Other T.V. productions, such as *Over There* (2005), have flopped on account of the fact that they have tied themselves in knots in attempting to present the domestic, foreign, military, political, social and cultural consequences of the war in Iraq all at the same time. And major films based on the heroic transformational formula simply do not exist. The ignorance of military transformation in major Hollywood movies, and the relative lack of attention of transformation on T.V., reflects not only the ideological and cultural climate which has followed the controversial wars in Afghanistan and Iraq, which makes heroic war narratives appear desperately inappropriate, but also the expectations which have come to be associated with these different visual media, and the different codes of realism which they promote.

Military computer games, for example, are purely combat oriented media productions which aim to present the immersive and immediate realities of combat. In this respect, their code of realism – based on the realistic recreation of combat in a graphical and visual sense – is not concerned with ‘social realism’, which Alexander Galloway characterizes as being mainly concerned with a critical examination of the status quo,¹⁷ and nor is such a critical vision required or expected by game players, or courted by game producers. It is

commonly accepted, however, that television and film are media which are capable of presenting more critical and socially realistic representations of combat. As a result, the processes of remediation and intertextuality which I described in Chapter 3, have occurred primarily between games and films which share the same code of realism. The film *Black Hawk Down*, for example, which was celebrated as ‘One of the most convincing realistic combat movies ever seen’,¹⁸ and criticized for its lack of genuine analysis concerning the history and geopolitical complexities of the conflict in Somalia,¹⁹ recreates the same singular focus on combat as is created in military computer games. As a result, the film provided ideal material for remediation and adaptation when produced as the game *Delta Force: Black Hawk Down*. On the other hand, as I argued in Chapter 3, whilst games such as *Conflict: Vietnam* make token intertextual links to Vietnam War films, they cannot produce the same subversive and critical representations of the war as their filmic counterparts. And in this respect, films such as *Apocalypse Now* and *The Deer Hunter* do not share the same code of realism as games such as *Conflict: Vietnam*. As I argued in Chapter 3, the narrative of *Apocalypse Now*, which portrays the Vietnam War as a drug-fuelled, anarchic, and directionless war without end, could not be recreated in games as a result of the multiple determinants which limit the computer game form. Equally, as I argued in Chapter 1, the post-heroic narrative of *Jarhead*, which depicts the real life experiences of Marine Swofford during Desert Storm in 1991, could not be recreated in a computer game, since the film obscures any sort of heroic

narrative in its representation of overwhelming force, airpower and mechanization – aspects which make the narrative unsuitable for computer game representation.

As I argued in the Introduction, initial understandings of military computer games as presenting a simplistic, sanitized and high-tech vision of warfare were encouraged by references to games during the debate concerning television news coverage of the Gulf War in 1991, in which T.V. news, and the footage presented by the Pentagon, was frequently derided as being ‘like a computer game’. Ten years after Desert Storm, Ty Burr, in an editorial in the *Boston Globe*, wrote that he learned more about the Gulf War from watching the film *Three Kings* (1999) than from the news coverage which had been presented at the time: ‘there’s still more human truth to the film than in the video-game footage of buildings silently exploding that we saw on TV during the Gulf War itself’.²⁰ William O’Neill, in searching for a truly critical modern war film, concludes that *Three Kings* ‘is one film that does not support the national security state but rather brings out the moral and political complexities of post-colonial wars’.²¹ Whilst the limitations of the representation of war in military computer games have therefore led to the common understanding that computer games are unable to present critical reflections concerning warfare, films such as *Three Kings*, on the other hand, are seen as capturing the true complexities of conflict more accurately than any other media form. This thesis, in its analysis of the influence of the multiple

determinants, has concluded that in some ways, the representation of war in military computer games is inherently limited. Future developments and changes in computer game design conventions may alter this perspective, but for now, this is the case. As a result, it seems that film can do things that computer games cannot – for example, present the purposelessness of the war in Vietnam, or the post-heroic nature and true complexities of the war in the Gulf in 1991. There is not enough room here to investigate in detail the determinants and critical potential of film relative to that of computer games; the following section, however, analyses the representation of warfare presented in *Three Kings* and *Jarhead* – films which appear to offer greater critical insights into warfare than their computer game counterparts - in order to see how the understandings of warfare which they encourage, differ from those which are encouraged by the ostensibly more simplistic form of the military computer game.

Film and the Critical Representation of Warfare

On the DVD commentary which accompanies the film *Three Kings*, Director David Russell explains:

I'm taking people's perceptions of this war and turning them on their head...All these assumptions you had about this war need to be looked at and turned over, including the sense of satisfaction you had as a moral victor, as an American.

As I described in Chapter 3, U.S. military operations during the Gulf War in 1991 ended with a peace agreement which left Saddam Hussein in power and parts of the Republican Guard intact, and which also allowed the Iraqis to hold on to a number of their attack helicopters. These helicopters were subsequently used to suppress the civilian uprisings against Saddam Hussein; uprisings which had been encouraged by President Bush and the CIA.²² It was reported in a PBS documentary, that on occasion, the killing of Iraqi civilians during the suppression of this civilian uprising took place in view of U.S. forces who were ordered not to intervene.²³ *Three Kings* takes this post war setting as its backdrop. Essentially, as David Russell suggests, the film invites the audience to recognize that whilst the Gulf War ended in U.S. victory, the aftermath of the war left a legacy in which many Iraqi civilians were killed as the U.S. looked on. As the film suggests, and as Bush himself suggested (see Chapter 3), despite U.S. success, the Gulf War felt like a limited victory. As Major Archie Gates shouts at his superior officer in *Three Kings*: ‘I don’t even know what we did here. Tell me what we did here’. In this respect, the film both criticizes the limited nature of Desert Storm, and suggests that the American military could and should have done more. In fact, in the film, a group of four American soldiers, led by Special Forces Major Archie Gates, succeed in rescuing a large group of Iraqi civilians and escorting them across the border, before being arrested by members of the U.S. military for doing so. *Three Kings*, therefore, is intended to present a critical and revisionist understanding

of the conflict, which challenges understandings of the war as an absolute U.S. victory. But if we consider the representation of Desert Storm in *Three Kings* in the same way as we approached the representation of past wars in military computer games in Chapter 3, what are the lessons of the conflict which the film encourages? They seem to be that the Powell Doctrine's insistence on the setting of limited strategic objectives was inappropriate and that the U.S. should have pushed on and supported the Iraqi uprising. At the time, strategists argued that such actions would have led to the toppling of Saddam Hussein and regime change, and would therefore have seen the U.S. sucked into a protracted quagmire in Iraq.²⁴ In many ways, these predictions came true following the operation in Iraq in 2003. In this respect, whilst William O'Neill claims that *Three Kings* points to the moral and political complexities of post-Cold War conflicts, the film also suggests that a less restricted military campaign would have offered a solution to these complexities. And whilst Ty Burr claims that the representation of war in *Three Kings* offers far greater insights into warfare than computer games, the lessons concerning conflict which they promote are basically the same. This, after all, was the way in which Cheney looked back at Desert Storm as Vice President in 2003 (see Chapter 3); as a campaign which was too limited - an interpretation of the conflict which encouraged the belief that the U.S. should aim for regime change in Iraq in 2003.

Like *Three Kings*, the film *Jarhead* appears to offer a radically different perspective of the Gulf War of 1991 to anything presented in computer games. Unlike *Conflict: Desert Storm*, the film *Jarhead* – based on the actual experiences of Marine Swofford in Desert Storm - makes no attempt to reinvent the conflict in light of the policy of military transformation which was being played out at the time of its production. On the contrary, the film makes the Powell Doctrine model of overwhelming force, massed troops, and long build-up periods explicitly clear. The audience is regularly updated with statistics on the length of time spent in the desert and the number of troops deployed. This rises from ‘Time in Desert: 14 Minutes. Troops in Desert: 5,000’; to ‘Time in Desert: 175 Days. Troops in Desert: 575,000’. Far from celebrating this application of overwhelming force, however, the film exposes its apparent futility by showing the Marines occupied in exploits such as playing American football in their gas-protecting suits to pass the time. In the entire film, not one member of the Marine squad fires their rifle in anger. The message is clear: ground troops were surplus to requirements in Desert Storm; ‘the fucking zoomies’, as one member of the Marine squad argues in the film, ‘are going to win the war all on their own.’. Even when in position to take a shot, the lead character Swofford is prevented from doing so by a senior officer who calls in airpower to do the job more efficiently. As he says ‘You were just going to kill one guy’.

In some respects, the image of the military that *Jarhead* presents is intensely critical: the Marines are depicted as degenerates who spend most of their time masturbating, and one member of the squad even defiles Iraqi corpses. At a time when scandals such as Abu Ghraib and the Fallujah massacre had broken, this was clearly a critical and unwelcome view of American military culture for Defense Secretary Rumsfeld. However, the film also offers substantial support for Rumsfeld's claims concerning the futility of long build up periods and massed troops, and notwithstanding the critical elements of the film in relation to military culture, it is hard to imagine an image of Desert Storm which would fit more perfectly with Rumsfeld's ideas concerning the need for military transformation. In this respect, the representation of the war in *Jarhead* reflects the lessons which policymakers drew from Desert Storm when formulating current policy. Ironically, however, these lessons appear to directly oppose the understanding of Desert Storm held by the writer William Broyles Jr.. On the commentary of the *Jarhead* DVD, Broyles Jr., a Vietnam veteran whose son was fighting in Iraq at the time of the film's production, argued that in Desert Storm, the troops:

Were very clear what they had to do, they had to go and get Saddam Hussein's troops out of Kuwait where they invaded. There's a clear mission and unlike in Vietnam where the mission became very confused or even today when it's quite confused, this was a war in which with the Powell Doctrine

you had a clear mission, you had overwhelming force and they had a clear exit strategy, and that was supposedly because they'd learnt the lessons from Vietnam for this war and now of course my son's war [in Iraq] is disturbingly familiar for me and more and more like Vietnam and less and less like this.

In his comparison of Desert Storm and Operation Iraqi Freedom, Broyles reproduces a number of the lessons which were drawn from Desert Storm by strategists in order to explain its success, whilst also identifying those lessons of Operation Iraqi Freedom which have been highlighted to explain its problems. In particular, Broyles points to the Powell Doctrine's stipulations of overwhelming force, restrictive objectives, and a clear exit strategy as indicating the reasons behind the success of Operation Desert Storm in 1991, and the lack of such a strategy as contributing to the problems of Operation Iraqi Freedom in 2003. Yet nowhere is this argument suggested in the actual film. On the contrary, the film is intensely critical of Desert Storm and the Powell Doctrine's insistence on overwhelming force and massed troops, and lends support to the vision of a transformed and de-massed military – precisely the vision which Broyles suggests he wishes to critique. In this respect, whilst *Jarhead* recreates a post-heroic narrative and a critical perspective of military culture which could not be recreated in military computer games, like military

computer games, it supports the lessons of the past which have been used in the formation of current U.S. policy.²⁵

As this very short and selective investigation into the representation of war in films suggests, despite the fact that the medium is not restricted in the same way as computer games, in many respects, the understandings and lessons of past conflicts which films such as *Three Kings* and *Jarhead* encourage are not dissimilar to those encouraged by games. It is not possible to draw any conclusions based on this straw poll of filmic representation, but the way in which the differing representations of warfare presented in games and film interact, challenge and support each other points to another important area for further research. As Geoff King and Tanya Krzywinska argue in *Tomb Raiders and Space Invaders: Video Game Forms and Contexts* (2006):

Games do not exist in a vacuum...They often draw upon or produce material that has social, cultural or ideological resonances, whether these are explicit or implicit and whether they can be understood as reinforcing, negotiating or challenging the assumptions generated elsewhere in society.²⁶

In order to truly gauge the influence of military computer games on popular understandings of warfare, it is important to consider how military computer

games fit into the broader discourse which surrounds warfare, and to consider how the representations of war which games present are reinforced, negotiated, and challenged by other media representations. It would be interesting, therefore, to conduct a cross-media analysis which considered the representation of war not only in computer games, but in film, literature, comics, toys, journalism, and T.V. news, and also on internet sites such as *YouTube*, in order to form a broader picture of the discourse surrounding warfare, and as a means of delineating and highlighting the multiple determinants which influence each media form. In addition, of course, it will be interesting to see the results of audience and reception research being carried out in the U.S. – by Nina Huntemann and others - which will attempt to provide empirical evidence concerning the influence of military computer games on game players.

CONCLUSION

Military Computer Games and the New American Militarism

In the abstract to his article, 'Unsettling the Military Entertainment Complex: Video Games and a Pedagogy of Peace' (2004), David Leonard sums up the prevailing understanding of the relationship between military computer games and American militarism. As Leonard argues:

Virtual war games elicit support for the War on Terror and United States imperialism, providing space where Americans are able to play through their anxiety, anger, and racialized hatred. While commentators cite a post-September 11th climate as the reason for increasing interest and support for the U.S. military, this article underscores the importance of video games as part of the militarization of everyday life and offers insight into the increasingly close-knit relationship between the U.S. military, universities, and the video game industry. Because video games form an important pedagogical project of U.S. war practices, they must be critically analyzed.¹

Leonard provides an archetypal analysis of military computer games and their relationship to American militarism which builds on the popular belief in U.S.

military policy as imperialistic, and, on the basis of the military-entertainment complex, suggests that military computer games recreate the same sense of imperialism, racism, and xenophobia. The purpose of this thesis has been to challenge such understandings at every turn. As I have argued, the fixation with the idea of games as politicized, racist and imperialist supports for U.S. policy has completely marginalized considerations of the main focus and experience of gameplay. Military computer games, after all, are about learning how to win wars according to the logic of the game, and they are fundamentally – and almost exclusively – concerned with combat, and not with political, cultural, and social concerns. The political and ideological significance of military computer games, and also their contribution to U.S. militarism, should therefore be seen in relation to the way in which games teach players how to win wars, and specifically, the way in which military computer games promote misunderstandings and misconceptions concerning warfare. As Andrew Bacevich has described in *The New American Militarism: How Americans Are Seduced by War* (2005), military policy and U.S. militarism cannot simply be explained by pointing to the Bush administration and the neoconservatives as a racist, imperialistic and warmongering cabal. As Bacevich suggests, American militarism has in fact emerged as a result of the misunderstandings and misconceptions concerning warfare which have come to pervade the American consciousness. In the same way, the militarism of military computer games does not lie in their promotion of racist or

imperialistic beliefs, but rather in their promotion of the misunderstandings and misconceptions which characterize American militarism.

Military computer games have encouraged misunderstandings concerning warfare in three major ways. Firstly, they have promoted the vision of military transformation as the means of winning wars. As I argued in Chapter 1, this vision, based around the combination of Special Forces and high-technology, has proved a popular and powerful propagandist model for military computer games not only because it allows military computer games to recreate the 'reality' of military policy whilst maintaining the imperatives of providing compelling representational narratives, but also because the model of military transformation appears so similar to existing heroic cultural forms. In this respect, a convergence has developed between the popular hero narrative, as represented in military computer games, and U.S. military policy; a convergence which, contrary to popular suggestion, is not based around the recreation of the vision of 'joystick war'. As I argued in Chapter 1, existing understandings of the propagandist significance of games have therefore been based on fundamental misunderstandings of the notion of propaganda itself. Rather than seeing the propagandist significance of games in terms of their deception and distortion of reality, their propagandist significance should be seen in relation to the power and appeal of the vision which they present.

Military computer games, however, as I argued in Chapter 2, not only recreate the vision of military transformation, but obscure transformation's strategic and operational vulnerabilities. As a result, the vision of warfare presented by military computer games encourages an unrealistic faith in the ability of military transformation to meet the challenges promoted by contingencies such as cyberwar, asymmetric warfare, Military Operations in Urban Terrain, and Operations Other Than War (OOTW). Beyond the obfuscation of transformation's vulnerabilities, however, military computer games have encouraged certain other misunderstandings concerning warfare; in particular, the representation of war in military computer games promotes the belief in the inevitability of U.S. victory; the belief that victory in combat will automatically lead to broader strategic success; and the belief that a successful combat campaign should be based on the destruction of men and materiel. These beliefs, as the conflicts in Afghanistan and Iraq suggest, are inappropriate to understandings of contemporary conflict. In effect, military computer games, despite their claims to represent the realities of contemporary combat, recreate a vision of warfare which is more akin to the now obsolete model of total industrial conventional warfare, than to that of contemporary post-Cold War conflicts such as those in Afghanistan and Iraq.

Critics have suggested that the limited nature of the representation of war in military computer games can be explained by the military-entertainment complex, and the idea that computer games are controlled by the military and

political establishment and used by this establishment in order to promote militaristic beliefs. As I illustrated in Chapter 2, however, the representation of war in military computer games, and its limitations, are the result of the complex interaction between the multiple determinants of games. The interactivity and agency of military computer games have restricted the critical potential of games and their ability to represent defeat; and together with the structure of games, based around the attainment of set objectives and missions, and the weight of player expectation and computer game convention, these determinants have ensured that military computer games inevitably end in victory. The perspective of first person and squad based military computer games, which is restricted to the representation of purely combat oriented considerations, has encouraged the belief that victory in the major combat stage of a war is equivalent to the attainment of broader and more complex strategic objectives. Finally, the logic of winning wars presented by military computer games, which is based around the quantification of the After Action Review, has privileged the belief that ‘hard’ and conventional factors such as the destruction of troops and materiel are the means of winning wars, whilst ignoring ‘soft’ and non-combat oriented considerations – a process encouraged by the restricted perspective of games. Contrary to the suggestions of critics, therefore, the representation of war in military computer games cannot solely be explained by the existence of the military-computer game relationship; but must be seen as the product of the influence of the multiple determinants of games. In the same way, as I argued in Chapter 2, U.S. military policy should

be seen as the product of the multiple determinants which have affected its development, and not solely the product of a cabal of warmongering politicians. It is the influence of these determinants on U.S. policy – which include practical, economic, social and cultural influences - combined with the influence of the multiple determinants of games, which has led to a convergence not only between the vision of warfare promoted by military transformation and the vision of warfare promoted by the representation of war in military computer games, but also between the limitations of the representation of war in military computer games, and the limitations of U.S. policy.

As I argued in Chapter 3, however, the determinants of U.S. military policy are not confined to practical, economic, social and cultural factors; they also include historical influences and, in particular, the influence of the ‘lessons’ of past wars. As I illustrated in Chapter 3, current U.S. military policy, and in particular the problems of U.S. policy, can be seen as the product of lessons learned, ‘mis-learned’, and ignored from past wars. And it is these lessons of the past - which policymakers have used in the formation and promotion of current policy and which have contributed to the limitations of U.S. policy - which are also promoted by representations of past wars in military computer games. As I showed in Chapter 3, the dominance of representations of World War II, the absence of representations of the Balkan conflicts in the 1990s, and the selective representation of the war in Vietnam in the 1960s and 1970s, Iraq

in 1991, and Somalia in 1993, has encouraged further misunderstandings concerning the utility of force. In particular, the representation of past wars in military computer games has promoted the belief in the ability of warfare to achieve total victory and allow the total resolution of complex political disputes, whilst ignoring the problems and limitations which have been revealed by historical conflicts. Military computer games therefore recreate many of the ‘lessons’ of past conflicts which have informed U.S. policy and which have led to the problems which U.S. policy has faced when applied in Afghanistan and Iraq. Military computer games therefore promote military transformation as the means of winning wars; obscure transformation’s strategic vulnerabilities; encourage an understanding of warfare more similar to total industrial scale war than to contemporary post-Cold War conflict; and promote the lessons of past wars which have led to the shortcomings of current policy. In all these respects, military computer games have encouraged misunderstandings and misconceptions concerning warfare, and also an overblown faith in the utility of military force. And it is these aspects of military computer games, and the misunderstandings which they encourage, which reveal the relationship between military computer games and American militarism.

This thesis has made a number of original contributions to the debate surrounding military computer games. It has provided a thorough re-conceptualization of understandings of the propaganda of games, the

limitations of games, and the unhistorical nature of games. In doing so, it has provided a corrective to some of the major misconceptions concerning military computer games, including the belief that the representation of war in military computer games can be explained purely in relation to the military-computer game relationship, and the idea that military computer games recreate a vision of 'joystick war'. It has replaced this fixation with the military-entertainment complex with a thoroughgoing analysis of the multiple determinants which affect the representation of war in military computer games, and has also highlighted the ways in which military computer games, despite their sometimes limited and unhistorical nature, reflect the vision of U.S. military policy. In addition, it has shown that U.S. military policy itself should be seen not simply as the product of a warmongering cabal, but rather, as the product of its own set of determinants. In bringing these insights together, it has provided a complete reevaluation of understandings of the relationship between military computer games and American militarism.

Military computer games are now part of a multi-billion dollar mass market industry which rivals Hollywood in terms of the generation of revenue. They are part of a medium which is reportedly played by 69% of heads of households in the U.S.² Each year, military computer games are amongst the best selling computer games, and the ongoing relationship between the military and the computer game industry, along with technological developments, continues to encourage the growing perception of games as

realistic and authentic. As a result, as the influence of television news wanes, and the number of people who have experienced combat first hand declines, military computer games will take on an ever greater significance in terms of their influence on popular understandings and perceptions of conflict. In this respect, military computer games, and the misunderstandings and misconceptions concerning conflict which they encourage, represent an important influence in contributing to American militarism, and they will continue to do so well into the future.

ENDNOTES

Introduction: Why Study Military Computer Games?

¹ GamePolitics.com, 'South Korea Lifts Ban on Military Games' (2006), <http://gamepolitics.com/2006/12/29/south-korea-lifts-ban-on-military-games/> (Accessed 20th February 2007).

² BBC News Online, 'Venezuelan Anger at Computer Game' (2006), <http://news.bbc.co.uk/1/hi/business/5016514.stm>. (Accessed 10th October 2006).

³ An open letter which called on religious leaders of all faiths to petition Bono – the lead singer of the band U2, and a managing partner of private equity firm Elevation Partners which owns a majority stake in game development companies BioWare and Pandemic – explained: 'Our concern is that this game will only deepen an already antagonistic relationship between the U.S. and Venezuelan governments. Millions of Venezuelans fear an invasion from the U.S.; knowing that a company that works for the U.S. military has created a game in which their country is completely destroyed will increase those concerns'. See Gamasutra, 'Venezuelans Petition Bono Over *Mercenaries 2*' (2007), http://www.gamasutra.com/php-bin/news_index.php?story=13236 (Accessed 17th April 2007).

⁴ GamePolitics.com, 'South Korea Lifts Ban on Military Games'.

⁵ See the description of the *KumaWar* level at www.kumagames.com/mission/m76_kerbala/story.htm (Accessed 22nd July 2007). For the story of the Iranian response, see Ian Bogost, 'A Taste of Our Own Rhetoric' (2007), <http://www.watercooler.com/archives/000826.shtml> (Accessed 22nd July 2007).

⁶ See Ian Bogost, 'Iran Releases State-Funded Oil Disruption Game' (2006), <http://www.watercooler.com/archives/000640.shtml> (Accessed 10th October 2006). And Michael Smith, 'Iran Threatens Gulf Blitz if US Hits Nuclear Plants', *The Sunday Times*, June 10th, 2007, <http://www.timesonline.co.uk/tol/news/world/article1909896.ece> (Accessed June 10th 2007).

⁷ See Ed Halter, 'Islamogaming: Looking for Videogames in the Muslim World' (2006), <http://www.lup.com/do/feature?pager.offset=0&cId=3153332> (Accessed 13th September 2006). And also http://news.yahoo.com/s/afp/20071018/wl_uk_afp/britainintelligenceadvertisingrecruitoffbeat_071018070634 and <http://www.abc.net.au/mediawatch/transcripts/s1644639.htm> (Accessed 20th February 2007).

⁸ See http://news.yahoo.com/s/afp/20071018/wl_uk_afp/britainintelligenceadvertisingrecruitoffbeat_071018070634 (Accessed 1st January 2008).

⁹ See <http://www.abc.net.au/mediawatch/transcripts/s1644639.htm> (Accessed 20th February 2007).

¹⁰ Harold Kennedy, 'Computer Games Live Up Military Recruiting, Training' (2002), http://www.nationaldefensemagazine.org/issues/2002/Nov/Computer_Games.htm (Accessed 8th August 2006).

¹¹ Richard A. Peterson, *Creating Country Music: Fabricating Authenticity* (Chicago and London: The University of Chicago Press, 1997), p. 205.

¹² Peterson, *Creating Country Music*, p. 211.

¹³ The *Full Spectrum Warrior* games are sometimes classified as real time tactical games, a sub-genre of the real time strategy game. For more on this, see Mark Walker's series of articles, which are listed in endnote 14.

¹⁴ For a discussion of strategy games and the distinctions between the differing genres of strategy game, see Mark Walker's series of articles. Mark H. Walker, 'Strategy Gaming: Part I – A Primer' (2002), <http://archive.gamespy.com/articles/february02/strategy1/> (Accessed 12th September 2008). Mark H. Walker, 'Strategy Gaming: Part II' (2002), <http://archive.gamespy.com/articles/february02/strategy02/> (Accessed 12th September 2008).

Mark H. Walker, 'Strategy Gaming: Part III' (2002), <http://archive.gamespy.com/articles/february02/strategygames3/> (Accessed 12th September 2008). Mark H. Walker, 'Strategy Gaming: Part IV – In the Beginning' (2002), <http://archive.gamespy.com/articles/february02/strat04/> (Accessed 12th September 2008). Mark H. Walker, 'Strategy Gaming: Part V – Real Time vs. Turn Based' (2002), <http://archive.gamespy.com/articles/february02/strategygames05/> (Accessed 12th September 2008). See also Bruce Geryk, 'A History of Real-Time Strategy Games: Part 1' (no publication date), http://www.gamespot.com/gamespot/features/all/real_time/ (Accessed 11th September 2008). And Bruce Geryk, 'A History of Real-Time Strategy Games: Part 2' (no publication date), http://www.gamespot.com/gamespot/features/all/realtime_pt2/index.html (Accessed 11th September 2008).

¹⁵ It has been argued that the ancestor of *Pong*, named *Tennis for Two* by its creator Willy Higinbotham, was the first game. Higinbotham created the display - an abstract simulation of tennis like a pinball game - for a company open day in 1958. He did not patent the idea, however, since he saw it more as a means of illustrating technology than as a game. See Steven Malliett and Gust de Meyer, 'The History of the Video Game', in *Handbook of Computer Game Studies*, eds. Joost Raessens and Jeffrey Goldstein (Cambridge, Massachusetts and London: MIT Press, 2005), p. 23.

¹⁶ Stephen Kline, Nick Dyer-Witherford, and Greg De Peuter, *Digital Play: The Interaction of Technology, Culture and Marketing* (Montreal and Kingston: McGill-Queen's University Press, 2003), p. 85.

¹⁷ Paul N. Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge, Massachusetts: MIT Press, 1996), p. 44.

¹⁸ Kline, Witherford, and De Peuter, *Digital Play*, p. 84 and 80.

¹⁹ Kline, Witherford, and De Peuter, *Digital Play*, p. 92.

²⁰ Kline, Witherford, and De Peuter, *Digital Play*, p. 80 and P. Crogan, 'Gametime: History, Narrative, and Temporality in *Combat Flight Simulator 2*', in *The Video Game Theory Reader*, eds. M. J. P. Wolf and B. Perron (New York and London: Routledge, 2003).

²¹ Kline, Witherford, and De Peuter, *Digital Play*, p. 100 and J. C. Herz and M. Macedonia, 'Computer Games and the Military: Two Views', *Defense Horizons* 11 (2002). In fact, in 1931, the Navy purchased the first aircraft simulator off Edward Link. In 1932, the military still only had one, whereas there were close to fifty already in amusement parks. See James Der Derian, *Virtuous War: Mapping the Military-Industrial-Media-Entertainment Network* (Colorado and Oxford: Westview Press, 2001), p. 89.

²² 'I recently learned something quite interesting about video games. Many young people have developed incredible hand, eye, and brain coordination in playing these games. The Air Force believes these kids will be outstanding pilots should they fly our jets. The computerized radar screen in the cockpit is not unlike the computerized video screen. Watch a 12-year-old take evasive action and score multiple hits while playing Space Invaders, and you will appreciate the skills of tomorrow's pilot'. Ronald Reagan cited in Ed Halter, *From Sun Tzu to Xbox: War and Video Games* (New York: Thunder's Mouth Press, 2006), p. 118

²³ Timothy Lenoir, 'All But War is Simulation: The Military-Entertainment Complex', *Configurations* 8, no. 3 (2000), p. 323

²⁴ National Research Council, *Modeling and Simulation: Linking Entertainment and Defense* (Washington: National Academies Press, 1997), p. 1

²⁵ National Research Council, *Modeling and Simulation*, p. 9

²⁶ National Research Council, *Modeling and Simulation*, p. 26.

²⁷ Lenoir, 'All But War is Simulation', p. 322/323

²⁸ National Research Council, *Modeling and Simulation*, p. 26.

²⁹ Timothy Lenoir, 'Fashioning the Military-Entertainment Complex' (2002), <http://www.stanford.edu/dept/HPST/TimLenoir/public.html>, p. 15 (Accessed 20th November 2005).

³⁰ Lenoir, 'All But War is Simulation', p. 325.

³¹ As a result of developments in the military-computer game relationship, technology and personnel had begun to move back and forth between the military and computer game

industry. In 1991, GE Aerospace had begun exploring commercial applications for its real-time 3D graphics technology. This led to a contract with Sega Enterprises Ltd of Japan to adapt the technology for Sega's arcade games. In 1993, GE Aerospace was acquired by Martin Marietta, which expanded the relationship with Sega. In 1995 Martin Marietta merged with Lockheed Corporation to become Lockheed Martin, and in 1997, Real 3D was established as an independent company, focusing solely on developing and producing 3D graphics products for commercial markets. See Timothy Lenoir, 'Programming Theatres of War: Gamemakers as Soldiers' (2003), <http://www.stanford.edu/dept/HPST/TimLenoir/public.html> (Accessed 20th November 2005). Silicon Graphics entered into a partnership with Nintendo to produce N64 processor chips, leading to a huge rise in revenue from \$1.5 billion in 1994 to \$2.66 billion in 1997 - the year the N64 was launched. See Lenoir, 'All But War is Simulation'. A number of personnel who had worked on the military's SIMNET project subsequently transferred their knowledge and skills to the commercial industry. Steven Woodcock, the chief designer of Artificial Intelligence (AI) for SIMNET moved to Real 3D and designed several games including *Thundering Death*. See Lenoir, 'Fashioning the Military-Entertainment Complex', p. 14.

³² Kline, Witherford, and De Peuter, *Digital Play*, p. 182.

³³ National Research Council, *Modeling and Simulation*, p. 26 and Lenoir, 'All but War Is Simulation'.

³⁴ Lenoir, 'Fashioning the Military-Entertainment Complex'.

³⁵ Amy Alexander, Tad Brunye, Jason Sidman, and Shawn Weil. 'From Gaming to Training: A Review of Studies on Fidelity, Immersion, Presence, and Buy-In and Their Effects on Transfer in PC-Based Simulations and Games' (2005), <http://www.darwars.bbn.com/downloads/DARWARS%20Paper%2012205.pdf> (Accessed 15th October 2007).

³⁶ Alexander Galloway, 'Social Realism in Gaming', *Game Studies* 4, no. 1 (2004). Available at <http://gamestudies.org/0401/galloway/> (Accessed 10th December 2004).

³⁷ When released for the Xbox, it retained its status as 'the official US Army game' whilst being co-developed with Ubisoft.

³⁸ They also generated terrain maps from declassified Department of Defense Predator Unmanned Aerial Vehicle imagery. See Wagner James Au, 'Weapons of Mass Distraction' (2002), http://www.salon.com/tech/feature/2002/10/04/why_we_fight/index.html?x (Accessed 28th January 2006) and David Machin and Usama Suleiman, 'Arab and American Computer War Games: The Influence of a Global Technology on Discourse', *Critical Discourse Studies* 3, no. 1 (2006), p. 1.

³⁹ Halter, *From Sun Tzu to Xbox*, p. 259-264.

⁴⁰ Halter, *From Sun Tzu to Xbox*, p. 259-264.

⁴¹ Herz and Macedonia, 'Computer Games and the Military'.

⁴² Herz and Macedonia, 'Computer Games and the Military'.

⁴³ Lenoir, 'Programming Theatres of War'.

⁴⁴ See the ICT mission statement at <http://www.ict.usc.edu/> (Accessed 25th January 2006).

⁴⁵ It was named as E3's best original game and best simulation game.

⁴⁶ J. H. Korris, 'Full Spectrum Warrior: How the Institute for Creative Technologies Built a Cognitive Training Tool for the Xbox' (2004), <http://www.ict.usc.edu/publications/korris-fsw-asc.pdf> (Accessed 16th January 2006).

⁴⁷ Halter, *From Sun Tzu to Xbox*, p. 215.

⁴⁸ Herz and Macedonia, 'Computer Games and the Military'.

⁴⁹ See http://www.peostri.army.mil/ABOUTUS/FILES/PEO_Overview.pdf for the PEO STRI budget and list of their simulation programs (Accessed 20th March 2008).

⁵⁰ For statistics on the use of games amongst recruits, see James Verini, 'War Games', *The Guardian*, April 19, 2005. Available at <http://technology.guardian.co.uk/online/news/0,12597,1463233,00.html> (Accessed April 19th 2005).

⁵¹ One of the reasons for the increasing use of computer games as training tools is that they combat the problems of limited live training time whilst on deployment. As deployments

increase, the opportunity for live training exercises decreases, and with it, so does the proficiency of troops. Computer simulation therefore offers an alternative means of training. See National Research Council, *Modeling and Simulation*, p. 25. In the late 1970s and early 1980s, however, simulators were prohibitively expensive, often involving full mock-ups of the vehicles that they were simulating, with the simulator being more expensive than the actual vehicle being simulated. In 1983, Jack Thorpe, an Air Force Lieutenant on loan to DARPA (Defense Advanced Projects Research Agency) as a program manager, initiated a massive change, looking to technologies outside the Department of Defense such as videogame technology to reduce costs and provide selective fidelity simulation, networked simulation, and collaborative training. These ideas became the basis for SIMNET – the military’s networked simulation system, approved in 1982 and made operational in 1990. As Tim Lenoir describes in his article ‘Programming Theatres of War: Gamemakers as Soldiers’, this approach of looking outside the Department of Defense’s traditional procurement sector was formally enforced by the Federal Acquisitions Act of 1994. With the end of the Cold War there came an emphasis on a fiscally efficient military, and changes introduced by Secretary of Defense William Perry directed the Department of Defense’s procurement policy away from a reliance on contracting from a technological and technical base that were dedicated to Department of Defense requirements, and towards considering commercially available alternatives first. By the mid-90s, it had become DOD policy to use commercial-off-the-shelf software whenever it met DOD requirements. Another reason for such a change was that it had also become apparent that it was the commercial entertainment industry, and not just military funding and research, which was driving the development of computing. As Michael Macedonia argues: ‘As a mass market, games now drive the development of graphics and processor hardware...By aggressively maneuvering to seize and expand their market share, the entertainment industry’s biggest players are shaping a 21st Century in which consumer demand for entertainment – not grand science projects or military research – will drive computing innovation’. See Lenoir, ‘Programming Theatres of War’ and Clark Dodsworth, ed. *Digital Illusion: Entertaining the Future with High Technology* (New York: ACM Press, 1998), p. 116

⁵² David Nieborg, ‘Changing the Rules of Engagement - Tapping into the Popular Culture of *America’s Army*, the Official U.S. Army Computer Game’ (MA Dissertation, Utrecht University, 2005), p. 46

⁵³ Rick Atkinson, ‘General: A Longer War Likely’, *Washington Post*, March 28th, 2003, A01.

⁵⁴ See James Der Derian, *Virtuous War* and James Der Derian, ‘War as Game’, *The Brown Journal of World Affairs* X, no. 1 (2003).

⁵⁵ The problem of using computer simulations for training and planning has been recognized within the military and simulation community. Major General Ray Smith, for example, argues that: ‘In war you fight people not machines. We’re training to beat computers, instead of training to beat the enemy. You cannot model the effects of confusion and surprise, the friction and fog of war’. See Der Derian, *Virtuous War*, p. 85. Even those who work on developing simulation technologies such as Jonathan Gratch, a project leader at the ICT, warn that you must ‘take systems with a grain of salt’. As Gratch says, if you are not careful, there is a possibility that you could ‘institutionalize these limitations of information technology’. See Jonathan Gratch, ‘Computer Games’ (2003), <http://www.watsoninstitute.org/infopeace/dissim/> (Accessed 25th January 2006). Stephen Biddle also warns that: ‘For over 40 years, the analytical community has focused on an expected conflict between massed armed forces operating mostly in the open. The corpus of models and other tools that emerged from this effort reflect this focus and treat warfare mainly as a problem of interactions among armored vehicles and major weapon systems. The role of dismounted soldiers has been largely ignored...To assess military requirements using tools that cannot address such combat is to reach findings that are meaningless at best, dangerous at worst’. Stephen D. Biddle, *Afghanistan and the Future of Warfare: Implications for Army and Defense Policy* (Carlisle: Strategic Studies Institute, U.S. Army War College, 2002).

⁵⁶ Michael S. Sherry, *In the Shadow of War: The United States Since the 1930s*, (New Haven and London: Yale University Press, 1995), p. 1

⁵⁷ Electronic Software Association, '2005: Essential Facts About the Gaming Industry' (2005), <http://www.theesa.com/files/2005EssentialFacts.pdf> (Accessed 1st November 2005).

⁵⁸ Andrew Bacevich opens *The New American Militarism* in a similar fashion. 'Today as never before in their history Americans are enthralled with military power. The global military supremacy that the United States presently enjoys...has become central to our national identity...the nation's arsenal of high-tech weaponry and the soldiers who employ that arsenal have come to signal who we are and what we stand for'. Andrew Bacevich, *The New American Militarism: How Americans Are Seduced by War* (Oxford: Oxford University Press, 2005), p. 1.

⁵⁹ William L. O'Neill, 'The "Good" War: National Security and American Culture', in *The Long War: A New History of U.S. National Security Policy Since World War II*, ed. Andrew J. Bacevich (New York, Columbia University Press, 2007), p. 517

⁶⁰ Electronic Software Association, '2007: Essential Facts About the Gaming Industry' (2007), <http://www.theesa.com/archives/files/ESA-EF%202007.pdf> (Accessed 7th February 2007).

⁶¹ Electronic Software Association, '2008: Essential Facts About the Gaming Industry' (2008), http://www.theesa.com/facts/pdfs/ESA_EF_2008.pdf (Accessed 17th July 2008).

⁶² In 2003, *Medal of Honor Rising Sun* was the 10th best selling video game. In 2004, the top-selling computer games included *Battlefield Vietnam* (7th) and *Call of Duty* (8th). In 2005, the top selling video games included *Socom 3: US Navy Seals* (16th), *Call of Duty 2: Big Red One* (20th), and the top selling computer games included *Battlefield 2* (6th) and *Call of Duty 2* (10th). In 2006, the top selling video games included *Tom Clancy's Ghost Recon: Advanced Warfighter* (8th) and the top selling computer games *Call of Duty II* (16th). See Electronic Software Association, '2007: Essential Facts'. In 2007, the top selling video games included *Call of Duty 4: Modern Warfare* (3rd), whilst the best selling computer games included *Call of Duty 4: Modern Warfare* (4th), and *Battlefield 2142* (14th). The games *Medal of Honor*, *Medal of Honor Frontline*, *Medal of Honor Rising Sun*, *Socom II: US Navy Seals*, *Spec Ops*, and *Tom Clancy's Ghost Recon* have all sold over 1 million copies in the U.S.. For these statistics see Electronic Software Association, '2005: Essential Facts About the Gaming Industry'. NPD Group, 'Annual 2003 Video Game Best-Selling Titles' (2004), www.npdfunworld.com/funServlet?nextpage=trend_body.html&content_id=780 (Accessed 8th September 2006). Electronic Software Association, '2006: Essential Facts About the Gaming Industry' (2006), www.theesa.com/archives/files/Essential%20Facts%202006.pdf (Accessed 9th September 2006). The Magic Box, 'US Platinum Videogame Chart' (2006), www.the-magicbox.com/Chart-USPlatinum.shtml (Accessed 9th September 2006).

⁶³ Daya Kishan Thussu, 'Live TV and Bloodless Deaths: War, Infotainment and 24/7 News', in *War and the Media: Reporting Conflict 24/7*, ed. Daya Kishan Thussu and Des Freedman (London: Sage, 2003), p. 121

⁶⁴ See http://www.gamepro.com/news.cfm?article_id=136548 (Accessed 20th June 2008).

⁶⁵ David Machin and T. Van Leeuwen, 'Computer Games as Political Discourse: The Case of Black Hawk Down', *Journal of Language and Politics* 4, no. 1 (2005), p. 119/120.

⁶⁶ In studies into the use of computer games as teaching aids, one of the major problems to be identified is that students often fail to make connections between in-game representations and the real world. As Kurt Squire argues in *Replaying History: Learning World History Through Playing Civilization III* (2003), players learn 'the symbols of the game system', but are 'unable to tie those symbols back to their real world referents'. See Kurt Squire, 'Replaying History: Learning World History Through Playing Civilization II' (PhD Thesis, Indiana University, 2004), p. 65. In the context of the classroom, the perception of this disjuncture between the game world and the real world raises serious questions over the potential of computer games as teaching tools. A game such as *Civilisation*, for example, might be seen as an ideal conceptual tool for teaching pupils about the emergence and development of civilizations since it introduces pupils - through interactive gameplay - to the historical, geographical, cultural, and social influences which affect their development. If players are failing to make connections between the game world and the real world, however, then it follows that even a player who has mastered the details of a game such as *Civilisation* might assume that these details relate only to the game world, and therefore assume that they have

learnt nothing about 'real' history. In this respect, Squire questions, 'are players merely becoming adept at manipulating the game's sign system or are they also developing understandings of the phenomenon depicted by the simulation?' See Squire, 'Replaying History', p. 65. Clearly, this is a question which is relevant not only to considerations of the potential of computer games as teaching tools, but also to analyses of the influence of military computer games on popular understandings of warfare. The issues raised by Squire in his research into the use of computer games as teaching tools have also been identified by researchers analyzing the use of games for the purposes of military training. In both cases, the question of the perceived realism of games was a major contributor to how games were received and to how effective they were in transmitting their intended message. In the case of the use of games for the purposes of military training, as Alexander et al have argued, an increase in the perception of a game as realistic was accompanied by an increasing sense of 'buy-in' on the part of the player ('buy-in' being 'related to the amount of fidelity and perceived realism' experienced by a player when they play a game. See Alexander, Brunye, Sidman, and Weil, 'From Gaming to Training'). In turn, this led to an increased level of 'transfer' – the take up of skills learnt whilst playing the game which are necessary in a real operational environment. A reduction in the perception of the realism of the game had the opposite effect. In the same way, Squire's analysis into the potential of games as teaching tools revealed that the perception of games as unrealistic contributed to the sense of a disjuncture between the real world and the game world, thereby reducing the links which pupils made between in-game representations and their real world referents, and between the game's sign system and the real-world phenomenon being depicted. See Squire, 'Replaying History', p. 69. Research into the use of games as both teaching tools and military training tools has therefore shown that the player's perception of the realism of the game is a major contributor to how it is received and also to how successful the game is in transmitting its intended message.

⁶⁷ See <http://firsttofight.com/html/makingitreal.html> (Accessed 20th June 2007). There are numerous other examples of the marketing of games as realistic and authentic; the tagline for the latest version of *America's Army*, *America's Army: True Soldiers* (2007), for example, reads 'Created by soldiers, developed by gamers, tested by heroes' – a reference to the production procedure in which the game was tested by real soldiers prior to being released. *America's Army: True Soldiers* is the latest version of *America's Army* to be released for the Microsoft Xbox. See <http://www.truesoldiersgame.com/> (Accessed 10th August 2008).

⁶⁸ In principle, the authenticity of a game is therefore more closely related to the way in which the game, and the marketing and paratextual material which surrounds the game, encourages a belief in the authenticity of the game's origins, accuracy and authorship. In this respect, it is not only the marketing of games, but also computer game journalism, which has encouraged an understanding of the authenticity of games. In 'Weapons of Mass Distraction' (2002), for example, Wagner James Au interviews members of the military who are returning from Afghanistan and Iraq, and these soldiers serve as witnesses to the authenticity of computer games. Captain Jason Amerine, a West Point graduate who served in Afghanistan, explains the value of games as follows: 'The Army taught me all the skills I have, but at the same time, a lot of these first-person shooters, I think that they do tend to kind of get you in the right mind-set for some of the situations you might encounter in real life he says... When you're sitting there in some of these multiplayer shootouts, engaging your opposition, I think that it does kind of condition you a little bit to know what to look for. You get those visual cues down, I think is the best way to put it'. Describing his thought processes during a firefight in Afghanistan, Captain Amerine explains: 'It was kind of funny, because it was sort of like, Well, this is just like what I did on my computer... It definitely made it easier ... in a lot of ways it was similar to what you would see if you were playing a sniper in the original *Delta Force*, for example'. In this way, Captain Amerine's testimony serves much the same function as the marketing of games as military training tools; it supports the authenticity of games based on an understanding of their accurate representation of the realities of warfare. This close association between computer games and real warfare has also been encouraged by the U.S. military's televised recruitment commercials. In a recent U.S. Army recruitment

advertisement, two gamers are shown playing a military computer game when suddenly the sergeant depicted in the game knocks on the television screen, and, as the picture changes from computer game animation to real-life footage, asks ‘You guys look like you’re really into this. You want a real challenge?’ The advertisement’s targeting of the game playing demographic – and also its offer of a free copy of the *America’s Army* computer game – identifies game players as an audience which is likely to be interested and attracted not only in the vicarious pleasure of playing computer war games, but also by the reality which these games are seen as depicting. And whilst it distinguishes between the ‘real challenge’ of active service, and the experience of playing military computer games, its concluding question – ‘You ready to take this to the next level?’ – alludes to the idea of the military computer game as a training tool which prepares the player for active service. In so doing, the advert re-inscribes the close connection between the military and the computer game industry, and supports the understanding of the authenticity and realism of military computer games. The advert is available at http://warandvideogames.typepad.com/blog/2007/04/take_it_to_the_.html (Accessed 13th May 2007).

⁶⁹ In principle, the realism of a game, and the authenticity of a game, can be seen as relating to two distinct aspects of computer game representation; in practice, however, these understandings tend to be complementary and interdependent.

⁷⁰ Kline, Dyer-Witherford and De Peuter, *Digital Play*, p. 182.

⁷¹ At one stage, the level of violence which games presented was seen as a means of product differentiation. During the console wars of the early 1990s, Sega consciously increased the level of violence in their games and used this as a marketing strategy to differentiate Sega games from those of their competitor Nintendo. The success of Sega’s strategy was made clear when their version of the martial arts game *Mortal Kombat* (1993) – which was famous for the depiction of hearts being ripped out – outsold Nintendo’s more sanitized version by a ratio of two to one. This initiated what Marsha Kinder described as ‘a spiralling escalation of competitive violence’. See Kline, Dyer-Witherford and De Peuter, *Digital Play*, p. 133, 130 and 257. With the rise of the military-entertainment complex, however, the realism and authenticity of military computer games have replaced violence as the most crucial ingredients for success. On March 21st 2003, a day into the war in Iraq, Sony filed a trademark application for the phrase ‘Shock and Awe’ apparently for use as a Playstation title. Sony’s application (which was subsequently dropped) was very much in keeping with the ‘fetish for realistic gaming scenarios’ that Galloway describes. See Alexander Galloway, ‘Social Realism in Gaming’. *Game Studies* 4, no. 1 (2004). Available at <http://gamestudies.org/0401/galloway/> (Accessed 25th March 2005). The initial reaction of the computer game industry following 9/11 was to retract from ‘realism’. Ubisoft pulled its latest Tom Clancy terrorist game, and EA showed its embarrassment concerning the storyline of *Command and Conquer: Red Alert 2* – in which you have to destroy the World Trade Centre and the Pentagon – by offering a different box for the game. See Kline, Dyer-Witherford and De Peuter, *Digital Play*, p. 289. But since then, the market has been flooded with games based around real-life military conflicts. There has been a definite shift in the content of the first person and squad based shooter games since they arrived on the scene in the early 1990s with *Wolfenstein* and *Doom*. The plot of *Doom* – involving a space marine dispatched to destroy a mutant race created as a result of an experiment gone wrong – has continued to be worked and reworked to the present day, initially in a sequence in which the game engine of *Doom* was used to produce *Duke Nukem*, *Unreal*, *Descent*, and *Half-Life* – games with virtually the exact same settings, plots and formats as the original. Kline, Dyer-Witherford and De Peuter *Digital Play*, p. 251. Such games remain massively popular today, but alongside these sci-fi narratives, the genre of the realistic military shooter has developed. As Patrick Crogan explains: ‘After the groundbreaking success of *Wolfenstein*, *Doom*, and *Quake*, the genre was initially dominated by science fiction/horror fantasy scenarios’. Latterly, however, ‘it is as if the fantastic monsters of *Doom* and its progeny have been unmasked retrospectively as discarded disguises for enemy soldiers’. P. Crogan, ‘The Experience of Information in Computer Games’, *Scan Online Journal* 1, no. 1 (2004).

⁷² Take the game *KumaWar*, for example. It has a board of military veteran advisers and a retired Marine Corps Major General serves as one of its corporate chiefs. See Nick Turse and Tom Engelhardt, 'Bringing the War Home: The New Military-Entertainment Complex at War and Play' (2003), http://www.tomdispatch.com/index_mhtml?emx=x&pid=1012 (Accessed 28th January 2006). One of its key investors, General Thomas Wilkerson, commanded U.S. Marine forces in Operation Desert Storm. See www.inc.com/magazine/20040801/casestudy.html (Accessed 5th December 2005) and he provides military analysis and an explanation of tactics during the TV spot introduction to each mission. See <http://www.wired.com/wired/archive/12.03/wargames.html> (Accessed 5th December 2005). Some of its scenarios are based on declassified material from the Department of Defense (see <http://www.inc.com/magazine/20040801/casestudy.html> Accessed 5th December 2005), and the game uses satellite photos, footage from AP, ABC, and CBS, as well as interviewing soldiers, the CIA, Marines, Rangers, and terror analysts from CNN. See <http://www.itconversations.com/shows/detail370.html> (Accessed 5th December 2005). On top of this, the game producers work with the Army and Marines to develop missions for training, providing *KumaWar* with all the information they need to do so. See <http://www.itconversations.com/shows/detail370.html> (Accessed 5th December 2005).

⁷³ As Galloway argues, part of the realism of these games relies on a 'congruence requirement' – congruence between the events and situations being depicted on screen and the events which the player can relate to in real life. The game therefore serves as an extension of the player's political reality. As Galloway puts it, 'There emerges a true congruence between the real political reality of the gamer and the ability of the game to mimic and extend that political reality'. Clearly, this will not often represent a direct link to the immediate reality of the gamer, as most game players will not be fighting a real war whilst they fight the virtual one; but nevertheless, the games represent 'an expression of political realities as they exist today in global military power struggles' which they gamer can recognize and relate to. See Galloway, 'Social Realism in Gaming', p. 8

⁷⁴ Crucially for the study of the influence of military computer games on popular understandings of warfare, there is evidence to suggest that the understanding of the authenticity and realism of games is an understanding which is shared by many game players. A look at any online forum in which gamers discuss the merits of military computer games invariably reveals the centrality of notions of realism and authenticity. For example, the online forum for *Full Spectrum Warrior* contains a number of discussion threads entitled 'How realistic is this?' – the consensus being, 'very'. And the idea of the realism of the game, the authenticity of the game, and the game's relationship to the military is prominent throughout. See <http://www.neoseeker.com/forums/5993/t661128-how-relistic-this/> (Accessed 25th January 2008).

⁷⁵ The growing belief in the potential of the computer game to influence audiences either pedagogically, psychologically or ideologically is reflected in the myriad ways in which these games are now employed. They are used in education and learning, public policy, politics, health, medicine, therapy, and business. They have been used for political campaigning and critique, for medical and corporate training, for the promotion of social movements, and even for the treatment of Gulf War syndrome. For an overview of all the different ways in which games are used see <http://www.watercooler-games.org/> and <http://www.socialimpactgames.com/index.php> (Accessed 20th May 2008). The treatment of post-traumatic stress disorder is based on the game *Full Spectrum Warrior* and has been used on soldiers returning from Iraq. See James Randerson, 'Virtual War Helps US Soldiers Deal with Trauma' (2007), <http://technology.guardian.co.uk/print/0,,329720499-117802,00.html> (Accessed 19th February 2007). Anecdotal evidence from the classroom suggests that games can act as successful teaching tools. As Greg Toppo reports: 'History teacher David McDivitt wanted to find out whether video games could teach. So he asked 64 sophomores at Oak Hill High School in Converse, Ind., last spring to trade in their textbooks for a week and play a World War II simulation game instead. Another 45 stuck with the books... At week's end, he tested both groups and found that the gamers had learned more about the war and its geography — and wrote more sophisticated essays'. See Greg Toppo, 'Games Take on Books'

(2006), http://www.usatoday.com/tech/gaming/2006-11-29-ed-games_x.htm (Accessed 1st February 2007). Empirical studies and audience research into the use of computer games as a means of influencing interpretation of historical, social, and cultural issues suggest that they do indeed have an impact on understandings. In her paper, 'Videogames and Knowledge of History: A Multi-Method Approach', Simona Biancalana seeks to provide empirical evidence concerning the potential of videogames in shaping and promoting the knowledge of history. She analyses the content of *Great Battles of Rome* as a means of influencing understandings of Roman civilization. Biancalana found that players developed knowledge of specific weaponry, tactics and the winners and losers of battles. See Simona Biancalana 'Videogames and Knowledge of History: A Multi-Method Approach', (Paper presented at *Digital Games: Theory and Design* conference, Brunel University, England, September 14, 2007). See also Squire, 'Replaying History'.

⁷⁶ As Rutter and Bryce have argued in *Understanding Digital Games* (2006), whilst a number of commentators have pointed to the fact that the games industry now challenges the Hollywood box office in terms of revenue, such comparisons ignore considerations of DVD sales, rental, merchandising and other revenue streams associated with the film industry and Hollywood. See Jason Rutter and Jo Bryce, eds., *Understanding Digital Games* (London: SAGE Publications, 2006), p. 5.

⁷⁷ See, for example, the transcript of a discussion which took place on PBS concerning the film *Saving Private Ryan* (1998) http://www.pbs.org/newshour/bb/entertainment/july-dec98/ryan_8-3.html (Accessed 28th November 2007). Interestingly, the processes, testimonies, and structures of legitimization which support the understanding of the film as realistic and authentic are much the same as those which support understandings of games as realistic and authentic.

⁷⁸ See, for example, http://www.archive.org/details/Rifle_Marksmanship_with_M1_Rifle_Part_1 <http://www.archive.org/search.php?query=creator%3A%22U.S.%20Army%22> <http://uk.youtube.com/watch?v=U93PBZlyqBs> <http://www.realmilitaryflix.com/public/departement61.cfm> (Accessed 20th October 2008). Like military computer games, many films have also been influenced by military involvement during production. See David L. Robb, *Operation Hollywood: How the Pentagon Shapes and Censors the Movies* (New York: Prometheus Books, 2004).

⁷⁹ For descriptions of the wide range of disparate simulations being developed by the military see the ICT website at <http://ict.usc.edu/>

⁸⁰ Simon Penny, 'Representation, Enaction, and the Ethics of Simulation', in *First Person: New Media as Story, Performance, and Game*, eds. Noah Wardrip-Fruin and Pat Harrigan (Cambridge, Massachusetts and London: MIT Press, 2004), p. 75

⁸¹ See James H. Korris, 'Full Spectrum Warrior: How the Institute for Creative Technologies Built a Cognitive Training Tool for Xbox' (2004), <http://www.ict.usc.edu/publications/korris-fsw-asc.pdf> (Accessed 16th January 2006).

⁸² See Korris, 'Full Spectrum Warrior'.

⁸³ Penny, 'Representation, Enaction, and the Ethics of Simulation', p. 83

⁸⁴ As James Newman argues: 'Assimilating knowledge gleaned from a game is critical to the continued success of the player'. See James Newman, *Videogames* (London: Routledge, 2004), p. 87.

⁸⁵ For a summary of the ludology versus narratology debate, see Jan Simons, 'Narrative, Games, and Theory: What Ball to Play?', *Game Studies: The International Journal of Computer Game Research* 7, no. 1 (2007).

⁸⁶ See Espen Aarseth, 'Computer Game Studies: Year One', *Game Studies: The International Journal of Computer Game Research* 1, no. 1 (2001), and Markku Eskelinen, 'The Gaming Situation', *Game Studies: The International Journal of Computer Game Research* 1, no. 1 (2001.)

⁸⁷ For more on the definition of these terms and how they are used see Eric Zimmerman, 'Narrative, Interactivity, Play, and Games: Four Naughty Concepts in Need of Discipline', in

First Person: New Media as Story, Performance, and Game, eds. by Noah Wardrip-Fruin and Pat Harrigan (Cambridge, Massachusetts and London: MIT Press, 2004).

⁸⁸ Janet H. Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (Cambridge, Massachusetts: MIT Press, 1997), p. 143/144

⁸⁹ Eskelinen, 'The Gaming Situation'.

⁹⁰ Eskelinen, 'The Gaming Situation'.

⁹¹ Jesper Juul, *Half Real* (Cambridge, Massachusetts and London: MIT Press, 2005), p. 12.

⁹² Espen Aarseth, 'Genre Trouble: Narrativism and the Art of Simulation', in *First Person: New Media as Story, Performance, and Game*, eds. Noah Wardrip-Fruin and Pat Harrigan (Cambridge, Massachusetts and London: MIT Press, 2004), p. 48

⁹³ Aarseth, 'Genre Trouble', p. 48.

⁹⁴ Juul, *Half Real*, p. 161.

⁹⁵ See <http://www.neoseeker.com/forums/5993/t661128-how-relistic-this/> (Accessed 25th January 2008).

⁹⁶ For a discussion of game characters, see Jon Dovey and Helen Kennedy, *Game Cultures: Computer Games as New Media* (Maidenhead and New York: Open University Press, 2006), p. 96-99.

⁹⁷ Barry Atkins, *More Than a Game: The Computer Game as Fictional Form* (Manchester and New York: Manchester University Press, 2003), p. 57.

⁹⁸ Gonzalo Frasca, 'Simulation Versus Narrative: Introduction to Ludology' (2003), http://www.ludology.org/articles/VGT_final.pdf (Accessed 6th November 2008), p. 4.

⁹⁹ Frasca, 'Simulation Versus Narrative' [Online], p. 6

¹⁰⁰ Frasca, 'Simulation Versus Narrative' [Online], p. 11

¹⁰¹ Frasca, 'Simulation Versus Narrative' [Online], p. 7

¹⁰² Juul, *Half Real*, p. 56.

¹⁰³ Juul, *Half Real*, p. 17.

¹⁰⁴ David Buckingham, 'Doing Game Analysis', in *Computer Games: Text, Narrative and Play*, eds. Dianne Carr, David Buckingham, Andrew Burn and Gareth Schott (Cambridge: Polity, 2006), p. 181. As Jan Simons has argued: 'The courses of action open to the player are scripted into the design of the game'. See Jan Simons, 'Narrative, Games and Theory: What Ball to Play?', *Game Studies: The International Journal of Computer Game Research* 7, no. 1 (2007).

¹⁰⁵ As Diane Carr has argued: it is 'nonsensical to disregard' the unique aspects of games in order to have them 'conform to a model of narrative structure'. 'On the other hand, it would be counterproductive to ignore the game's narrative qualities, in order to have it obey a preoccupation about what games (and hence the study of games) should be about'. Dianne Carr, 'Games and Narrative', in *Computer Games: Text, Narrative and Play*, eds Dianne Carr, David Buckingham, Andrew Burn and Gareth Schott (Cambridge: Polity, 2006), p. 38

¹⁰⁶ See W. Smartout et al, 'Simulation Meets Hollywood: Integrating Graphics, Sound Story and Character for Immersive Simulation' (2003), <http://ict.usc.edu/files/publications/integration-paper15.pdf> (Accessed 26th October 2008), p. 16.

¹⁰⁷ Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge, Massachusetts and London: MIT Press, 1999), p. 45.

¹⁰⁸ Bolter and Grusin, *Remediation*, p. 15.

¹⁰⁹ A lexis-nexis search for 'military and computer games' on 26th May 2007 returned more than 3000 hits.

¹¹⁰ For a representative sample of such articles, see Stephen Graham, *War Play: Practising Urban Annihilation* (2007), http://www.geography.dur.ac.uk/information/staff/personal/graham/graham_documents/DOC%205.pdf (Accessed 12th April 2007). Andy Deck, 'Demilitarizing the Playground', *No Quarter* (2004), www.artcontext.org/crit/essays/noQuarter (Accessed 8th November 2005). David Nieborg's 'We Want the Whole World to Know How Great the U.S. Army Is! Computer Games and Propaganda' (2006), http://www.gamespace.nl/content/Nieborg_GamesAndPropaganda_2006.pdf (Accessed 25th

February 2007). Nick Turse and Tom Engelhardt's 'Bringing the War Home: The New Military-Entertainment Complex at War and Play' (2003), and Ed Halter's book *From Sun Tzu to Xbox: War and Video Games* (2006). This body of work also includes articles which deal with the practical realities of the 'military entertainment complex' such as Tim Lenoir's series of essays, 'All But War is Simulation: The Military-Entertainment Complex' (2000); 'Fashioning the Military-Entertainment Complex' (2002); and 'Programming Theatres of War: Gamemakers as Soldiers' (2003). Such articles provide fact-based historical accounts of the practical and economic realities of the military-computer game relationship and how such a relationship came about; but they provide little or nothing in the way of analysis of actual commercial computer games, their content, or their gameplay. This body of work also includes articles and books such as those written by James Der Derian - *Virtuous War: Mapping the Military-Industrial-Media-Entertainment Network* (2001) and 'War as Game' (2003) – which extend the description of the practical realities of the military-computer game relationship, and suggest that the use of computer game simulations for the purposes of military training and planning has had a detrimental effect on real military operations.

¹¹¹ See <http://www.americanrhetoric.com/speeches/dwighteisenhowerfarewell.html>

(Accessed 1st August 2008) for the text and audio of Eisenhower's farewell address.

¹¹² In *The Political Economy of U.S. Militarism* (New York: Palgrave MacMillan, 2006), for example, Ismael Hossein-Zadeh begins his text by citing Eisenhower's address, which is almost invariably cited in any text to do with American militarism.

¹¹³ Carl Boggs and Tom Pollard, *The Hollywood War Machine: U.S. Militarism and Popular Culture* (Boulder and London: Paradigm Publishers, 2007), p. 18.

¹¹⁴ See Der Derian, *Virtuous War*; Andy Deck, 'Demilitarizing the Playground' (2004), www.artcontext.org/crit/essays/noQuarter (Accessed 8th November 2005); Stephen Stockwell and Adam Muir, 'The Military-Entertainment Complex: A New Facet of Information Warfare' (2003), http://journal.fibreculture.org/issue1/issue1_stockwellmuir.html (Accessed 1st August 2008); and Nick Turse and Tom Engelhardt, 'Bringing the War Home: The New Military-Entertainment Complex at War and Play' (2003),

<http://www.tomdispatch.com/index.mhtml?emx=x&pid=1012> (Accessed 28th January 2006).

¹¹⁵ Stockwell and Muir, 'The Military-Entertainment Complex'.

¹¹⁶ Stephen Graham, 'War Play: Practicing Urban Annihilation' (2007),

http://www.geography.dur.ac.uk/information/staff/personal/graham/graham_documents/DOC%205.pdf (Accessed 12th April 2007).

¹¹⁷ Jonathan Burston, 'War and the Entertainment Industries: New Research Priorities in an Era of Cyber-Patriotism', in *War and the Media: Reporting Conflict 24/7*, ed. Daya Kishan Thussu and Des Freedman (London: Sage, 2003), p. 167

¹¹⁸ James Der Derian, *Virtuous War*, p. 126

¹¹⁹ Neal Curtis, *War and Social Theory: World, Value and Identity* (New York: Palgrave Macmillan), p. 147

¹²⁰ Curtis, *War and Social Theory*, p. 149.

¹²¹ The idea of MIMENET which Curtis attempts to paint is therefore not dissimilar to the plot of the James Bond film *Tomorrow Never Dies* (1997), in which the media mogul Elliott Carver attempts to deliberately engineer a war between China and the UK in order to gain exclusive access to the news coverage of the events.

¹²² Halter, *From Sun Tzu to Xbox*, p. xvii.

¹²³ Halter, *From Sun Tzu to Xbox*, p. xix.

¹²⁴ Deck, 'Demilitarizing the Playground'

¹²⁵ Graham, 'War Play: Practising Urban Annihilation'.

¹²⁶ Turse and Engelhardt, 'Bringing the War Home'.

¹²⁷ See Steven Poole, *Trigger Happy: The Inner Life of Video Games* (London: Fourth Estate, 2000).

¹²⁸ Jack Thompson cited in Boggs and Pollard, *The Hollywood War Machine*, p. 230.

¹²⁹ David Grossman cited in Henry Jenkins, 'The War Between Effects and Meaning: Rethinking the Video Game Debate' (2005),

<http://web.mit.edu/cms/faculty/WarEffectMeaning.htm> (Accessed 10th September 2007).

¹³⁰ Der Derian, *Virtuous War*, p. 10

¹³¹ Der Derian, *Virtuous War*, p. 11

¹³² Deck cited in Graham, 'War Play: Practising Urban Annihilation'.

¹³³ See Mike Snider, 'Big-Selling War Games May Carry Bigger Cost' (2004), http://www.usatoday.com/tech/news/2004-06-09-war-video-games-inside_x.htm (Accessed 18th February 2007).

¹³⁴ The ruling attempted to limit the access of minors to mature or violent video games. Limbaugh argued that computer games did not merit the protection of the First Amendment since they did not qualify as free speech. See Gonzalo Frasca, 'Simulation versus Narrative: Introduction to Ludology' in Mark J.P. Wolf and Bernard Perron (eds.), *The Video Game Theory Reader* (New York and London: Routledge, 2003). This ruling was overturned in the Court of Appeal in 2003. See Chris Morris, 'Constitution Protects Video Games' (2003), http://money.cnn.com/2003/06/03/technology/games_firstamendment/index.htm (Accessed 10th October 2006). Judge Limbaugh's legal decision to deny games first amendment protection, and its subsequent rejection, provides an interesting parallel between computer games and film, particularly in relation to the 'Miracle Decision'. The legal case of *Joseph Burstyn, Inc. v. Wilson* 343 U.S. 495 (1952) was a landmark decision by the United States Supreme Court which secured First Amendment protections of freedom of expression for the film industry. It ruled that restrictions placed on the showing of films, or the denial of the license for a film which was considered sacrilegious, violated the First Amendment and the protection on freedom of speech. This ruling came in response to the limitations placed on the film *The Miracle* (released in 1950 in America) which the New York State Board of Regents had ruled was sacrilegious and had subsequently banned. The 'Miracle Decision' overturned the earlier ruling in the case of *Mutual Film Corporation v. Industrial Commission of Ohio* (1915), which had ruled that the film was not an art form worthy of First Amendment protection. See <http://www.dailyherald.com/special/crossingcenturies/2a/12rest.asp> and http://www.digitalhistory.uh.edu/historyonline/miracle_decision.cfm (Accessed 7th May 2008).

¹³⁵ Halter, *From Sun Tzu to Xbox*, p. xvii.

¹³⁶ Halter, *From Sun Tzu to Xbox*, p. xv.

¹³⁷ This belief that computer games somehow bypass conscious interpretation in order to induce a spontaneous effect on their audience is reminiscent of the earliest understandings of advertising and public relations. As Stuart Ewen argues in *PR! A Social History of Spin* (1996), 'the advertisers of the twenties and thirties embraced a belief that images were the most significant tools for bypassing the critical thought processes of consumers'. See Stuart Ewen, *PR! A Social History of Spin* (New York: Basic Books, 1996), p. 210. Despite describing games as vacuous and messageless, critics such as Halter can therefore maintain that games influence their audience.

¹³⁸ Jenkins, 'The War Between Effects and Meaning'.

¹³⁹ Barry Atkins and Tanya Krzywinska, *Videogame, Player, Text* (Manchester and New York: Manchester University Press, 2007), p. 5.

¹⁴⁰ Ian Bogost, *Persuasive Games: The Expressive Power of Videogames* (Cambridge, Massachusetts and London: MIT Press, 2007), p. 36).

¹⁴¹ Bogost, *Persuasive Games*, p. 64.

¹⁴² Bogost, *Persuasive Games*, p. 75

¹⁴³ See David Reid, 'Video Games Find Their Political Voice' (2004), <http://news.bbc.co.uk/1/hi/technology/3604940.stm> (Accessed 26th June 2006). As William Uricchio argues: There is 'little analysis of tendencies latent in the structural logic of the process [of] games'. 'Games like *Civilisation* are built upon notions such as social coherence, progression and increasing complexity as a sign of advance. Indeed, *Civilisation* boils down to several ideologically positioned maxims such as the more efficient production, the more advanced the civilization; and the more democracy, the better'. William Uricchio, 'Simulation, History, and Computer Games', in Joost Raessens and Jeffrey Goldstein (eds), *Handbook of Computer Game Studies*, Cambridge, Massachusetts: MIT Press, 2005), p. 335. Such methodologies have been used to decipher the ideologies of games such as *SimCity* and

Civilisation. Tom Henthorne, for example, argues that in *SimCity*, the game instructs players that careful planning, capital investment, and technological advancement, are the means to a more perfect society. In *Civilisation*, as the player manual explains, ‘The fundamental concepts for a successful civilization are the expansion and growth of your cities, and acquiring new technology’. The internal logic of the game therefore betrays a particular world view and ideology, which, as Justin Hall argues, could be seen as reflecting the ‘high technology late capitalist mindset of America’. Or as Carl-Magnus Dumell observes: ‘the fixed set of rules are biased and reflect a conservative American interpretation of the world. Cities have to be equipped with temples and cathedrals to make people prosperous, the discovery of communism enables the building of police stations and so on. [The] Wall Street Journal is said to once have pointed out the fact that in *Civilization* market economy and low taxation leads to growth’. See Tom Henthorne, ‘Cyber-Utopias: The Politics and Ideology of Computer Games’, *Studies in Popular Culture* 25, no. 3 (2003), pp. 63-76. Available from <http://www.pcasacas.org/SPC/> (Accessed 5th September 2007).

¹⁴⁴ As Kurt Squire argues in relation to his research into the use of computer games as teaching tools: ‘Students learn concepts by playing with them and observing patterns that emerge from rule sets and initial conditions’. Kurt Squire, ‘Replaying History’, p. 399.

¹⁴⁵ Virilio cited at <http://www.ctheory.net/articles.aspx?id=132> (Accessed 24th July 2008).

¹⁴⁶ Virilio cited in Der Derian, *Virtuous War*, p. 68

¹⁴⁷ My critique of Virilio owes much to Douglas Kellner, ‘Virilio, War and Technology: Some Critical Reflections’ (1999), <http://www.gseis.ucla.edu/faculty/kellner/essays/viriliowartechology.pdf> (Accessed 1st November 2007).

¹⁴⁸ Virilio cited in John Armitage ed., *Virilio Live: Selected Interviews* (London: Sage, 2001), p. 191

¹⁴⁹ Paul Virilio, *Desert Screen: War at the Speed of Light* (London: Continuum, 2002), p. 108

¹⁵⁰ Paul Virilio, *War and Cinema: The Logistics of Perception* (London: Verso, 1989), p. 26

¹⁵¹ A look at any bibliography on the topic reveals Virilio’s influence. See, for example, Thusu, ‘Live TV and Bloodless Deaths’; Burston, ‘War and the Entertainment Industries’; Der Derian, *Virtuous War*, and Curtis, *War and Social Theory*.

¹⁵² Burston, ‘War and the Entertainment Industries’, p. 173

¹⁵³ As Jon Dovey argues: ‘We have developed great expertise in understanding readers’, users’, and players’ responses to mediation – we claim privileged insight into the kind of interpretive responses available to us. However, we seldom consider how the wide range of these experiences are already prescribed by the choices made by media producers... Of course there is a small academic industry that attempts to understand the social function of media institutions by interpreting their products, through further practices of hermeneutic surgery on the ideological body. However there is still very little work that subjects the process of production to critical analysis’. See Jon Dovey, ‘Why am I in Vietnam? The History of a Videogame’, in *Videogame, Player, Text*, eds. Barry Atkins and Tanya Krzywinska (Manchester and New York: Manchester University Press, 2007), p. 66/67. Dovey’s analysis of the production culture surrounding *Conflict: Vietnam*, however, extends only as far as considering why it is that the game producers decided to produce a war game, and why this war game was based around Vietnam. It does not include an analysis of the production pressures which affect the actual content and gameplay of computer games.

¹⁵⁴ See Bacevich, *The New American Militarism*, p. 3 and <http://www.americanempireproject.com/booklist.asp> (Accessed 9th March 2008) for a list of such books.

¹⁵⁵ Bacevich, *The New American Militarism*, p. 3 and 4

¹⁵⁶ Bacevich, *The New American Militarism*, p. ix

¹⁵⁷ David Clearwater has asked – but not answered – a similar set of questions in his conference paper ‘War Games: Militarism, Recruitment, and the Emergence of the Video Game’, (Paper presented at *Society for Cinema and Media Studies Conference*, Atlanta, Georgia, 2004). ‘How do these games affect the general perception of war, of national conflicts and national interests, and historical understandings of past conflict? More

importantly, even when based on past military conflicts, how do these media texts affect the perception of current war and conflict?

¹⁵⁸ See Halter, *From Sun Tzu to Xbox*, p. 177.

¹⁵⁹ Kline, Dyer-Witherford and De Peuter, *Digital Play*, p. 130/257.

¹⁶⁰ See Electronic Software Association, '2007: Essential Facts About the Gaming Industry'.

¹⁶¹ See Mia Consalvo, 'It's No Videogame: News Commentary and the Second Gulf War' (2003), www.digra.org/dl/db/05163.33172 (Accessed 20th June 2007).

¹⁶² The use of precision guided missiles; unmanned aerial vehicles (UAVs); joint surveillance and target attack radar system aircraft (JSTARS); GPS satellites; space systems support; MLRS – multiple launch rocket systems; and satellites for image and electronic intelligence, missile launch warning and weapons guidance, and navigation and communications, gave a striking impression of the success of military high-technology just when questions about the shape of the armed forces in the post-Cold War world were being asked. See Tim Benbow, *The Magic Bullet? Understanding the Revolution in Military Affairs*, (London: Brassey's, 2004), p. 69. RAND described the operation as a 'milestone in military history'. See Bacevich, *The New American Militarism*, p. 164. A CSIS report on Desert Storm stated that 'the effect of high technology – in weapons, command and control systems, intelligence, and other areas – has revolutionised the nature of war'. Dick Cheney, then Secretary of Defense, argued that 'This war demonstrated dramatically the new possibilities of what has been called the "military-technological revolution in warfare"'. Following interwar strategists like Douhet, air power was again taken up as a revolutionary force. As one USAF officer put it: 'This is the essence of Douhet's concepts: air power so powerful that it alone could defeat an enemy. It happened in Desert Storm'. For Lieutenant Colonel Jones: 'Perhaps the key question remaining from Desert Storm is "Did we need a ground operation at all?"' See Benbow (2004), *The Magic Bullet?*, p. 56, 61 and 66.

¹⁶³ Benbow, *The Magic Bullet?*, p. 82

¹⁶⁴ During coverage of Operation Iraqi Freedom in 2003, Christopher Dickey reported for CNN that: 'What people in the United States maybe don't appreciate... is the incredible divergence that exists now between what the rest of the world sees on its television screens and what the American audience is seeing, not so much on CNN, but there are many other American networks that make this sound like it's a football game and look like it's a video game. What the rest of the world is seeing is dead children, dead soldiers, dead bodies, ravaged cities, and it's only going to get worse.' See Consalvo, 'It's No Videogame'.

¹⁶⁵ Consalvo, 'It's No Videogame'.

¹⁶⁶ See Sherry, *In the Shadow of War*, p. 474.

¹⁶⁷ T.B. Allen, for example, has argued that 'Increasing automation and methods of computerized warfare have reduced the role of interpersonal combat and have renewed the close connection between war and games. In future there may be little difference between real war and virtual war, or between war and war games'. T. B. Allen cited in T. J. Cornell and T. B. Allen, eds. *War and Games* (Centre for Interdisciplinary Research on Social Stress, San Marino: The Boydell Press, 2002), p. 14. Chris Ayres, like Graham, argues that the Unmanned Aerial Predator 'is practically undistinguishable from a video game'. See Chris Ayres, 'The Changing Face of War: Now a Pilot in Las Vegas Can Blast a Sniper in a Baghdad Apartment', *The Times*, March 14th, 2008, p. 26/27.

¹⁶⁸ Stephen Graham (2007), 'War Play: Practising Urban Annihilation', p. 3

¹⁶⁹ Graham points out what is an interesting parallel between media and military technologies; the fact that the military are beginning to use video game console controls within real military weaponry: 'Predator controls have been explicitly remodeled to resemble Playstation controls'. The reason, as Michael Keaton, a Raytheon weapons designer explains, is that 'there's no point in reinventing the wheel. The current generation of pilots was raised on the Playstation, so we created an interface that they will immediately understand'. But although this marks another instance of the apparently bizarre connections between the military and the computer game industry, Graham's analysis ignores the actual content of games and therefore the actual experience of gameplay. See Stephen Graham, 'War Play: Practising Urban Annihilation', p. 5.

¹⁷⁰ Toby Clark, *Art and Propaganda in the Twentieth Century* (London: Orion Publishing Group, 1997), p. 7.

¹⁷¹ Linda Robertson, *The Dream of Civilised Warfare: World War I Flying Aces and the American Imagination* (Minneapolis and London: University of Minnesota Press, 2003), p. 116/117

¹⁷² See David Wong (No Date), 'The Ultimate War Simulation', <http://www.pointlesswasteoftime.com/games/wargames.html> (Accessed 1st May 2007).

¹⁷³ Niall Ferguson, 'How to Win a War' (2006), www.nymag.com/news/features/22787/index.html (Accessed 31st January 2007).

¹⁷⁴ Ferguson, 'How to Win a War'.

¹⁷⁵ Niall Ferguson, 'This Vietnam Generation of Americans has Not Learned the Lessons of History' (2005), <http://www.niallferguson.org/publications/Telegraph%20-%20Opinion%20-%20This%20Vietnam%20generation%20of%20Americans%20has%20not%20learnt%20the%20lessons%20of%20history.pdf> (Accessed 24th June 2006).

¹⁷⁶ Ernest May, *"Lessons of the Past": The Use and Misuse of History in American Foreign Policy* (New York: Oxford University Press, 1973), p. xi

Chapter 1: From Underdog to Overmatch: Computer Games, Propaganda, and Military Transformation

¹ David Nieborg, 'Changing the Rules of Engagement - Tapping into the Popular Culture of America's Army, the Official U.S. Army Computer Game' (MA Diss., Utrecht University, 2005), p. 152.

² Ed Halter, *From Sun Tzu to Xbox: War and Computer Games* (New York, Thunder's Mouth Press, 2006), p. x.

³ Casey Wardynski, 'Informing Popular Culture' (2004), <http://www.movesinstitute.org/~zyda/pubs/YerbaBuenaAABooklet2004.pdf> (Accessed 1st June 2006).

⁴ Strategy games had tended to take a 'God-game' perspective, looking down on a two-dimensional map from above, and controlling troops, armies or civilizations by selecting the abstract icons used to depict them.

⁵ Jon Dovey, 'Why am I in Vietnam? The History of a Videogame', in *Videogame, Player, Text*, eds. Barry Atkins and Tanya Krzywinska (Manchester and New York: Manchester University Press, 2007), p. 75.

⁶ John Newsinger, *Dangerous Men: The SAS and Popular Culture* (London: Pluto Press, 1997), p. 49 and 140.

⁷ These heroes have been lionized in films such as *The Sands of Iwo Jima* (1949), *Strategic Air Command* (1955), and *Green Berets* (1968).

⁸ Barry Atkins, *More Than a Game: The Computer Game as Fictional Form* (Manchester and New York: Manchester University Press, 2003), p. 93/94.

⁹ Jon Dovey, 'Why Am I in Vietnam?', p. 74.

¹⁰ See the sketch 'Bombing', Episode 5, Series 2, *Big Train* (2004), directed by Jonathan Gershfeld.

¹¹ Dovey, 'Why Am I in Vietnam?', p. 74.

¹² Dovey, 'Why Am I in Vietnam?', p. 73

¹³ Dovey, 'Why Am I in Vietnam?', p. 74

¹⁴ In *Bravo Two Zero*, for example, the S.A.S. squad sets out without Land Rovers and they soon lose radio contact as a result of faulty equipment.

¹⁵ See <http://imdb.com/title/tt0041841/taglines> (Accessed 5th March 2007).

¹⁶ In this respect, the real-life story of Bravo Two Zero proved perfect for media representation, since the patrol troop had decided to depart without any support vehicles, and with minimal communications equipment, which subsequently broke down. See Newsinger, *Dangerous Men*. In *Rambo: First Blood Part II* (1985), when being briefed for his mission,

Rambo is told: 'Don't try the blood and guts routine, let technology do the work'. Having been shown around the operations support centre full of monitors and computer equipment, he is asked if he is impressed. Rambo responds, 'I always thought the brain was the best weapon'. 'Times change' he is told. 'For some' Rambo responds. As he jumps from the plane, his parachute is caught and he has to cut all of his equipment from him, leaving him only with his knife and bow and arrow. It has often been pointed out that the *Rambo* films recreate the suspicion of the political establishment and their role in restricting the war effort in Vietnam. But the *Rambo* films also evoke a suspicion of technology which was very much in keeping with the post-Vietnam attitude towards military high-technology. See Paul N. Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge, Massachusetts: MIT Press, 1996), p. 275. Whilst *Top Gun* (1986) does not attempt to engineer this sense of technological exclusion to the same extent as the *Rambo* films, it does suggest that the success of U.S. fighter pilots is a result of their skill and heroism which is achieved despite their inferior aircraft. For example, before the U.S. pilots are deployed, the flight Commander in the film, called 'Jester', explains that 'the jets you are fighting against are smaller, faster and more maneuverable, just like the enemy MiGs'. Not only does this position the U.S. pilots in the role of the underdog, it also points to the origins of 'Top Gun' in reality. 'Top Gun' is the informal name for the elite training facility which was created during the Vietnam War at the Miramar naval base. It was created in response to the poor kill ratios which U.S. pilots were experiencing in Vietnam – ratios which had stood at 8 to 1 in World War II and 10 to 1 in Korea, but had fallen to 2.4 to 1 and less in Vietnam. These poor kill ratios were blamed on McNamara's budgetary concerns and his insistence that Air Force and Navy planes should be designed primarily to drop large payloads – an emphasis which reduced maneuverability and meant they performed poorly in dog fights. In some respects, the Vietnam War was a catastrophe for airpower, as the resistance of Soviet missiles, anti-aircraft artillery, and MiG fighters led to large losses: 2,561 aircraft were lost, whilst 1,200 planes were crashed for non-combat reasons. 383 Air Force F-105 fighters were lost out of a total of 833 that were built. The Navy's Ault Report of 1968 studied the pilot loss rates in Vietnam and suggested a radical overhaul in training. This resulted in the creation of a new training program in air to air combat at Miramar, known as 'TopGun'. But despite this reinvigoration in the training of naval aviators, there remained question marks over the Navy's new plane, the F-14 – as the film *Top Gun* suggests. For statistics and details of Vietnam kill ratios and also for details of the origins of Top Gun see the chapter 'Recovering from Vietnam' and in particular pages 24-44 of Frederick Kagan, *Finding the Target: The Transformation of American Military Policy* (New York: Encounter Books, 2006).

¹⁷ Tim Benbow, *The Magic Bullet? Understanding the Revolution in Military Affairs* (London: Brassey's, 2004), p. 55

¹⁸ The Powell Doctrine – named after Secretary of Defense Colin Powell – was essentially a series of tests and preconditions for any policy decision concerning the deployment of U.S. troops. Military force should only be used as a last resort, in cases of vital national interest, where concrete and achievable political and military objectives had been identified, where there were secure assurances of popular and congressional support, where a clear exit strategy had been identified, and where overwhelming force would be used. The intention was to insulate the armed services from another Vietnam, and to fight only wars such as Desert Storm. See Andrew Bacevich, *The New American Militarism: How Americans Are Seduced by War* (Oxford: Oxford University Press, 2005), p. 51. But despite the origins of the Powell Doctrine as a means of preventing another Vietnam, in the post-Cold War world it came to be seen as placing overly restrictive limits of the use of military force. See footnote 19 for more on this, and the end of footnote 28 for a description of how Rumsfeld's plans for the Iraq War in 2003 were designed deliberately to disavow the Powell Doctrine.

¹⁹ In 1993, as the situation in Somalia deteriorated, Clinton's Secretary of State Madeleine Albright demanded of Powell, 'What's the point of having this superb military that you're always talking about if we can't use it?' See Andrew Bacevich, *American Empire: The Realities and Consequences of U.S. Diplomacy* (Cambridge, Massachusetts: Harvard University Press, 2002), p. 48. In 1999, as the situation in Kosovo deteriorated, Dana Pries

wrote in the Washington Post that the ponderous deployment of U.S. troops and armaments were reflective of an outdated military: 'the vaunted helicopters came to represent everything wrong with the Army as it enters into the twenty-first century: its inability to move quickly; its resistance to change; its obsession with casualties; its post-Cold War identity crisis'. See David Halberstam, *War in a Time of Peace: Bush, Clinton and the Generals* (London: Bloomsbury Publishing, 2002), p. 464. As Bill Keller argued, 'Since the gradual demise of the Soviet Union, certain scholars of combat had been arguing that the great lumbering military machine constructed for the Cold War was stubbornly ill suited to the new threats of a disorderly world and slow to exploit the new technologies of the information age.' See Bill Keller, 'The Fighting Next Time', *The New York Times*, March 10th 2002, p.32.

²⁰ Bacevich, *The New American Militarism*, p. 55.

²¹ Kagan, *Finding the Target*, p. 169/170.

²² Kagan, *Finding the Target*, p. 243.

²³ Department of Defense, 'Military Transformation: A Strategic Approach' (2003), www.oft.osd.mil/library/library_files/document_297_MT_StrategyDoc1.pdf (Accessed 15th April 2006), p. 17.

²⁴ Department of Defense, 'Military Transformation: A Strategic Approach'.

²⁵ See Richard B. Andres, Craig Wills and Thomas E. Griffith Jr., 'Winning With Allies: The Strategic Value of the Afghan Model', *International Security* 30, no. 3 (2005/2006); Stephen D. Biddle, *Afghanistan and the Future of Warfare: Implications for Army and Defense Policy* (Carlisle: Strategic Studies Institute, U.S. Army War College, 2002); Stephen D. Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton, N.J. and Oxford: Princeton University Press, 2004); Dave Moniz, 'Afghanistan's Lessons Shaping New Military', *USA Today*, October 8th 2002, 13A; Thom Shanker, 'After the War: Elite Fighters. Chief Details Huge Scope of Special Operations', *The New York Times*, July 28th 2003, A10.

²⁶ Andres, Wills and Griffith Jr., 'Winning With Allies'.

²⁷ Kagan, *Finding the Target*, p. 346.

²⁸ Following Afghanistan, Bush announced that: 'The conflict in Afghanistan has taught us more about the future of our military than a decade of blue ribbon panels and think-tank symposiums'. See Biddle, *Afghanistan and the Future of Warfare*, p. 3, footnote 3. 'Traditionally, war colleges have taught that to be sure of success, an attacking force must have a 3 to 1 advantage - a ratio that goes up to 6 to 1 in difficult terrain such as urban areas. Far from having a 3 to 1 advantage in Iraq, coalition ground forces (which never numbered more than 100,000) faced a 3 to 1 or 4 to 1 disadvantage'. See Max Boot, 'The New American Way of War', *Foreign Affairs*, 82, 4, (2003). Following Afghanistan, Rumsfeld had responded to questions concerning the size of the force by explaining that: 'I'm not sure that that much force is needed given what we've learned coming out of Afghanistan'. See Kagan, *Finding the Target*, p. 328. Rumsfeld had repeatedly pushed General Tommy Franks to overhaul his plans for the war in order to reduce the number of troops required. The military's existing contingency plan for Iraq, OPLAN 1003-98, called for more than 380,000 troops. Rumsfeld saw this as a classic example of old thinking, involving too many troops and too long a build-up period. See Gordon and Trainor, *Cobra II*, p. 26 and p. 4. In carrying out Operation Iraqi Freedom, the U.S. military took 26 days to conquer the country with less than 100,000 troops, and at a cost of 'only' 139 casualties. See Boot 2003, 'The New American Way of War'. Following the end of 'the major combat phase' in Iraq, proponents of military transformation again celebrated another startling victory which, they argued, showed that transformational technology could provide a fast, efficient and low casualty victory. Vice-President Dick Cheney described Operation Iraqi Freedom as 'Proof positive of our success to transform our military'. See Kagan, *Finding the Target*, p. 346. It was in the context of the apparently startling, rapid, and low-casualty 'victory' in Iraq, that Bush announced in April 2003, that 'By a combination of creative strategies and advanced technologies, we are redefining war on our terms'. See Bacevich, *The New American Militarism*, p. 148. According to Richard Armitage, the former U.S. Deputy Secretary of State, the primary reason for Rumsfeld's office putting forward a plan for Iraq involving such a small force was 'because they wanted to

disavow the Powell Doctrine' of overwhelming force. See Thomas E. Ricks, *Fiasco: The American Military Adventure in Iraq* (London: Penguin Books, 2006, p. 102.

²⁹ Dovey, 'Why Am I in Vietnam?', p. 79

³⁰ See http://www.youtube.com/results?search_query=a+130+gunship&search_type=nd (Accessed 10th July 2008).

³¹ Shanker, 'After the War: Elite Fighters'.

³² It is remarkable how similar the rhetoric of military transformation is to that of the electronic battlefield which Westmoreland adopted during the Vietnam War. Compare Admiral William Owen's description of future warfare to that of Westmoreland's in 1969. 'On the battlefield of the future, enemy forces will be located, tracked, and targeted almost instantaneously through the use of data links, computer assisted intelligence evaluation, and automated fire control. With first round kill probabilities approaching certainty, and with surveillance devices that can continually track the enemy, the need for large forces to fix the opposition physically will be less important... I see an Army built into and around an integrated area control system that exploits the advanced technology of communications, sensors, fire direction, and the required automatic data processing – a system that is sensitive to the ever-changing battlefield – a system that materially assists the tactical commander in making sound and timely decisions'. General William Westmoreland, former Commander in Chief of US Forces in Vietnam, 1969. See Edwards, *The Closed World*, p. 43/72.

³³ Bacevich, *The New American Militarism*, p. 21

³⁴ Technologies such as the HUD were foreseen in the 1959 Robert A. Heinlein novel *Starship Troopers*. Heinlein worked with Special Naval Projects in World War II. See Charles E. Gannon, *Rumors of War and Infernal Machines: Technomilitary Agenda-Setting in American and British Speculative Fiction* (Liverpool: Liverpool University Press, 2003), p. 211-214.

³⁵ See <http://www.ghostrecon.com/uk/ghostrecon3/crosscom.php> (Accessed 20th June 2007).

³⁶ See <http://www.ghostrecon.com/uk/ghostrecon3/crosscom.php> (Accessed 20th June 2008).

³⁷ See <http://www.ghostrecon.com/uk/ghostrecon3/iws.php> (Accessed 20th June 2008).

³⁸ See <http://www.ghostrecon.com/us/ghostrecon3/narcom.php> (Accessed 20th June 2007).

³⁹ See www.gdc4s.com (Accessed 20th June 2007).

⁴⁰ See <http://www.ghostrecon.com/uk/ghostrecon3/key-features.php> (Accessed 20th June 2007).

⁴¹ See <http://www.army.mil/fcs/f2c2/overview.html> (Accessed 20th June 2007).

⁴² Gannon, *Rumors of War*, p. 220.

⁴³ Gannon, *Rumors of War*, p. 211.

⁴⁴ See Neal Curtis, *War and Social Theory: World, Value and Identity* (New York: Palgrave MacMillan, 2006).

⁴⁵ Gannon, *Rumors of War*, p. 226.

⁴⁶ Gannon, *Rumors of War*, p. 145.

⁴⁷ In 'Military Transformation: A Strategic Approach' (2003), the Director of the Office of Force Transformation, Arthur Cebrowski, argues that 'The very character of warfare is changing... The last time we witnessed change of this magnitude was with the advent of the industrial age and the levee en masse. Both of these events are rapidly receding into the past. A new American way of war has emerged – network-centric operations'. See Department of Defense, 'Military Transformation: A Strategic Approach'.

⁴⁸ William S. Cohen, Secretary of Defense 1997-2001, for example, argued that 'Technology now gives the United States an opportunity that no other military has ever had: the ability to see through the fog of war more clearly and to strike precisely over long distances. This is what we call the revolution in military affairs. It means fighting with more stealth and surprise. It means achieving greater effectiveness with less risk'. See Bacevich, *American Empire*, p. 133.

⁴⁹ In a September 1999 campaign speech, Bush declared that as a result of the 'revolution in the technology of war, power is increasingly defined not by mass or size, but by mobility and swiftness'. 'On land our heavy forces must be lighter... And these forces must be organised in smaller, more agile formations'. See Kagan, *Finding the Target*, p. 266/267.

- ⁵⁰ See Shanker, 'Chief Details Huge Scope of Special Operations'; Biddle, *Afghanistan and the Future of Warfare*, p. iv; Keller, 'The Fighting Next Time'; Moniz, 'Afghanistan's Lessons Shaping New Military'; Rowan Scarborough, 'Pentagon Uses Afghan War as Model for Iraq', *The Washington Times*, December 4th, 2001, p. A1; Thom Shanker, 'Conduct of War is Redefined by Success of Special Forces', *The New York Times*, January 21st, 2002, p. A1. *Rolling Stone* magazine also had a series following the Marine 1st Recon Division during the Iraq War in 2003. See 'The Killer Elite' (2003), http://www.rollingstone.com/news/story/5938873/the_killer_elite/ (Accessed 25th April 2008).
- ⁵¹ Wagner James Au, 'America's Arming: Digital Memories, Real Bullets' (2004), <http://www.movesinstitute.org/~zyda/pubs/YerbaBuenaAABooklet2004.pdf> (Accessed 20th April 2007), p. 33
- ⁵² Linda Robertson, *The Dream of Civilised Warfare: World War I Flying Aces and the American Imagination* (Minneapolis and London: University of Minnesota Press, 2003), p. xv.
- ⁵³ See Andy Deck, 'Demilitarizing the Playground', *No Quarter* (2004) www.artcontext.org/crit/essays/noQuarter (Accessed 8th November 2005); Nick Turse and Tom Engelhardt, 'Bringing the War Home: The New Military-Entertainment Complex at War and Play' (2003), <http://www.tomdispatch.com/index.mhtml?emx=x&pid=1012> (Accessed 28th January 2006); and Ed Halter, *From Sun Tzu to Xbox: War and Video Games* (New York: Thunder's Mouth Press, 2006).
- ⁵⁴ See <http://www.neoseeker.com/forums/5993/t661128-how-relistic-this/> (Accessed 25th January 2008).
- ⁵⁵ Robertson, *The Dream of Civilised Warfare*, p. 116/117
- ⁵⁶ Jerome de Groot, 'Empathy and Enfranchisement: Popular Histories', *Rethinking History: The Journal of Theory of Practice* 10. no. 3 (2006), p. 405.
- ⁵⁷ Moniz, 'Afghanistan's Lessons Shaping New Military'.
- ⁵⁸ Interestingly, for many years, the leaders of the Special Forces in both the U.K. and the U.S. saw their daring missions in much the same light as media producers: an attempt to escape increasing mechanization and to show that human action still held the key to military success. This was the motivation behind the S.A.S. mission Bravo Two Zero in the Gulf War in 1991, and also behind the U.S. Operation Eagle Claw in 1980 in Tehran – one of the first missions for the newly formed U.S. DELTA Force. In his account of the Gulf War, the head of the S.A.S., General Peter de la Billiere, described his determination to 'demonstrate the importance of individual human beings in warfare'. See Newsinger, *Dangerous Men*, p. 37. The head and creator of the newly formed U.S. DELTA Force, Colonel Charlie Beckwith, saw Operation Eagle Claw mission in much the same light, as a way of escaping the increasing mechanization and bureaucracy of conventional military operations. See Mark Bowden, 'The Desert One Debacle' (2006), <http://www.theatlantic.com/doc/200605/iran-hostage> (Accessed 1st April 2008). On both these occasions, however, the efforts of the Special Forces were either frustrated, marginalized, or met by failure. For example, the head of Allied operations in the Gulf in 1991, U.S. General Schwarzkopf, did not even mention the S.A.S. in his account of Desert Storm; and the DELTA Force Operation Eagle Claw was a disaster. Although the S.A.S. mission Bravo Two Zero received considerable media attention, this was ultimately due, as the producers of the *Conflict* games revealed, to the fact that it offered a far more interesting image of Desert Storm than the broader reality of airpower, massed troops, and high-technology. In the U.S. – unlike in the U.K. – it was not until the new millennium that the Special Forces became famous. See Newsinger, *Dangerous Men*, p. 55. Under the new policy of transformation, however, the Special Forces, including the S.A.S., DELTA Force and Marine Reconnaissance Units, find themselves at the forefront of military operations, becoming the centerpiece of a new American way of war which was showcased in what was seen as a revolution in war fighting doctrine in Afghanistan and which was continued in Iraq with perhaps the largest deployment of Special Forces troops ever. The success of U.S. Special Forces in Afghanistan, and the media attention that this encouraged, dovetailed with the release of *Black Hawk Down* (book 1999; film 2001). As in the case of the S.A.S. mission Bravo Two Zero, the operation on which the film was based - Operation Restore Hope in Somalia (1994) – had been of questionable success; yet Ridley Scott's film created an image

of DELTA Force as exceptionally skilled, heroic and fearless soldiers, with the elite Rangers playing a supporting role. Despite the ambiguous success of the mission which it represented, it catapulted the U.S. Special Forces to fame. The film's depiction of Delta Force – the 'D-Boys' – became famous, and as a result, when the film was developed into a game in 2003, it was renamed *Delta Force: Black Hawk Down*, to emphasize the role of the Special Forces. In the new millennium, the depiction of the Special Forces narrative therefore no longer simply reflects the imperatives of media production, but also the reality of military policy.

⁵⁹ Charles E. Gannon, for example, argues that 'the age of the scientific soldier' signals the age of 'post-heroic warfare' and 'the death of chivalry'. See Gannon, *Rumors of War*, p. 34 and p. 38. Paul Virilio argues that 'The disintegration of the warrior's personality is at a very advanced stage. Looking up, he sees the digital display (opto-electronic or holographic) of the windscreen collimator; looking down, the radar screen, the onboard computer, the radio and the video screen, which enables him to follow the terrain with its four or five simultaneous targets; and to monitor his self-navigating Sidewinder missiles fitted with a camera of infra-red guidance system'. See Paul Virilio, *War and Cinema: The Logistics of Perception* (London: Verso, 1989), p. 84. Chris Hables Gray argues that 'In postmodern war, the central role of human bodies in war is being eclipsed rhetorically by the growing importance of machines in general and weapons in particular'. See Chris Hables Gray, *Postmodern War: The New Politics of Conflict* (London: Routledge, 1997), p. 46. And Hugh Gusterson argues that contemporary representation of warfare 'marginalises the presence of the body in war, [and] fetishizes machines'. See Gray, *Postmodern War*, p. 46.

⁶⁰ See Robertson, *The Dream of Civilised Warfare*, p. 196.

⁶¹ See Edward N. Luttwak, 'Towards Post-Heroic Warfare', *Foreign Affairs* 74, no. 3 (1995):109-122. And Edward N. Luttwak, 'A Post-Heroic Military Policy', *Foreign Affairs* 75, no. 4 (1996): 33-44.

⁶² This idea of the increasing use of military high-technology as signalling a form of post-heroic warfare was perfectly encapsulated by *Jarhead* (book 2003; film 2005), a book and film based on the real experiences of U.S. Marine Anthony Swofford during Desert Storm. In *Jarhead*, Swofford and his elite team of Marine reconnaissance scout snipers – the perfect protagonists for a behind-the-lines hero narrative - are denied the opportunity of living out their heroic fantasies by the overbearing influence of airpower. The enforced redundancy which is imposed upon them by the increasing mechanisation and automation of combat is at the forefront of Swofford's concerns: 'There was one constant debate within the Marine Corps regarding the effectiveness of the STA Platoon and scout/snipers. Leaders who adhered to the idea that mechanisation was the future of the Corps discounted the scouts and snipers, while others cried that the art of scouting and sniping helped sustain the Corps and its mythos. The STA Platoons were filled with men who worked in highly disciplined pairs, who gladly took on poor odds and likely death to fulfil thankless missions...I wanted a thankless mission; I wanted poor odds and likely death'. See Anthony Swofford, *Jarhead* (Sydney: Simon and Schuster, 2003), p. 58. Swofford's desire for a quintessential hero narrative, however, is denied by the dominating influence of airpower, and in the entire film, not one member of the Marine squad fires their rifle in anger. For more on this, see the Conclusion.

⁶³ See Chris Ayres, 'Changing Face of War: Now a Pilot in Las Vegas Can Blast a Sniper in a Baghdad Apartment', *The Times*, March 14th, 2008, p. 26/27.

⁶⁴ Michael S. Sherry, *In the Shadow of War: The United States Since the 1930s*, (New Haven and London: Yale University Press, 1995), p. 227.

⁶⁵ Donald Rumsfeld, 'Transforming the Military', *Foreign Affairs* 81, no. 3 (2002): 10-18.

⁶⁶ Wagner James Au, 'Weapons of Mass Distraction' (2002), http://www.salon.com/tech/feature/2002/10/04/why_we_fight/index.html?x (Accessed 28th January 2006).

⁶⁷ Benbow, *The Magic Bullet?*, p. 82. The reasons behind the real-life appeal of military transformation is another aspect which has been ignored by critics of media and military technologies, who have tended to characterize the development of American military policy

and new military high-technologies in intensely technophobic terms. In 'The Kosovo W@r Did Take Place', for example, Paul Virilio manages to link modern military technologies to Hiroshima, the H-bomb, and fears concerning the surveillance society. America's use of new technologies in the Kosovo War, Virilio argues, amounted to an experiment akin to the dropping of the nuclear bomb. 'What is important for us in Europe to note about the role of the US in the Kosovo War is that it conducted an experiment on Europe in the same manner that it did on Japan at the end of the Second World War'. See John Armitage ed., *Virilio Live: Selected Interviews* (London: Sage, 2001), p. 168. Similarly, in his book *Postmodern War: The New Politics of Conflict* (1997), Chris Hables Gray presents a technologically determinist and technophobic history of the development of warfare, from the machine guns of World War I which killed hundreds of thousands, to the strategic bombing and nuclear bombs of World War II which killed millions, through to the 'computerization of war' which points to the 'possibility of apocalypse'. See Gray, *Postmodern War*, p. 15. Whilst the suspicions of critics such as Gray and Virilio are rightly aroused when faced with the discourse of new warfare which adopts language such as 'clean', 'clinical', and 'surgical', such technophobic critiques ignore not only the origins of military transformation, but also the reasons behind its popularity, and hence its propagandist appeal. Recognizing the true appeal and reasoning behind the development of military transformation is important not only in terms of establishing its propagandist power, but also in terms of establishing its true contribution – and the contribution of military computer games - to the new American militarism. The origins of military transformation in fact lie in strategic attempts to escape the redundancy imposed by Mutually Assured Destruction and also the total war of the world wars. Following the Second World War and the dropping of the Bomb, strategists and defense intellectuals at the RAND Corporation, Harvard, MIT, Chicago and elsewhere, produced huge amounts of literature on the new strategic outlook, analyzing the role that war should now play in the nuclear age, and attempting to derive a new logic for the conduct of war. There were those – including Basil Liddell Hart - who considered that the total war of the world wars and the mutually assured destruction offered by nuclear war signaled the end to the utility of war and inaugurated the age of deterrence. Albert Wohlstetter, however, known latterly as the grandfather of the Revolution in Military Affairs, rejected such analyses in arguing that safety lay not in finding ways of avoiding war, but in finding ways of actually using force. From the war in Vietnam, he specifically took note of precision guided weapons and their revolutionary possibilities, and throughout the 1970s and 1980s he campaigned vigorously for the adoption of precisely limited force as the centerpiece of a new conception of warfare. 'Discriminate Deterrence', published in 1988 by the Commission on Long Term Strategy chaired by Wohlstetter, talked of stealth, targeting, long range weapons, space and 'revolutionary changes in the nature of war'. For Wohlstetter, the Revolution in Military Affairs offered not only a more effective, but a more discriminate and moral form of warfare. Before Operation Desert Storm began, he described his vision of what the U.S. attack should look like. For Wohlstetter, the use of 'precise weapons, stealth and other advanced techniques' to offer 'effective and discriminate air attacks' and in order to 'avoid indiscriminate collateral damage' is 'a political as well as moral necessity'. See Bacevich, *The New American Militarism*, p. 163/164. It is Wohlstetter's ideas, married with a new emphasis on Special Forces troops, which have underpinned the current arguments in support of military transformation. Richard Perle, the Chairman of the Defense Advisory Committee from 2001 to 2003, and a former student of Albert Wohlstetter, described Iraq 2003 as 'the first war that's been fought in a way that would recognize Albert's vision of future wars'. See Bacevich, *The New American Militarism*, p. 174. For more on the origins of military transformation, see Bacevich, *The New American Militarism*; Benbow, *The Magic Bullet?*; and Kagan, *Finding the Target*. The increasing representation of high-technology within the computer game narrative therefore reflects a change in attitudes towards military high-technology. Whereas the post-World War II period was consumed by fear of the nuclear bomb, and the post-Vietnam period was characterized by a suspicion of high-technology as a result of the horrors of the Vietnam War; during the 1980s, Reagan set about re-characterizing military high-technology as a moral good, which did not threaten the world with apocalypse, but rather represented the possibility of a more moral and humane form of

warfare. Reagan based his attempts to re-characterize military high-technology around the Strategic Defense Initiative (SDI), an umbrella defense system which would protect the U.S. from nuclear attack. Despite claims from many scientists that the system was patently unworkable, it proved incredibly popular. As Kissinger explains: 'Reagan was impervious to much of the technical criticism [of his Strategic Defense Initiative] because he had not advocated SDI in strategic terms in the first place. Instead, he had presented it in terms of the "liberal" cause of bringing about the abolition of nuclear war. The postwar president most committed to building up America's military strength, including its nuclear capacity, stood at the same time for a pacifist vision of a world from which all nuclear weapons were banished.' See Oliver Kamm, *Anti-Totalitarianism: The Left-Wing Case for a Neoconservative Foreign Policy* (London: The Social Affairs Unit, 2005), p. 58. Reagan called for 'the scientific community in our country, those who gave us nuclear weapons, to turn their great talents now to the cause of mankind and world peace, to give us the means of rendering these weapons impotent and obsolete'. See Edwards, *The Closed World*, p. 288. As Michael Sherry puts it, the SDI therefore offered to save 'technology's virtue from... violation by the nuclear monster'. See Michael S. Sherry, *In the Shadow of War: The United States Since the 1930s*, (New Haven and London: Yale University Press, 1995), p. 407. It is this mantle that military transformation upholds, promising a more moral and discriminate form of warfare. The depiction of military high-technology within computer games is therefore not seen in apocalyptic terms, or in terms of post-heroic warfare, but rather as part of the new American way of war which promises fast, decisive and precision strike capabilities. This understanding of the new American way of war has become so complete that the transformational combination of Special Forces and high-technology weaponry have even begun to make cameo-like appearances within Hollywood cinema, most recently in the film *Transformers* (2007), where Special Forces and U.S. military high-technology triumph even over giant, futuristic robots. As the Secretary of Defense warns in the film, 'losing really isn't an option for these guys [the Special Forces]'. For a discussion of the belief in military transformation as a more moral, discriminate, and efficient form of warfare see footnotes 68, 69, and 70.

⁶⁸ One of the reasons that the first Gulf War in 1991 had been seen in such a revolutionary light was the fact that the actual number of U.S. casualties undercut estimates by factors of between 2 and 200. See Stephen Biddle (2004), *Military Power*, p. 20. The loss of 'only' 270 US troops in the 'major combat phase' of Desert Storm seemed to inaugurate a new form of warfare. Following Desert Storm, 18 U.S. troops were killed by hostile fire in Mogadishu in 1993; 0 were killed in Kosovo in 1999; and despite the number of interventions, fewer U.S. military personnel lost their lives as a result of hostile action in the 1990s than in any other decade since the 1930s. In the new millennium, the results seem even more startling. During the major combat phase in Afghanistan, only 1 U.S. soldier was killed by hostile fire, and in carrying out the major combat phase of Operation Iraqi Freedom, there were 'only' 139 casualties. For statistics on the number of troops killed see Martin Shaw (2005), *The New Western Way of War: Risk-Transfer War and its Crisis in Iraq*, Cambridge, Polity Press, p. 10; Bacevich, *American Empire*, p. 156; and Boot, 'The New American Way of War'.

⁶⁹ Although heavily contested, the belief in the ability of military high-technology to reduce civilian casualties and collateral damage, and to offer a more humane form of warfare, is one of the strongest supporting arguments for military transformation. As President Bush has argued: 'With new tactics and precision weapons, we can achieve military objectives without directing violence against civilians. No device of man can remove the tragedy from war, yet it is a great advance when the guilty have far more to fear from war than the innocent.' See George W. Bush cited in the *San Francisco Chronicle*, May 3rd, 2003. Available at <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2003/05/03/MN98747.DTL> (Accessed 25th July 2007). The development of new military technology has significantly improved the accuracy of weaponry. Before the emergence of precision guided missiles and bombs, air strikes were accurate to within 500 feet, whereas satellite bombs are now accurate to within 20 feet, and laser targeted bombs are accurate to within 10 feet. 68% of the bombs used during Operation Iraqi Freedom were precision guided. See Thomas Donnelly, *The Military We Need: The Defense Requirements of the Bush Doctrine* (Washington D.C.: AEI Press, 2005),

p. 75. The idea of precision guided weapons offering a more humane form of warfare, or even reducing civilian casualties, has been heavily contested. See, for example, Carl Connetta, 'Arms Control in an Age of Strategic and Military Revolution' (2005), <http://www.comw.org/pda/0511conetta.html> (Accessed 25th November 2005) for a discussion of the realities of precision fire and civilian casualties.

⁷⁰ Proponents of military transformation have argued that with fewer troops on the ground, fewer U.S. casualties, fewer civilian casualties, and quick and decisive combat operations, there is less chance of alienating public opinion and reducing support for the war at home, and also less chance of inciting opposition to the campaign amongst the population in the country in which the campaign is being carried out. This notion of a small 'ideological footprint' has therefore also become a supporting rationale for transformation. When combined with reduced costs in terms of finances and casualties, this would enable the U.S. to intervene in situations which it had previously avoided, thereby confronting what was seen as a major strategic weakness. In recent years, Mohammad Khatami, Saddam Hussein, Slobodan Milosevic, and Bin Laden, have all been emboldened by the idea that U.S. casualty sensitivity will preclude intervention. See Peter Feaver and Christopher Gelphi, *Choosing Your Battles: American Civil-Military Relations and the Use of Force* (Princeton: Princeton University Press, 2004), p. 4/5. In 1998, for example, after al-Qaida bombed the U.S. embassies in Kenya and Tanzania, President Bill Clinton asked the Pentagon for options for putting 'boots on the ground' in Afghanistan and was particularly interested in Special Forces options. General Henry Shelton, chairman of the Joint Chiefs of Staff, quickly dismissed the possibility of a Special Forces campaign and, based on a standard conventional model, outlined a campaign that required months of preparation, and tens of thousands of U.S. troops. Based on the high costs of this plan, Shelton dismissed the political feasibility of any Afghan campaign, and the President, left with no low-cost alternative, was forced to agree. See Andres, Wills and Griffith Jr., 'Winning with Allies: The Strategic Value of the Afghan Model'. Under the Clinton Presidency, the U.S. had avoided committing ground troops against Iraq (although they had bombed Iraq in Operation Desert Strike in 1996) and had tried to avoid getting involved in the Balkans. What held Clinton back in the case of the Balkans, and also later in the decade when he considered an attack against Iraq, was the number of casualties which could be expected if an intervention was attempted. Colin Powell had suggested that the U.S. would need to commit over 200,000 ground troops. See Halberstam, *War in a Time of Peace*, p.42. In avoiding the problems of casualty sensitivity and also lessening resentment by imposing only a small ideological footprint, proponents of military transformation thereby argued that it would reduce the restrictions placed on the use of force by political, military and economic considerations, and would therefore strengthen the coercive diplomacy of the U.S. See Andres, Wills and Griffith Jr., 'Winning with Allies: The Strategic Value of the Afghan Model'. Interestingly, this idea of the small ideological footprint is reflected in the game *KumaWar*. As the *KumaWar* mission briefing for the level 'Assault on Iran' explains: 'We have to do something, but the mission must have a small ideological footprint, one that won't disturb the balance of power or the insurgency motivation in Iran... The insurgent movement needs reasons to recruit more fighters, and saying that Iran holds the Islamic Bomb is a great poster child for recruitment. So our plan calls for a specific capability that can be deployed quickly and effectively. We're talking about Special Operations'. See the mission briefing at www.kumawar.com/assaultoniran/overview.php (Accessed 20th July 2008).

⁷¹ Lawrence Freedman, *The Revolution in Strategic Affairs* (Oxford: Oxford University Press, 1998), p. 76.

⁷² For a discussion of the idea of military transformation as a more moral form of warfare, see footnotes 68, 69, and 70.

⁷³ See Carl Connetta, 'Arms Control in an Age of Strategic and Military Revolution' for a discussion of precision fire and civilian casualties.

⁷⁴ See Gordon and Trainor, *Cobra II*, p. 101. 'The current belief', as Williamson Murray, a Professor at the U.S. Army Military Institute, has argued, 'that technology alone and the capabilities of distant strike will allow American military forces to fight simple, decisive campaigns with few casualties flies in the face of 3,000 years of accumulated military history'.

Williamson Murray cited in Robert H. Scales, *Future Warfare* (Carlisle Barracks: US Army War College, 2000), p. vi.

⁷⁵ See David Machin and Usama Suleiman (2006), 'Arab and American Computer War Games: The Influence of a Global Technology on Discourse', *Critical Discourse Studies*, 3 (1), p. 1.

Chapter 2: The Limitations of Military Computer Games and U.S. Military Policy

¹ See David Frum and Richard Perle, *An End to Evil: How to Win the War on Terror* (New York: Ballantine Books, 2003), p. 181/182. David Frum is the former special assistant and speechwriter for George W. Bush, and is often attributed with the phrase 'Axis of Evil'. Richard Perle served as the Chairman of the Defense Policy Board between 2001 and 2003. Both men are considered not only supporters of military transformation, but of a neoconservative worldview. Perle's dedication in *An End to Evil* is to Albert Wohlstetter, often seen as the founder of the Revolution in Military Affairs. Both Perle and Paul Wolfowitz had studied under the supervision of Wohlstetter at the University of Chicago. See James Mann, *Rise of the Vulcans: The History of Bush's War Cabinet* (London: Penguin Books, 2004), p. 32

² Keith Stuart, "'What is missing is the chaos of battle': What a Military Expert Thinks About Modern Combat Games' (2007), http://blogs.guardian.co.uk/games/archives/2007/03/21/what_is_missing_is_the_chaos_of_battle_what_a_military_expert_thinks_about_modern_combat_games.html (Accessed 13th May 2007).

³ The level of accuracy of some of the projections and descriptions made by Clancy in *Red Storm Rising* (1987) have led some within the military to suggest that he must have been leaked information of classified military projects. In an interview with Gannon, Vice Admiral William E. Ramsey described Clancy as 'frighteningly precise'. 'It is this facility that has become his trademark'. See Charles E. Gannon, *Rumors of War and Infernal Machines: Technomilitary Agenda-Setting in American and British Speculative Fiction* (Liverpool: Liverpool University Press, 2003), p. 200. Clancy's *Red Storm Rising*, written with the assistance of the British Royal Navy Captain Doug Littlejohns, came to be viewed as such an authoritative work that Senator Dan Quayle famously referred to the text in a debate over military technology and national policy. See Gannon, *Rumors of War*, p. 226/227. As Quayle enthusiastically asked his colleagues: 'Have you read this book? ASAT [Anti-Satellite] technology is what wins this war!' See Michael S. Sherry, *In the Shadow of War: The United States Since the 1930s*, (New Haven and London: Yale University Press, 1995), p. 398.

⁴ The series of Tom Clancy games are based on the success of Clancy's literary fictional works. Following the publication of his novel *Red Storm Rising* (1986), Clancy started the Red Storm Entertainment multimedia company which produced games. It became a fully owned subsidiary of Ubisoft in 2000, under which name *Tom Clancy's Ghost Recon Advanced Warfighter* was produced. See <http://www.redstorm.com/index.php?page=history> (Accessed 25th August 2007). Red Storm Entertainment has recently been involved in the production of the latest console version of *America's Army* called *America's Army: True Soldiers*.

⁵ See Michael Rubin, 'Asymmetrical Threat Concept and Its Reflections on International Security' (2007), http://www.aei.org/docLib/20070502_AsymmetricalThreatConcept.pdf (Accessed 19th November 2008). For a series of papers on asymmetric warfare, see <http://www.comw.org/rma/fulltext/asymmetric.html> (Accessed 19th November 2008).

⁶ See Carl Connetta, 'Arms Control in an Age of Strategic and Military Revolution' (2005), <http://www.comw.org/pda/0511conetta.html> (Accessed 25th November 2005), p. 14

⁷ See <http://news.bbc.co.uk/1/hi/world/europe/7401260.stm> (Accessed 10th July 2008).

⁸ See <http://www.wired.com/science/discoveries/news/2003/04/58422> (Accessed 10th July 2008).

⁹ Conetta, 'Arms Control in an Age of Strategic and Military Revolution', p. 11. In fact, as Conetta reveals, the Iraqis attempted to target the U.S. network during the Iraq War of 2003.

¹⁰ In this respect, the game does not recreate the kind of suspicion and rejection of technology reminiscent of a film such as *Rambo: First Blood Part II* (1985). Unlike *Rambo: First Blood Part II*, in which the failure of high-technology systems - and Rambo's suspicion of such systems - lead Rambo to fight his way through Vietnam with nothing but a knife and bow and arrow, the failings of NCW and transformational technologies in *Tom Clancy's Ghost Recon Advanced Warfighter* prove only a temporary inconvenience, and once this inconvenience has been resolved, their status and efficacy is reaffirmed. For more on the Rambo films, see endnote 16, Chapter 1.

¹¹ As Lieutenant Colonel Leonhard of the U.S. Army has argued: 'Urban areas should become our preferred medium for fighting. We should optimise our force structure for it, rather than relegating it to Appendix Q in our fighting doctrine, treating it as the exception rather than the norm... Instead of fearing it, we must own the city'. See Robert R. Leonhard, 'Sun Tzu's Bad Advice: Urban Warfare in the Information Age' (2003), http://findarticles.com/p/articles/mi_qa3723/is_200304/ai_n9189341 (Accessed 20th June 2008).

¹² 'Urban operations represent a black hole in the current Revolution in Military Affairs pantheon of technological advantage... The Technologies traditionally ascribed to the current Revolution in Military Affairs phenomenon will have negligible impact on Military Operations in Urban Terrain'. See Stephen Graham, 'From Space to Street Corners: Global South Cities and U.S. Military Technophilia' (2007), http://www.geography.dur.ac.uk/information/staff/personal/graham/graham_documents/DOC%203.pdf (Accessed 12th April 2007).

¹³ Graham, 'From Space to Street Corners: Global South Cities and U.S. Military Technophilia', p. 11.

¹⁴ For more on this see the Introduction and Timothy Lenoir, 'All But War is Simulation: The Military-Entertainment Complex', *Configurations* 8, no. 3 (2000), p 322/323.

¹⁵ Max Boot, 'The Struggle to Transform the Military', *Foreign Affairs* 84, no. 2 (2005).

¹⁶ For example, James Dobbins, the author of the RAND studies *America's Role in Nation Building: From Germany to Iraq* (2003) and *The UN's Role in Nation Building: From the Congo to Iraq* (2005), analyzed a series of nation building exercises, concluding that 'the United States would be well advised to resume supersizing its nation building missions and to leave the small footprint approach to the United Nations'. See James Dobbins, *The UN's Role in Nation Building: From the Congo to Iraq* (Santa Monica, California: RAND Corporation, 2005), p. xxii. Paul Bremer, the head of the Coalition Provisional Authority in Iraq, having asked Dobbins to take up a post in Iraq, sent an executive summary of the study to Rumsfeld. He received no reply. See Michael Gordon and Bernard Trainor, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq* (London: Atlantic Books, 2006), p. 478. Steve Hawkins, a brigadier general from the Army Corps of Engineers and one of military's postwar planners suggested that no fewer than 350,000 troops would suffice to secure post-war Iraq, and that they might need as many as half a million. In order to deliver troop-to-population ratios comparable to the operations in Kosovo and Bosnia, the post-war operation in Iraq would have required 480,000 or 364,000 troops respectively. See Gordon and Trainor, *Cobra II*, p. 101 and 104. According to Thomas E. Ricks, these figures were included in briefing slides produced by the Phase IV planning group, which noted that if they were to parallel the efforts in Bosnia and Kosovo, postwar Iraq would require 470,000 troops. See Thomas E. Ricks, *Fiasco: The American Military Adventure in Iraq* (London: Penguin Books, 2006), p. 79.

¹⁷ Carl Conetta, 'QDR 2006: Do the Forces Match the Missions? DOD Gives Little Reason to Believe' (2006), <http://www.comw.org/pda/0602bm36.html> (Accessed 19th April 2006).

¹⁸ Frederick Kagan, *Finding the Target: The Transformation of American Military Policy* (New York: Encounter Books, 2006), p. 266/267.

¹⁹ See footnote 18, Chapter 1 for a description of the Powell Doctrine. The Powell Doctrine essentially reflected military concerns that civilian elites were far more cavalier in their attitude towards using force. The Powell Doctrine was seen as a means of limiting the freedom

of civilian elites to call on the use of force. During the 1990s, however, senior members within the U.S. military itself came to see the Powell Doctrine as inappropriate to the post-Cold War world. As David Halberstam explains, General Merrill McPeak, the Air Force Chief of Staff (1990-1994) felt the world had changed, and that sooner or later, the U.S. military would have to use the forces that were being paid for at massive expense. See David Halberstam, *War in a Time of Peace: Bush, Clinton and the Generals* (London: Bloomsbury Publishing, 2002) p. 40/41. General John Shalikashvili, Chairman of the Joint Chiefs of Staff from 1993 to 1997, also subscribed to a less restricted military policy which directed its attention away from a narrow consideration of vital national interests and major conventional wars, and towards Operations Other than War (OOTW). As a result, Shalikashvili controversially selected Wes Clark as the Southern Command Commander in Chief and then as Supreme Allied Commander Europe (SACEUR). Clark was a man he believed could push forward the transformation of the Army, but his appointment was made in the face of strong and obvious opposition, including the then Army Chief of Staff Reimer who refused to endorse Clark's nomination. As Halberstam argues, Clark's vision as an activist was seen as more in keeping with the civilian elite than with the military, and he was resented by those who still believed in the Powell Doctrine. Clark, on the other hand, believed that the military had acted too cautiously and had allowed the memory of Vietnam to overly restrict their actions. See Chapter 34 in David Halberstam, *War in a Time of Peace*. Clark dismissed the Powell Doctrine, arguing that: 'Exit strategies are a way to avoid military action. I mean, what was the exit strategy for World War II? It's absurd, it's a buzzword'. Clark cited in James Der Derian, *Virtuous War: Mapping the Military-Industrial-Media-Entertainment Network* (Colorado and Oxford: Westview Press, 2001), p. 195. As Andrew Bacevich argues, this was illustrative of the increasing trend within certain military quarters of seeing the use of force and coercive diplomacy as a viable means of attaining less than vital interests. See Bacevich, *American Empire*, p. 182. This appetite for intervention was encouraged by 9/11.

²⁰ Bacevich, *American Empire*, p. 226.

²¹ Gordon and Trainor, *Cobra II*, p. 146.

²² A plan emerged in August/September 2006 to target Rumsfeld in the mid-term elections, and to introduce a vote of no confidence. The plan was backed by 12 retired generals. See Oliver Burkeman, 'Rumsfeld Targeted in Midterm Election Fight', *The Guardian*, September 2nd 2006.

²³ See Paul Eaton, 'For His Failures, Rumsfeld Must Go' (2006), <http://www.iht.com/articles/2006/03/19/opinion/edeaton.php> (Accessed 18th April 2007).

²⁴ Gordon and Trainor, *Cobra II*, p. 497

²⁵ See www.socom.mil/Releases/Feb/QDR_News_Release.pdf (Accessed 25th November 2007).

²⁶ Michael Sirak, 'QDR Chronicles Path for U.S. Forces to Counter New Threats', *Defense Daily* 229, no. 23 (2006).

²⁷ Conetta, 'Do the Forces Match the Missions'.

²⁸ See <http://www.army.mil/fcs/f2c2/overview.html> (Accessed 25th June 2007).

²⁹ Marty Graham, 'Army Game Proves U.S. Can't Lose' (2006), <http://www.wired.com/science/discoveries/news/2006/11/72156> (Accessed 1st October 2007).

³⁰ Ismael Hossein-Zadeh, *The Political Economy of U.S. Militarism* (New York: Palgrave MacMillan, 2006), p. 188/189. For full details of the 'revolving door' and 'iron triangle' (the relationship between the Pentagon, its major contractors, and key congressional committees) see 'Waste, Inefficiency, and the Spoils of Military Spending' in Ismael Hossein-Zadeh, *The Political Economy of U.S. Militarism*, p. 181-203.

³¹ Espen Aarseth, 'Quest Games as Post-Narrative Discourse' in *Narrative Across Media: The Languages of Storytelling*, ed. Marie-Laure Ryan (Lincoln and London: University of Nebraska Press, 2004), p. 367.

³² See Lev Manovich, *The Language of New Media* (Cambridge, Massachusetts and London: MIT Press, 2001), p. 40. Manovich refers to the idea of the player as author and of the absolute belief in the freedom and interactivity of games as the 'California ideology'. See Manovich, *The Language of New Media*, p. x.

³³ Marie-Laure Ryan, 'Will New Media Produce New Narratives?' in *Narrative Across Media: The Languages of Storytelling*, ed. Marie-Laure Ryan (Lincoln and London: University of Nebraska Press, 2004), p. 333.

³⁴ Sharon Ghamari-Tabrizi, 'The Convergence of the Pentagon and Hollywood: The Next Generation of Military Training Simulations', in *Memory Bytes: History, Technology and Digital Culture*, eds. Lauren Rabinovitz and Abraham Geil (Durham, N.C.: Duke University Press, 2004), p. 161

³⁵ In *Black Hawk Down*, says NovaLogic's Wes Eckhart, 'In most cases, killing civilians or noncombatants will result in the player losing the mission and being forced to replay it'. See Wagner James Au, 'Weapons of Mass Distraction' (2002), http://www.salon.com/tech/feature/2002/10/04/why_we_fight/index.html?x (Accessed 28th January 2006). And as Mike Zyda, the designer of *America's Army* explains: 'If a player violates the Uniform Code of Military Justice, rules of engagement, or laws of land warfare, reprisal is instant' – they are either sent to Fort Leavenworth prison or banned from the game. See Ian Bogost, *Persuasive Games: The Expressive Power of Videogames* (Cambridge, Massachusetts and London: MIT Press, 2007), p. 76.

³⁶ Au, 'Weapons of Mass Distraction'.

³⁷ Ghamari-Tabrizi, 'The Convergence of the Pentagon and Hollywood', p. 152

³⁸ John Keegan cited in Chris Hables Gray, *Postmodern War: The New Politics of Conflict* (London: Routledge, 1997), p. 95

³⁹ Unlike in most military computer games, which attempt to hide their restrictive elements, in *Brothers in Arms: Earned in Blood* (2005) these restrictions are made explicit by an in-game message which appears following the death of a squad member who must later appear in the narrative. Following the death of the squad member, the in-game message rather curiously requests your permission to bring them back to life. 'Your victory was earned in blood... You have lost a soldier who should have survived in Hartsock's story. Would you like to revive the dead and continue Hartsock's story? (no penalty)'. In this respect, unlike those games which attempt to couch their limitations under the veil of authenticity, *Brothers in Arms: Earned in Blood* specifically draws attention to the preordained nature of the military computer game narrative, to its limited interactive potential, and also to its artificial revitalization of casualties. As the in-game message reveals, the game cannot react to the death of this character by taking the player down a differing narrative pathway; rather it must revive the character in order for the preordained narrative to play itself out. In this respect, *Brothers in Arms: Earned in Blood* explicitly challenges the idea of games as a performative interactive form.

⁴⁰ Marie-Laure Ryan, 'Will New Media Produce New Narratives?', p.334.

⁴¹ The 'big boss' is a common device used not only in military computer games, but games as diverse as *Super Mario*, *Sonic*, and *Harry Potter*. See James Newman, *Videogames* (London: Routledge, 2004), p. 77.

⁴² Jerome de Groot, 'Empathy and Enfranchisement: Popular Histories', *Rethinking History: The Journal of Theory and Practice*, 10 (3) (2006), p. 409.

⁴³ Ghamari-Tabrizi, 'The Convergence of the Pentagon and Hollywood', p. 161

⁴⁴ Ben Schneider, 'Losing for the Win: Defeat and Failure in Gaming' (2007), www.gamasutra.com/features/20070215/schneider_01.shtml (Accessed 20th February 2007).

⁴⁵ In this respect, military computer games share certain characteristics of perspective with a combat film such as *Black Hawk Down*; a film which was both celebrated as 'One of the most convincing realistic combat movies ever seen' (This *Observer* review appeared on the back of the video case) and criticized for its lack of genuine analysis concerning the history and geopolitical complexities of the conflict. See David Machin and Theo Van Leeuwen, 'Computer Games as Political Discourse: The Case of *Black Hawk Down*', *Journal of Language and Politics* 4, no. 1 (2005): 119-141. In the film, however, this lack of context is justified on the basis that the political, social and historical context of the war was not at the forefront of the soldiers' minds as they went into combat. As the DELTA Force operator 'Hoot' explains in *Black Hawk Down*, 'Once that first bullet goes past your head, politics and all that shit just goes right out the window'. As a film which aimed to portray the realities of combat as experienced by U.S. troops, such context was not therefore seen as particularly

relevant. Like the film *Black Hawk Down*, military computer games make no pretense to be anything other than pure combat games. Their goal is to provide the player with an immersive experience of combat and as a result, their perspective precludes the possibility of representing the broader contexts which surround warfare. As I argue, however, the influence of the limited perspective of games has serious consequences for understandings of how strategic victory is achieved.

⁴⁶ Perhaps the most ambiguous ending to a military computer game is shown in *Full Spectrum Warrior: Ten Hammers*, as Sergeant Daniels – the lead character, who began the game by explaining that he just wanted to ‘make a difference’ in Zekistan and make things better – is killed along with a number of other troops as the remainder of his squad escape in a helicopter. But although *Full Spectrum Warrior: Ten Hammers* provides a short narrative lesson in making the ‘ultimate sacrifice’, and is a radical departure from the standard ending to military computer games, it makes no comment on the state in which Sergeant Daniels leaves Zekistan.

⁴⁷ As Elaine Scarry has claimed: ‘The severe discrepancy in the scale of consequence makes the comparison of war and gaming nearly obscene, the analogy either trivializing the one or, conversely, attributing to the other a weight of motive and consequence it cannot bear’. See Elaine Scarry, *The Body in Pain: The Making and Unmaking of the World* (Oxford: Oxford University Press, 1985), p. 83.

⁴⁸ Ed Halter, *From Sun Tzu to Xbox: War and Computer Games* (New York, Thunder’s Mouth Press, 2006), p. 176/177.

⁴⁹ Hossein-Zadeh, *The Political Economy of U.S. Militarism*, p. 195

⁵⁰ See Benjamin O. Fordham, ‘Paying for Global Power: Costs and Benefits of Postwar U.S. Military Spending’, in *The Long War: A New History of U.S. National Security Policy Since World War II*, ed. Andrew J. Bacevich (New York: Columbia University Press, 2007), p. 376.

⁵¹ See Stefan Halper and Jonathan Clarke, *America Alone: The Neo-Conservatives and the Global Order* (Cambridge: Cambridge University Press, 2004), p. viii. From these beliefs come repeated assertions concerning the utility of military power as ‘the indispensable foundation of US foreign policy’ (Norman Podhoretz), and for the U.S. Army as ‘the best democracy program ever invented’ (Michael Ledeen). Norman Podhoretz and Michael Ledeen cited in Andrew J. Bacevich, *The New American Militarism: How Americans are Seduced by War* (Oxford: Oxford University Press, 2005), p. 85 and 74. For ‘military conquest’ as ‘an effective means of implanting democracy’. See Joshua Muravchik, ‘The Bush Manifesto’, *Commentary*, 114 (2002), p. 30. And for ‘American armed might...defended by American might’, as the only way to arrive at world peace. See David Frum and Richard Perle, *An End to Evil: How to Win the War on Terror* (New York: Ballantine Books, 2003), p. 239. Francis Fukuyama has argued that George W. Bush has effectively become a neoconservative. See Francis Fukuyama, *After the Neocons: America at the Crossroads* (London: Profile Books, 2006). In a speech at the American Enterprise Institute, a neoconservative think-tank whose fellows include David Frum, Michael Ledeen, Joshua Muravchik, and Richard Perle, Bush revealed the extent of neoconservative influence on the thinking of his administration. ‘At the American Enterprise Institute, some of the finest minds in our nation are at work on some of the greatest challenges to our nation. You do such good work that my administration has borrowed 20 such minds’. As he went on to argue, ‘the world has a clear interest in the spread of democratic values, because stable and free nations do not breed the ideologies of murder. They encourage the peaceful pursuit of a better life’. George W. Bush, ‘Speech at the American Enterprise Institute Annual Dinner, February 2003’, http://www.aei.org/publications/pubID.16197.filter.all/pub_detail.asp (Accessed 9th August 2006).

⁵² Halper and Clarke, *America Alone*, p. viii.

⁵³ David Hoogland Noon, ‘Operation Enduring Analogy: World War II, The War on Terror, and the Uses of Historical Memory’, *Rhetoric and Public Affairs* 7, no. 3, (2004), p. 356

⁵⁴ Bacevich, *The New American Militarism*, p. 148.

⁵⁵ See Max Boot, ‘The New American Way of War’, *Foreign Affairs* 82, no. 4 (2003).

⁵⁶ Ricks, *Fiasco*, p. 116.

- ⁵⁷ Antulio Echevarria, 'Toward an American Way of War' (2004), http://www.dtic.mil/jointvision/ideas_concepts/echeverria_american_way_of_war.pdf (Accessed 12th December 2005).
- ⁵⁸ Martin Shaw, *The New Western Way of War: Risk Transfer War and its Crisis in Iraq* (Cambridge: Polity, 2005), p. 78.
- ⁵⁹ Kagan, *Finding the Target*, p. 327.
- ⁶⁰ Gordon and Trainor, *Cobra II*, p. 208.
- ⁶¹ Gordon and Trainor, *Cobra II*, p. 222.
- ⁶² Jim Dunnigan, for example, argues that 'whether or not it [post-war Iraq] will be done is a political question'. He suggests there is a tendency to avoid 'games that tell unpleasant futures too often'. See James F. Dunnigan, 'Wargames' (2003), <http://www.watsoninstitute.org/infopeace/dissim/> (Accessed 2nd February 2006).
- ⁶³ General Sir Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (London, Allen Lane, 2005), p. 288.
- ⁶⁴ Smith, *The Utility of Force*, p. 288.
- ⁶⁵ Smith, *The Utility of Force*, p. 404. In *Terror and Consent: The Wars for the Twenty-First Century* (2008), Philip Bobbitt presents a similar argument to Smith in suggesting that U.S. policy has essentially been based around the concept of fighting the wrong sort of inter-state war which has led to an antagonism between the way in which the U.S. is fighting wars and the strategic ends they are trying to achieve. See Philip Bobbitt, *Terror and Consent: The Wars for the Twenty-First Century* (New York: A.A. Knopf, 2008).
- ⁶⁶ Following the end of the Cold War, the active U.S. Military was reduced from 2.1 million in 1990, to 1.3 million in 2001, whilst the active duty Army was reduced from 780,000 to 480,000 in the same period. See Thomas Donnelly, *The Military We Need: The Defense Requirements of the Bush Doctrine* (Washington D.C.: AEI Press, 2005), p. 59/60.
- ⁶⁷ See Benjamin O. Fordham, 'Paying for Global Power', p. 371-405
- ⁶⁸ Shaw, *The New Western Way of War*, p. 56.
- ⁶⁹ Shaw, *The New Western Way of War*, p. 71-94.
- ⁷⁰ Shaw, *The New Western Way of War*, p. 7.
- ⁷¹ Lawrence Freedman, *The Revolution in Strategic Affairs* (Oxford: Oxford University Press, 1998), p. 67.

Chapter 3: Military Computer Games: Historical Analogy, and the 'Lessons' of the Past

- ¹ David Hoogland Noon, 'Operation Enduring Analogy: World War II, The War on Terror, and the Uses of Historical Memory', *Rhetoric and Public Affairs* 7, no. 3, (2004): 340.
- ² These were *Battlefield Vietnam*; *Vietcong: Purple Haze*; *Conflict: Vietnam*; *Men of Valor*; and *Shellshock: Nam '67*. See Stephen Totilo, 'A Belated Invasion: Vietnam, the Game', *New York Times*, April 1st, 2004.
- ³ Jon Dovey, 'Why am I in Vietnam? The History of a Videogame', in *Videogame, Player, Text*, eds. Barry Atkins and Tanya Krzywinska (Manchester and New York: Manchester University Press, 2007), p. 76
- ⁴ Dovey, 'Why am I in Vietnam?', p. 77
- ⁵ The manual to *Delta Force: Task Force Dagger*, for example, reads like a strategic manual for the capabilities of military transformation: 'In response to terrorist attacks on the United States of America, the world banded together in 2002 to fight the threat of terrorists and their state sponsors... The front line action would not be waged with huge battalions of soldiers and tanks. It would be fought by small, mobile, Special Forces units who could move silently through the countryside. By employing guerrilla tactics against the terrorists, casualties to ISAF forces were kept to a minimum, while nearly every objective was accomplished... One of the primary roles of a Special Forces unit is to call in aerial strikes. To call in aerial strikes you will use the laser designator to direct bombers to a specific area. Activate the scope view to engage the designator's range finder and target acquisition systems... One of the most

advanced tools available to Special Forces units is the UAV. This unmanned plane will fly a preset path over the area of operations and allow a soldier on the ground to control the camera mounted to its underbelly. This can give a soldier important knowledge of enemy positions...If you lock the camera onto a moving vehicle, the camera will track along with the target'. See Game Manual, *Delta Force: Task Force Dagger*, Novalogic, 2002.

⁶ Dovey, 'Why am I in Vietnam?', p. 79

⁷ See the chapter 'Recycling the Good War' in Carl Boggs and Tom Pollard, *The Hollywood War Machine: U.S. Militarism and Popular Culture* (Boulder and London: Paradigm Publishers, 2007).

⁸ Keith Stuart, 'Love the New Consoles, Shame About the Games', *The Guardian*, January 5th 2006, Technology Guardian, p. 3.

⁹ Michael S. Sherry, *In the Shadow of War: The United States Since the 1930s*, (New Haven and London: Yale University Press, 1995), p. 449.

¹⁰ The following is General Dwight D. Eisenhower's D-Day message of 6th June 1944, as read at the beginning of the level 'D-Day' in *Call of Duty II*. 'Soldiers, Sailors and Airmen of the Allied Expeditionary Force. You are about to embark upon the Great Crusade, toward which we have striven these many months. The eyes of the world are upon you. The hopes and prayers of liberty-loving people everywhere march with you. In company with our brave Allies and brothers-in-arms on other Fronts, you will bring about the destruction of the German war machine, the elimination of Nazi tyranny over the oppressed peoples of Europe, and security for ourselves in a free world. Your task will not be an easy one. Your enemy is well trained, well equipped and battle hardened. He will fight savagely. But this is the year 1944. Much has happened since the Nazi triumphs of 1940-41. The United Nations have inflicted upon the Germans great defeats, in open battle, man-to-man. Our air offensive has seriously reduced their strength in the air and their capacity to wage war on the ground. Our Home Fronts have given us an overwhelming superiority in weapons and munitions of war, and placed at our disposal great reserves of trained fighting men. The tide has turned! The free men of the world are marching together to Victory. I have full confidence in your courage and devotion to duty and skill in battle. We will accept nothing less than full Victory. Good luck. And let us beseech the blessing of Almighty God upon this great and noble undertaking'.

¹¹ Niall Ferguson, 'How to Win a War' (2006),

www.nymag.com/news/features/22787/index.html (Accessed 31st January 2007).

¹² General Sir Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (London, Allen Lane, 2005), p. 404.

¹³ Lewis Sorley, *A Better War: The Unexamined Victories and Final Tragedies of America's Last Years in Vietnam* (New York: Harcourt, Inc., 1999), p. 225

¹⁴ David Halberstam, *War in a Time of Peace: Bush, Clinton and the Generals* (London: Bloomsbury Publishing, 2002), p. 46.

¹⁵ Halberstam, *War in a Time of Peace*, p. 46

¹⁶ For more information on Operation Desert Storm and how it was perceived, see Tim Benbow, *The Magic Bullet? Understanding the Revolution in Military Affairs* (London: Brassey's, 2004); Michael S. Sherry, *In the Shadow of War: The United States Since the 1930s*, (New Haven and London: Yale University Press, 1995); Andrew Bacevich, *The New American Militarism: How Americans Are Seduced by War* (Oxford: Oxford University Press, 2005); and Andrew Bacevich, *American Empire: The Realities and Consequences of U.S. Diplomacy* (Cambridge, Massachusetts: Harvard University Press, 2002).

¹⁷ Francis Fukuyama, *After the Neocons: America at the Crossroads* (London: Profile Books, 2006), p. 160.

¹⁸ See <http://www.cnn.com/SPECIALS/2001/gulf.war/facts/gulfwar/> (Accessed 20th June 2008).

¹⁹ See http://www.globalsecurity.org/military/ops/desert_storm.htm (Accessed 20th June 2008).

²⁰ Bacevich, *American Empire*, p. 62.

²¹ Sherry, *In the Shadow of War*, p. 473.

- ²² See the transcripts of the PBS documentary on the Gulf War which featured all of the main players at http://www.pbs.org/wgbh/pages/frontline/gulf/script_b.html (Accessed 12th September 2008). See also Michael R. Gordon and Bernard E. Trainor, *The Generals' War: The Inside Story of the Conflict in the Gulf* (New York: Back Bay Books, 1995); and http://www.pbs.org/wgbh/pages/frontline/gulf/script_b.html (Accessed 20th June 2008).
- ²³ Benbow, *The Magic Bullet?*, p. 61 and 66.
- ²⁴ This was the view of the war which some neoconservatives took. See Bacevich, *The New American Militarism*, p. 86.
- ²⁵ President George Bush cited in Robert C. DiPrizio, *Armed Humanitarians: U.S. Interventions from Northern Iraq to Kosovo* (Baltimore and London: Johns Hopkins University Press), p. 53.
- ²⁶ Bacevich, *American Empire*, p. 143.
- ²⁷ Bacevich, *American Empire*, p. 144/145. See also James Dobbins, *The UNs Role in Nation Building: From the Congo to Iraq* (Santa Monica, California: RAND Corporation, 2005).
- ²⁸ Bacevich, *American Empire*, p. 146/147
- ²⁹ See Wagner James Au, 'Weapons of Mass Distraction' (2002), http://www.salon.com/tech/feature/2002/10/04/why_we_fight/index.html?x (Accessed 28th January 2006) and David Machin and Usama Suleiman, 'Arab and American Computer War Games: The Influence of a Global Technology on Discourse', *Critical Discourse Studies* 3, no. 1 (2006).
- ³⁰ Ed Halter, *From Sun Tzu to Xbox: War and Video Games* (New York: Thunder's Mouth Press, 2006), p. 266.
- ³¹ See Karen Rasmussen and Sharon D. Downey, 'Dialectical Disorientation in Vietnam War Films: Subversion of the Mythology of War', *Quarterly Journal of Speech* 77, no. 2 (1991): 176-95.
- ³² More recently, the film *We Were Soldiers* (2002) has offered a more concrete and heroic representation of a single battle during the Vietnam War, with the tagline '400 U.S paratroopers. 4000 Vietnamese soldiers. 12 000 miles away from home. 1 man led them into battle'.
- ³³ William L. O'Neill, 'The "Good" War: National Security and American Culture', in *The Long War: A New History of U.S. National Security Policy Since World War II*, ed. Andrew J. Bacevich (New York: Columbia University Press, 2007), p. 533-534.
- ³⁴ See the *Conflict: Vietnam* game manual, p. 3
- ³⁵ Sorley, *A Better War*, p. xii
- ³⁶ Sorley, *A Better War*, p. 14
- ³⁷ James Gibson, *The Perfect War: Technowar in Vietnam* (Boston: Atlantic Monthly Press, 1986).
- ³⁸ Sorley, *A Better War*, p. 9
- ³⁹ Sorley, *A Better War*, p. 124
- ⁴⁰ Sorley, *A Better War*, p. 1
- ⁴¹ Sorley, *A Better War*, p. 18
- ⁴² George W. Bush is certainly not the first president to use World War II in such a way. Ever since the end of World War II, politicians and critics have sought to invoke the lessons of World War II in order to justify and explain contemporary policies. As Ernest May argues in '*Lessons of the Past*, World War II was the dominant factor in informing policy decisions concerning the wars in Korea and Vietnam, and ever since, it has placed a conceptual hold on interpretations and understandings of warfare, even when the model of industrial scale total war has proved inapplicable to current contingencies. The lessons of World War II have been used to justify the wars in Iraq in 1991, Afghanistan in 2001, and Iraq in 2003. Before the Gulf War in 1991, George Bush Senior warned that, 'Appeasement does not work. As in the 1930s, we see in Saddam Hussein an aggressive dictator threatening his neighbours... We're not about to make the same mistake twice... We do not need another Hitler in this time of our century'. George Bush cited in Michael S. Sherry, *In the Shadow of War: The United States Since the 1930s*, (New Haven and London: Yale University Press, 1995), p. 464
- ⁴³ Bacevich, *American Empire*, p. 230.

⁴⁴ Oliver Burkeman, 'Rumsfeld Targeted in Midterm Election Fight', *The Guardian*, September 2nd 2006.

⁴⁵ For overviews of neoconservative thought see Stefan Halper and Jonathan Clarke, *America Alone: The Neo-Conservatives and the Global Order* (Cambridge: Cambridge University Press, 2002); Francis Fukuyama, *After the Neocons: America at the Crossroads* (London: Profile Books, 2006); and Andrew Bacevich, *The New American Militarism: How Americans are Seduced by War* (Oxford: Oxford University Press, 2005). For the major neoconservative tracts which reveal neoconservative thinking on global geopolitics, see David Frum and Richard Perle, *An End to Evil: How to Win the War on Terror* (New York: Ballantine Books, 2003); and Robert Kagan and William Kristol, *Present Dangers: Crisis and Opportunity in American Foreign and Defense Policy* (San Francisco: Encounter Books, 2000).

⁴⁶ As Frum and Perle argue in *An End to Evil: How to Win the War on Terror*: 'We must at all costs avoid the potentially much more serious error of turning Iraq into a ward of the United Nations or the "international community". Once the international bureaucrats get their hands on a society, they are loathe to let go. They continue to rule in Kosovo, Cambodia, Somalia, and Bosnia five and ten years after the conflicts in those states ended'. See Frum and Perle, *An End to Evil*, p. 142.

⁴⁷ See Donald Rumsfeld, 'Beyond Nation Building' (2003), <http://www.defenselink.mil/speeches/2003/sp20030214-secdef0024.html> (Accessed 1st August 2006).

⁴⁸ As Rumsfeld argues in 'Beyond Nation Building' (2003): 'Our experiences then [World War II] and now are similar... After Pearl Harbor our country fought back and defeated those who attacked it. But we also made clear that America was not interested in conquest or colonization. And when the hostilities ended after World War II we helped the Japanese people rebuild from the rubble of war and establish institutions of democracy. Take Kosovo where a driver shuttling international workers around the capital can earn ten times the salary of a university professor in that country... three years after the war the United Nations still runs Kosovo really by executive orders. They issue postage stamps, passports, driver's licenses and the like and decisions made by the local parliament are invalid without the signatures of the UN administrators... Our goal in Afghanistan is to try and not create a culture of dependence... Long-term stability comes not from the presence of foreign forces but from the development of functioning local institutions'. See Donald Rumsfeld, 'Beyond Nation Building'.

⁴⁹ See the following footnote.

⁵⁰ In Germany in 1945, for example, there were 101 soldiers per thousand inhabitants; following the war in Kosovo there were 20 per thousand inhabitants; in Iraq there are 7 per thousand, and in Afghanistan 1. The peak troop levels in Germany reached 1.6 million; in Iraq they have reached only 175,000, and according to the research of James Robbins at RAND, the significantly lower force to population ratios in Afghanistan and Iraq have contributed to much higher casualty levels. See Dobbins, *The UN's Role in Nation Building*, p. xvi and xxvii-xxviii. Dobbins also notes that whilst in the U.S. and Europe comparisons with World War II evoke memories of successful reconstruction, in the Arab world it evokes associations with Israeli occupation of the West Bank and Gaza. See Dobbins, *The UN's Role in Nation Building*, p. 234.

⁵¹ Thomas Donnelly, *The Military We Need: The Defense Requirements of the Bush Doctrine* (Washington D.C.: AEI Press, 2005), p. 58.

⁵² Sherry, *In the Shadow of War*, p. 378

⁵³ Cheney cited at www.washingtoninstitute.org/templateC07.php?CID=55 (Accessed 10th April 2007). This understanding of the requirement for limited objectives was also shared by Robert Gates (Deputy National Security Adviser at the time) and General Schwarzkopf. See http://www.pbs.org/wgbh/pages/frontline/gulf/script_b.html (Accessed 20th June 2008).

⁵⁴ Cheney cited at www.washingtoninstitute.org/templateC07.php?CID=55 (Accessed 10th April 2007).

⁵⁵ Cheney cited at <http://www.defenselink.mil/news/newsarticle.aspx?id=29033> (Accessed 10th April 2007).

⁵⁶ See Michael Gordon and Bernard Trainor (2006), *Cobra II: The Inside Story of the Invasion and Occupation of Iraq*, London, Atlantic Books, p. 93.

⁵⁷ Gordon Arnold, *The Afterlife of America's War in Vietnam: Changing Visions in Politics and On Screen* (London: McFarland and Co., 2006), p. 159.

⁵⁸ Halberstam, *War in a Time of Peace*, p. 265

⁵⁹ Bacevich, *American Empire*, p. 147/148.

⁶⁰ Dobbins, *The UN's Role in Nation Building*, p. x.

⁶¹ Bacevich, *American Empire*, p. 144

⁶² Halberstam, *War in a Time of Peace*, p. 264

⁶³ Joshua Muravchik, 'The Bush Manifesto', *Commentary* 114, (2002): 28.

⁶⁴ One group which challenged this view, however, was the neoconservatives. Whilst others argued that the Cold War was something to be managed, the neoconservatives continued to support an aggressive stance towards the evil empire and maintained the belief that the Cold War could be won. See Fukuyama, *After the Neocons*, p. 51.

⁶⁵ See Arthur Herman, 'Who Owns the Vietnam War?', *Commentary*, December 2007.

⁶⁶ James Mann, *Rise of the Vulcans: The History of Bush's War Cabinet* (London: Penguin Books, 2004), p. 117.

⁶⁷ Gibson, *The Perfect War*, p. 5.

⁶⁸ During the 1990s, the Bush administration encouraged the idea that the Vietnam War had contributed to victory in the Cold War. In his 1992 State of the Union address, Bush argued: 'The Cold War didn't end; it was won. And I think of those who won it, in places like Korea and Vietnam. And some of them didn't come back. Back then, they were heroes, but this year they were victors'. Bush cited Arnold, *The Afterlife of America's War in Vietnam*, p. 20

⁶⁹ Sorley, *A Better War*, p. 152

⁷⁰ Bush has compared calls for withdrawal from Iraq with what happened at the end of the Vietnam War in 1975. 'Many argued that if we pulled out, there would be no consequences for the Vietnamese people'. 'The world would learn just how costly these misimpressions would be. Three decades later, there is a legitimate debate about how we got into the Vietnam War and how we left. Whatever your position in that debate, one unmistakable legacy of Vietnam is that the price of America's withdrawal was paid by millions of innocent citizens. See http://news.bbc.co.uk/1/hi/world/middle_east/6958824.stm and <http://news.bbc.co.uk/1/hi/world/americas/6958947.stm> (Accessed 20th August 2008).

⁷¹ In fact, it was only after the invasion of Iraq and the problems of the post-war situation that *A Better War* became 'the hot book among Iraq strategists' (see cover review by David Ignatius). As David Ignatius reveals, the head of Central Command, General John Abizaid, had a copy of the book, as did State Department Counselor Philip Zelikov. And it was only after the U.S. began experiencing problems in post-war Iraq, that the terminology used by Abrams during the Vietnam War, and recounted by Sorley in his book – such as 'clear and hold' – became part of the official strategy of the U.S. in Iraq. On October 19th 2005, for example, Condoleeza Rice argued in testimony to the Senate Foreign Relations Committee: 'Our political-military strategy has to be clear, hold and build: to clear areas from insurgent control, to hold them securely, and to build durable, national Iraqi institutions'. The phrase 'clear and hold' appeared to have been borrowed from Abrams. See 'Praise for *A Better War*' on the opening pages of the book. For critics of the Bush administration's post-war strategy, however, this realization came too late. It is interesting to note, however, that in this respect, the Bush administration *did* take lessons from the Vietnam War. Like the representation of the Vietnam War in *Conflict: Vietnam*, Bush's statement on staying the course in Iraq highlighted his belief that the war in Vietnam had been winnable. But like the game *Conflict: Vietnam*, which depicted victory as a result of conventional military action, policy in Iraq initially failed to take heed of Abrams' 'one war strategy'.

Chapter 4: Military Computer Games and the Discourse Surrounding Warfare

- ¹ Andy Deck, for example, claims that films such as 'Gillo Pontecorvo's 1965 film, *Battle for Algiers*, has character development and thought-provoking dialogue. It comes nearer to conveying the human tensions of war than any video game has. It conveys the tragedy of war'. See Andy Deck, 'Demilitarizing the Playground', *No Quarter* (2004), www.artcontext.org/crit/essays/noQuarter (Accessed 8th November 2005). Mark Bowden, the author of the book *Black Hawk Down* (1999), although involved in the production of the film of the same name, refused to be involved in the production of the computer game *Delta Force: Black Hawk Down* (2005). As Bowden explained: 'I think there's a substantial difference between a work of art, which I consider a film to be, even a Hollywood film, [and a game]... A game is a game. It's something that you play. And this story is about real people, and I know many of the family members who lost brothers and husbands and sons in that battle. And I did not want to be part of something that turns it into a game'. See Wagner James Au, 'Weapons of Mass Distraction', Retrieved 28th January 2006 from http://www.salon.com/tech/feature/2002/10/04/why_we_fight/index.html?x
- ² Available at <http://www.newsgaming.com/games/index12.htm>
- ³ See <http://www.newsgaming.com/press092903.htm> (Accessed 10th September 2008).
- ⁴ See <http://www.newsgaming.com/games/index12.htm> (Accessed 10th September 2008).
- ⁵ Although Frasca did report that 100,000 people played *September 12th* in the first few weeks after it was published. See <http://www.watercooler.com/archives/000011.shtml> (Accessed 12th September 2008).
- ⁶ See <http://www.newsgaming.com/press092903.htm> (Accessed 10th September 2008).
- ⁷ The 'games for change' movement attempts to promote the production of games with real critical and social impact. See <http://www.gamesforchange.org/> (Accessed 10th September 2008). At the University of Southern California, for example, there has emerged a counterpoint to the ICT (which produces military training tools and commercial games, see Introduction) in the form of the Centre for Public Diplomacy. The centre hosted the prize for 'Reinventing Public Diplomacy Through Games' competition in 2006. The winner was *Peacemaker*, a game looking at possible resolutions to conflict in the Middle East. See http://uscpublicdiplomacy.com/index.php/events/events_detail/1686/ (Accessed 1st September 2006).
- ⁸ *A Force More Powerful* is a non-violent strategy game which is designed to teach players about the power and strategic use of non-violent action. See <http://www.aforcemorepowerful.org/game/index.php#about> (Accessed 10th September 2008).
- ⁹ See Oliver Kamm, *Anti-Totalitarianism: The Left-Wing Case for a Neoconservative Foreign Policy* (London: The Social Affairs Unit), p. 81
- ¹⁰ See <http://seriousgamessource.com/index.php> (Accessed 12th September 2008).
- ¹¹ Esther MacCallum-Stewart works in this area. See <http://www.whataloveywar.co.uk/> (Accessed 12th September 2008).
- ¹² See the Introduction, and Ed Halter, 'Islamogaming: Looking for Videogames in the Muslim World' (2006), <http://www.lup.com/do/feature?pager.offset=0&cId=3153332> (Accessed 13th September 2006). For information on *The Night of the Bush Capturing* see http://www.gamasutra.com/php-bin/news_index.php?story=14112 (Accessed 6th June 2007).
- ¹³ Ed Halter, *From Sun Tzu to Xbox: War and Video Games* (New York: Thunder's Mouth Press, 2006), p. 283.
- ¹⁴ Halter, 'Islamogaming: Looking for Videogames in the Muslim World'.
- ¹⁵ The *Special Force* website describes: 'The problem behind these electronic games, especially those designed for computers, is that most of them are foreign make, especially American. Therefore, they present enormous false understandings and habituate teenagers to violence, hatred and grudges. In addition, some enfold[sic] humiliation to many of our Islamic and Arab countries, where battles are running in these Arab countries, the dead are Arab soldiers, whereas the hero who kills them is...an American'. See

<http://web.archive.org/web/20041207003910/www.specialforce.net/english/indexeng.htm>

(Accessed 12th September 2006).

¹⁶ David Machin and Usama Suleiman, 'Arab and American Computer War Games: The Influence of a Global Technology on Discourse', *Critical Discourse Studies* 3, 1 (2006): p. 3.

¹⁷ Alexander Galloway, 'Social Realism in Gaming', *Game Studies* 4, no. 1 (2004). Available at <http://gamestudies.org/0401/galloway/> (Accessed 10th December 2004), p. 4

¹⁸ This was the *Observer* review on the back of the video case.

¹⁹ See David Machin and T. Van Leeuwen, 'Computer Games as Political Discourse: The Case of Black Hawk Down', *Journal of Language and Politics* 4, no. 1 (2005).

²⁰ Maria Consalvo, 'It's No Videogame: News Commentary and the Second Gulf War' (2003), <http://www.digra.org/dl/db/05163.33172> (Accessed 20th June 2007).

²¹ William L. O'Neill, 'The "Good" War: National Security and American Culture', in *The Long War: A New History of U.S. National Security Policy Since World War II*, ed. Andrew J. Bacevich (New York, Columbia University Press, 2007).

²² See the transcripts of the PBS documentary on the Gulf War, which featured all of the main players, at http://www.pbs.org/wgbh/pages/frontline/gulf/script_b.html (Accessed 20th June 2008). See also Michael R. Gordon and Bernard E. Trainor, *The Generals' War: The Inside Story of the Conflict in the Gulf* (New York: Back Bay Books, 1995).

²³ See the transcripts to the PBS documentary at http://www.pbs.org/wgbh/pages/frontline/gulf/script_b.html (Accessed 12th September 2008) and Gordon and Trainor, *The Generals' War*.

²⁴ In fact, the only group that had argued for regime change in 1991 was the neoconservatives. See Andrew Bacevich, *The New American Militarism: How Americans Are Seduced by War* (Oxford: Oxford University Press, 2005), p. 86.

²⁵ Even the idea that Vietnam War films such as *Apocalypse Now* and *Platoon* present enduring lessons and critical reflections concerning warfare has been challenged. As Michael Sherry comments, in 'Portraying Vietnam as mysterious, most films made the war there incongruous – disconnected from traditions of American war making in Asia and offering no larger lesson about war's meaning and utility. What instruction, after all, could an atypical war offer about war generally?' See Michael S. Sherry, *In the Shadow of War: The United States Since the 1930s*, (New Haven and London: Yale University Press, 1995), p. 361. James Kurth's analysis of the Vietnam War, which investigates the reasons behind the failure of U.S. strategy, adopts a similar perspective. As Kurth writes in 'Variations on the American Way of War: The Ordeal of an un-American Strategy', the Vietnam War was 'the only defeat for the United States in the long history of American wars. A major reason for this defeat was that, for much of the course of the Vietnam War, U.S. military operations had been in clear violation of the American way of war'. See James Kurth, 'Variations on the American Way of War', in *The Long War: A New History of U.S. National Security Policy Since World War II*, ed. Andrew J. Bacevich (New York: Columbia University Press, 2007), p. 71. In Kurth's analysis, therefore, the Vietnam War did not signify lessons in the limits of military force, or even the requirement of a change in U.S. policy; for Kurth, the failure in Vietnam was not a failure of U.S. strategy, but rather a failure to apply the American way of war.

²⁶ Geoff King and Tanya Krzywinska, *Tomb Raiders and Space Invaders: Videogame Forms and Contexts* (London and New York: I.B. Tauris, 2006), p. 168

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¹ David Leonard, 'Unsettling the Military Entertainment Complex: Video Games and a Pedagogy of Peace', *Studies in Media and Information Literacy Education* 4, no. 4 (2004).

² Electronic Software Association, '2007: Essential Facts About the Gaming Industry' (2007), <http://www.theesa.com/archives/files/ESA-EF%202007.pdf> (Accessed 7th February 2007).

This reference list is split into a bibliography, gameography (list of games), and filmography (list of films) for ease of reference.

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