Changing the Rules of Engagement -

Tapping into the Popular Culture of *America's Army*, the Official U.S. Army Computer Game

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Digital games are rapidly becoming the preferred pastime of adolescents all over the world. Whereas the research and development into simulation technologies was initially the domain of military communities, over the last few decades the commercial game development industries introduced new modelling and simulation technologies. By the appropriation and adaptation of successful commercial game technology, the United States military contributes to specific areas of research and development thereby deliberately tapping into youth popular culture. This thesis examines the status of the free state-of-the-art PC-game *America's Army* within the military-entertainment complex and contemporary youth popular culture by exploring the implications of the interaction between commercial game culture, technology and marketing and military culture. Since the United States military uses the same simulation technologies as commercial game designers do, there is a blurring between commercial (military themed) games and governmental military simulations. The success of *America's Army* has implications for thinking about games and simulations and the use of these interactive texts for advertisement, education, analysis and propaganda. The aesthetic and socio-economic implications of the appropriation of game culture, results in a dynamic relationship between the top-down institutional nature of the U.S. military and the bottom-up participatory character of game communities and signals a shift of the changing status of the representation and simulation of war. The extensive and multi-dimensional analysis of a single PC-game documents its curriculum vitae and at the same time provides a framework for further game research of this kind.

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Changing the Rules of Engagement – Tapping into the Popular Culture of *America's Army*, the Official U.S. Army Computer Game

Thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in Communications (*Doctoraalscriptie Communcatie- en Informatiewetenschappen - Specialisatie Nieuwe Media en Digitale Cultuur*) at the Faculty of Arts, Utrecht University, the Netherlands.

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Abstract

Digital games are rapidly becoming the preferred pastime of men and women all over the world. Whereas the research and development into simulation technologies was initially the domain of military communities, over the last few decades the commercial game development industries introduced new modelling and simulation technologies. By the appropriation and adaptation of successful commercial game technology, the United States military contributes to specific areas of research and development thereby deliberately tapping into youth popular culture.

This thesis examines the status of the free state-of-the-art PC-game *America's Army* within the military-entertainment complex and contemporary youth popular culture by exploring the implications of the interaction between commercial game culture, technology, marketing and military culture. Since the United States military uses the same simulation technologies as commercial game designers do, there is a blurring between commercial (military themed) games and governmental military simulations.

America's Army is a logical outcome of the expanding military-entertainment complex and signals the successful linking of entertainment and defence. The U.S. army is just one of many institutions using games to promote its services. However, unlike many other companies thus far, the Army can claim that it has been very successful at it. Why it became such a success is only part of the question, but its implications are equally important.

By juxtaposing the game within the broader range of First Person Shooter games the aesthetic and socio-economic implications of a new generation of computer games in an age where war has become an experiential intertextual commodity will be explored. The realistic approach to both the production of *America's Army* and the representation of the U.S. Army in a virtual environment raises questions about the status of *America's Army* as a game. By analysing the game itself, its production, distribution, and its reception, four different dimensions of the game will be proposed: a recruiting tool, a propagame, an edugame, and a test bed and tool for the U.S. Army.

The success of *America's Army* has consequences for thinking about games and simulations and the use of these interactive texts for advertisement, education, analysis and propaganda. The appropriation of a global game culture results in a dynamic relationship between the top-down institutional nature of the U.S. Military and the bottom-up participatory character of game communities and signals a shift of the changing status of the representation and simulation of war. The extensive and multi-dimensional analysis of a single PC-game documents its curriculum vitae and at the same time provides a framework for further game research of this kind.

Foreword & Acknowledgements

Before I wrote this foreword, I wrote a dozen others. Some were hilarious, others very immature, but all of them were utterly boring. I may have written dozens of pages about *that* game. Nevertheless, I had a hard time explaining why I like researching the game so much, where to begin? In my humble opinion, *America's Army* and researching it, touches upon every interesting aspect of contemporary game culture. Fans, clans, mods, the U.S. military, guns that go BOOMMMM, technical computer (nerd) stuff, First Person Shooter games, war, U.S. foreign policy, doing research, writing, thinking, writing some more and playing games *because you are doing research*.

Thinking and writing about this game, proved to be as fun as playing it. It got a little out of hand. You cannot play *America's Army* for ten minutes, it is simply impossible. If you like the game, you play for at least half an hour. And when you are in a winning mood, you might just play for another hour. Writing this thesis meant the same excitement, amazement, anger, misery, happiness and joy as during online play. You cannot research a game such as *America's Army* for ten minutes. If you want to gain *some* understanding, you have to 'play' for another hour.

Thanks for taking care, for the support and inspiration professor dr. William Uricchio! Thanks for reading along Imar!

A major, Major acknowledgment for Super-friend Shenja, Viva Las Vegas! Thanks a million for reading Nardi & Ruud. A big fat Hooah for Bernadette Kester, the Gibbons-family, Keir Darcey, de gehele TMG redactie, Brock R. Dubbels, MasterGnr, Karen J. Hall, Mike Zyda, New York Law School for a scholarship, the =UBF= clan, Capt. Keybind, Vatte Bedeend, all my students of the New Media and Popular Culture: Computergames-course, all at Ownage.nl, the Creative Gamers Seminar participants, and the Game Analysis Methodology course participants. There's no I in team – a lot of gratitude for the academic support of all those colleagues at Utrecht University, e.g. Ann-Sophie, Eggo, Eva K., Frank, Jan-Hein, Marinka, Marjan, Mirko, Pepita, Sybille en Zuraida.

Een eresaluut voor Pa & Kris en *the family.*

En deze is voor jou Jet, *totus tuus*.

Chapter 1 - Introduction

The first sentence of a thesis is always the hardest so let me just skip it.[1] My memories of the first Gulf War are quite vivid. In the middle of the night my mother woke my little brother and me: "Boys, sorry I woke you but you should see this. What you'll see is history in the making." It proved to be a valuable foresight. What I saw that night made an impression that lasts until this day. The TV was glowing with green balls. This was war and we were watching. My mother was scared, what if they dropped chemical weapons on Israel? My geopolitical knowledge at the time had yet to be developed so my attention was on those green balls that lit the sky over Baghdad, wow war was thrilling and cool! My first experience with war was a mediated one. Only half a decade later I would learn the true face of war, reading about "the Highway of Death", the thousands of killed Iraqi soldiers and civilians and that this was "perhaps the first war ever orchestrated for television" (Kellner, 1992).

Then, the second Gulf War began. And similar to the first one, this war was both highly anticipated and seen as inevitable (c.f. Compton, 2004). The American comedian Lewis Black gave a humorous account of the months leading to war:

> "So by the time it came around I was like WOOOHOO we're going to war. So I'm excited. I may be ambivalent about war, I don't like war, but dammit now I got a reason because he (President George W. Bush, DBN) fucking told me. He's been telling me every day. Dammit, he's right. Saddam Hussein is a prick, I'm going to kick the shit out of him"[2]

And it is true; this war was anticipated by many all over the world. During the build-up of troops I had many discussions with friends and relatives: will the U.S. attack and when? This time I was prepared. I made a deal with a friend that we would call each other when the war would break out. War became an instant combat spectacle, a live-feed from the front and the best of all, we were there, on the couch with food and beverages. It was beyond cynical….

And when it broke out and I saw the first images of war, tanks racing through the desert, I had the feeling I had been there before. It was like watching a rerun of a movie. You can still stand to watch it again, but in the end you have seen it all. I had a similar experience when I visited New York for the first time, it was all so familiar. The taxis, the sky scrapers, the hot-dog stands, McDonalds, Starbucks, I had seen it all before. In a similar way, I had the strange feeling I had seen this war before. I knew the names of the units (the 101st Airborne Division), the weapons (a modded M4 with a M203 grenade launcher), I recognized the call-signs, the hand-gestures, the army slang. In short, I had the feeling I knew these soldiers, their duty, their humor, their perils, their anxieties. The simulated experience I had of war looked

[1] Thanks for the tip Jet! Please note that this is the first and certainly the last dotty attempt to insert 'humor' from my part in this thesis.
[2] Black, Lewis. Rules of Enragement. Comedy Central Recordings, 2003.

exactly like the 'real war' as shown on television and what struck me the most was the total lack of criticism or reflection I myself had during the road towards war. I just had to experience war on television, I just wanted to see it, just like a 'good' war movie and of course the Americans had to win. What happened here? To answer this question I have to take you back to the fourth of July 2002.

At July 4, 2002 the free PC-game *America's Army*: *Recon* (U.S. Army, 2002) was released. *America's Army* is a so called First Person Shooter (FPS) game, developed and published by the U.S. Army.[3] PC games in the popular FPS genre are an interesting starting point to question the relation between the representation of recent military conflicts, and the War on Terror in particular, and popular culture. The same games used by the American military to prepare soldiers for ongoing and future conflicts, are used by gamers in their fight against boredom. The saying "there is only one truth about war: people die", is constantly put to the test by FPS games but also by the representation of war within a journalistic discourse. The next game is about to begin, or as the commander in the military game *Full Spectrum Warrior* shouts to the gamer: "Lets play wargames Soldier!"

1.1 What do you want for Christmas?

The influential game theorist Espen Aarseth is of the opinion that games are probably the most influential product of computer technology. Many aspects of the omnipresent and growing cyber culture are surfacing in this new form of digital amusement (Crogan, 2004). Scholars within the emerging field of game studies seize the moment to underline the importance of studying games and game culture. The game industry is not only growing rapidly, games are a growing part of contemporary popular culture and occupy a special place within the lives of many youngsters all over the world (Herz, 1997; Poole, 2000; Kline et al., 2004; Newman, 2004; King & Borland, 2003). It was Gonzalo Frasca who proclaimed: "After an early start as a subset of digital text studies, video game studies is finding its own academic space. Probably the most promising change comes from a new generation of researchers who grew up with computer games and now are bringing to this new field both their passion and expertise on this form of entertainment" (2003: 221). This thesis is the product of a researcher from the games generation. I grew up with PC-games and the history of the main genre studied in this research, the First Person Shooter-genre, matured at the same moment as I did. Having vivid memories of *Wolfenstein 3-D* (id Software, 1992) and *DOOM* (id Software, 1994), I come to this field with

[3] The analyses in this thesis are based on all versions of *America's Army* up till *America's Army: Special Forces* (Firefight) version 2.3, released on February 18, 2005. When giving specific data (e.g. the number of maps), I always refer to version 2.3. See for a complete list of all versions appendix C. For the sake of clarity I will always refer to '*America's Army*' when discussing 'the game' or 'the Army Game'. In paragraph 2.5.1, the methodological implications of researching a game under constant development will be discussed.

great passion, intense enthusiasm, a pair of red eyes and expertise gained by experience.[4] Lots of experience.

This new field Frasca refers to is better known as Game Studies, a discipline where scholars and students immerse themselves in the craft of studying digital games. Similar to Film or Television Studies, Game Studies uses social scientific and humanities perspectives and is able to draw on a rich body of disciplines and fields of studies ranging from Anthropology, Economics and Narratology to Political Sciences and Communication Studies. Being able to visit academic conferences on games, to teach and be taught game related courses and to visit seminars, talks, discussions and lectures on games all signal the growing academic importance of this interesting interactive object of study.

Games can longer be seen as child's play. The question is, if games ever have been child's play. The earliest digital games were developed in universities and (military) research laboratories, and thus intensively played by their developers and subsequently by a growing number of gamers. Later on, PC games such as *DOOM* were developed by young men in their early twenties and played by a heterogeneous group of thousands of networked gamers all around the world, playing at "school, corporations and government facilities" (Kushner, 2003: 160). Due to the graphic nature but also the sophistication of many contemporary PC games, children are not even the primary target group of game publishers. The average age of a gamer is not thirteen, not even twenty, but twenty-nine (ESA, 2004).

It is tempting to start an academic article or a thesis with a comparison of the movie industry with the gaming industry. Are games as big as Hollywood? Many game scholars and students hope so and use an economic argument to give their subject the credit it certainly deserves. The claim that games are bigger than Hollywood, is an arbitrary one. Does one include figures of DVD-rentals, is the consumption of U.S. produced movies comparable to a global gaming culture? By using a disputed financial claim, one does not do justice to the important socio-cultural value of digital games. A sixty Euro game can be compared to an eight Euro visit to the movies, but in the end both the game and the movie can be a terrific/horrific experience. The true value of games can be quantified by empirical data such as the amount of time gamers spend by gamers in front of or behind their PC or television screens, with a controller in their hand, engaged in hour-long (online) gaming sessions.[5] Combine this quantitative data with qualitative observations and one has an argument that screams: 'Games are here to stay'. You can also ask a sixteen year old boy what he wants for Christmas and you will get the answer as well.

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[4] Throughout this thesis I will systematically annotate the games mentioned, by providing the development studio (or developer) and the year a game is published for the first time. In the references there is a special ludology section with all the games mentioned in this thesis and a more complete MLA annotation. There has been some debate on the Gamesnetwork discussion list about the merits of a universal videogame referencing style guide, c.f. Roudavski, Stanislav. Academic Videogame-Referencing Project. 2003. Stanislavroudavski.net. Available: http://www.stanislavroudavski.net/Research_Prj/Game_Refs_Prj. March 10, 2005.

[5] Also add, the time spend on game fora, developing game related content, reading about games and various other actions an interactive audience may perform (c.f. Jenkins, 2002).

1.2 Theoretical Trajectories

Digital games are rapidly becoming the preferred pastime of adolescents all over the world. Whereas the research and development into simulation technologies was initially the domain of military communities, over the last few decades the commercial game development industries introduced new modelling and simulation technologies.[6] By the appropriation and adaptation of successful commercial game technology, the U.S. military contributes to specific areas of research and development and as a result it taps directly into youth popular culture. Since this vast military apparatus uses the same simulation technologies as commercial game designers do, for marketing purposes, military training and testing, there is a blurring between commercial (military themed) games and governmental military simulations. The same games used by soldiers to prepare for war serve as entertainment for gamers who are eager to experience the virtual battlefield. As such, military themed games become part of the long history of the synergy between the political and domestic sphere: "The cross-fertilization that has taken place between adult political culture and adolescent popular culture since at least the era of twentieth-century fascism functions to reformulate the play of childhood and the seriousness of adulthood […]" (Hall, 2003: 53). The following case study of *America's Army* explores the implications of the interaction between commercial game culture, technology, marketing and military culture.

An extremely useful book on the interaction among game technology, game culture and marketing is written by Stephen Kline, Nick Dyer-Witheford, and Greig de Peuter (2004). They see games as the ideal commodity in the post-Fordist society, and PC-games, such as *America's Army*, are natural inhabitants of this new high-technology capitalistic society.[7] The notion of a post-Fordist society is a suitable concept to frame the role of *America's Army* within today's culture. The post-Fordist society, also dubbed "post-industrial capitalism" and "information capitalism", signals "changes in the workplace, in patterns of consumption. In media of communication, and in the role of government" (ibid: 64). It is a move towards perpetual innovation, from material to experiential commodities and towards the development of media, information and digitization. The notion of a post-Fordist society and its emerging characteristics correspond with *America's Army*, its development and publishing, as well as its reception. As a digital text, the game is an experiential commodity *pur sang* and under constant development. As a virtual replica of the U.S. Army, the U.S. military's role in a post-Fordist society, directly influences *America's Army* within the domain of the game, its development and its reception. A vital element "to the construction of a lean and mean post-Fordist state" is the use of "new digital weaponry and security systems" (ibid: 65). A society where war, as I will outline in this study, has become an experiential commodity and where game technology anticipates post-human warfare.

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[6] Unless stated otherwise, the use of the words 'the military', 'Army' and 'defense communities', always refers to the U.S. military.
[7] Defining an ideal commodity, based on the ideas of Martyn Lee, as "an artefact within which converge a series of the most important production techniques, marketing strategies, and cultural practices of an era" (Kline et al., 2004: 24).

The research of Kline et al. provides a very useful theoretical framework to tackle the three main elements constituting the research on games that they discuss in their model of "the three circuits of interactivity in the mediatized global marketplace." In this model, they balance the strengths and weaknesses of three theoretical approaches to study media – i.e. media theory, cultural studies, and political economy – to understand the circuit of technology (production), culture (commodities), and marketing (consumption).[8] The combination of these three theoretical trajectories provides a multi dimensional approach to the study of interactive games, by balancing overly deterministic views on the role of technology with overly deterministic views on human agency and the structuring power of capitalistic societies. For instance, futurists such as Alvin Toffler celebrate the interactive nature of games and see interactivity as a counter-hegemonic trait overthrowing broadcast technologies. Gamers are able to structure their own experiences "through technological empowerment, consumer sovereignty and cultural creativity" (ibid: 14). Such overly deterministic stances can be balanced by arguments from a political economic or cultural studies perspective, stressing both structure and agency.

The research of Kline et al. is even more relevant as they see a historical linkage between digital play and the military similar to chapter 2.[9] And since they base their theoretical assumptions on the work of the Welsh academic Raymond Williams, they stress the need to understand the historical circumstances of the development of a medium. The invention of the television was not the outcome of a "single event", and neither are digital games, nor is the digital text *America's Army*. By locating the development of a text within its institutional context, there can be a more fluid understanding of the economic, technological and socio-cultural factors of its origination. In chapter 3, I will give such an historical analysis of the linkage between military and entertainment communities.

As a free downloadable online PC-game, *America's Army* is part of a global game culture, noting that "nearly all the game industry's sales are within advanced capital's triadic core of North America, Europe and Japan […] " (ibid: 190). "The global economy has become increasingly multipolar" and the globalisation of communication influences media texts in many ways (Thompson, 1995). Transnational communication and the development of ever expanding new (communication) technologies, enables game developers and publishers to transgress national boundaries in order to increase their audience. Some argue that this process of globalisation leads to an "American Hegemony" (Schiller as quoted in Thompson, 1995: 167) and is closely linked "to the rise of a significantly more integrated 'neoliberal' global capitalistic economic system" (McChesney, 2000: 159). The size and output (measured both in economic and in symbolic power) of the main publishers of games puts them in line with the 'media moguls' (e.g. AOL Time Warner, Bertelsmann, Sony) and many publishers are already

[8] To a small degree this model is conceptually similar to the model outlined by Nieborg (2003b).
[9] "Interactive gaming is a spin-off of the military-industrial complex […]" (Kline et al 2004: 179).

part of these companies. Thompson signals a trend of global diffusion of the production of media texts. As for the reception of media texts (games), due to their "contextualized character of appropriation, one cannot determine in advance which aspect (or aspects) will be involved in the reception of a particular symbolic form" (Thompson, 1995: 177). The question of the local appropriation of *America's Army,* and whether or not this trend of globalisation leads to what some call cultural imperialism of the United States (McChesney, 2000), are most intriguing, but unfortunately falls outside the scope of this thesis.[10]

1.3 The Complex Interplay of a Multidimensional Game

By analysing the game itself, its production, distribution, and its reception, I will propose four different dimensions of *America's Army* in chapter four: a marketing tool, an edugame, a propagame and a test bed and tool for the U.S. Army. These dimensions touch upon various fundamental questions regarding contemporary cyber culture, using games for education, marketing, analysis (testing) and propaganda. Therefore, the theoretical trajectories offered by Kline et al. correspond with the four proposed dimensions. As game culture has become part of "a web of synergistic advertising, branding and licensing practices spreading through contemporary popular culture" (Kline et al: 21), the contradiction of commodification and play can be framed by the theories of political economy. The pervasive role of gaming technology, merging with military technology, can be understood by tracing the various technological possibilities of the medium and their relation with mass consumption. The "circuit of culture" (based on the theoretical assumptions of cultural studies), acknowledges the important role of popular culture in a capitalist society but at the same time interacts with the circuit of marketing. Throughout this thesis there will be implicit and explicit references to the interaction and assumptions of the three theoretical trajectories as discussed by Kline et al.

America's Army as a text not only interacts with its design rational explicated through its four dimensions, but also with other games in the same genre. As a game, authenticity and fun are constantly balanced. This balancing act offers interesting interactions between the U.S. Army trying to recruit, educate and use the game as a test tool and the need of gamers for entertainment. This thesis explores the status of *America's Army* as a game and as a simulation. By juxtaposing the game within the broader range of FPS games the aesthetic and socio-economic implications of a new generation of commercial media culture in an age of computer network-facilitated participation will be explored. *America's Army* is a logical outcome of the appropriation of popular culture by the U.S. Army and has earned its own place within in the broader range of First Person Shooter games. The realistic approach to both the production of *America's Army* and the representation of the U.S. Army in a virtual environment raises questions about the status of *America's Army* as a game.

[10] A small part of this paragraph first appeared in Nieborg (2003b). Chapter 2.4 discusses the community and gamers of *America's Army*.

Why a thesis about just one single game? The multi-dimensional character of the game makes it fairly unique. While each of the single dimensions may be present in other games, the dynamic combination of all four within one successful state-produced game is unequalled. The four different dimensions of *America's Army* provide a comprehensive framework and a starting point for future research. The Army Game is the centre of a growing community where gamers meet to experience a representation and simulation of war and interact with a government institution. The success of *America's Army* has implications for thinking about games and simulations and the use of these interactive texts for advertisement, education, propaganda and training. The extensive and multi-dimensional analysis of a single PC-game documents its curriculum vitae and at the same time providing a framework for further game research of this kind. As an online game and part of a global game culture, *America's Army* has become the pivotal point of an enormous cluster of (mostly virtual) communities. As gamers are the lifeblood of any game, especially online games, the focus on the reception of the game by various groups is indeed paramount. Nevertheless, this thesis primarily focuses on *America's Army* as a text and will discuss the role of gamers and reception of the game only when appropriate. No thorough reception analysis has been conducted on my part. But as said before, this thesis provides a rich theoretical framework to further analyse the role of an audience interacting with a government-developed game. To ask the right questions and to understand the actions of gamers, developers and the U.S. Army, the multidimensional character of *America's Army* has to be acknowledged at all times.

1.4 Methodological Trajectories

Besides hours and hours of online play analysis, various forms of non-play analysis (Aarseth, 2003) are conducted – i.e. gaining and using (previous) knowledge of the genre (e.g. Kushner, 2003) and previous knowledge of the game-system (see chapter 2), analysing other players' reports, reviews (e.g. Hecht, 2004), written interviews with players (e.g. Li, 2004), game documentation (e.g. Tran, 2005), interviews with game developers (e.g. GameDaily Staff, 2005; Roth, 2003; Scutro, 2004), engaging in discussions, observing others play, interviewing players, but also analysing design documents (e.g. Zyda et al., 2004; Davis, 2004), somewhat neutralizes the shortcomings of no direct reception analysis.[11] This thesis is the result of a research project on PC-games and the FPS Game *America's Army* in particular, which took almost three years.[12] The first significant (academic) output of this project was the exploration

[11] The distinction of play-analysis and non-play analysis is based on Aarseth (2003) and the list of the various forms of non-play analysis is derived from his paper. The examples in this list are not exhaustive. Over the last two and a half years I gathered many more interviews, reports, interviews with members of the community, and participated in countless online and offline discussions other than annotated in the references.

[12] Visiting the 'State of Play: Law, Games, and Virtual Worlds conference' at the New York Law School and the 'Creative Gamer Seminar' at the University of Tampere, Finland, lecturing at the Institute of Military History in Den Haag, the University of Amsterdam and the Utrecht University, as well as teaching courses, such as 'New Media and Popular Culture: Computer Games' at Utrecht University, all contributed to the realization of this thesis and provided additional knowledge and input on the role of *America's Army* in youth popular culture.

of the cultural status of the *America's Army* (Van der Graaf & Nieborg, 2003). In this paper the game, its production, distribution, and its reception were analysed and the four different dimensions of the game were proposed for the first time. The four dimensions were further considered in Nieborg (2004b), focusing on the use of *America's Army* as a game based simulation. *America's Army* is more than a 'mere' marketing tool. The implications of the four different dimensions of *America's Army* offered a starting point for further analysis of the changing relationship between military and electronic entertainment communities. This relationship was explored by Nieborg (2004c), arguing that the FPS game *America's Army* is a logical outcome and example of the successful linking of the entertainment and defense industry. A growing interaction between computer games, the representation of recent conflicts and the news discourse is a result of this linkage. This claim was backed by the analysis of several FPS games and user-created modifications and by a review of the research of the representation of war and partly draws on previous research by Nieborg (2004a; 2005) as well.

Knowledge about the game, its production and development and the role and actions of gamers, is gained by thoroughly and systematically playing the game and through my experience as a member of the *America's Army* community. In July 2002, I started playing and since then I spent more than 500 hours online, playing almost every version for a substantial amount of time.[13] A considerable amount was spent online, playing with friends, communicating via voice over IP software. Playing together adds an extra dimension to the game and at the beginning of 2003 we decided to found an *America's Army* clan.[14] Playing in a clan, which lasted until May 2003, provided a whole new perspective on the *America's Army* community. The clan grew in early 2003 and at one time there were over 22 Dutch and Belgian members. We fought clan wars via Team Warfare League (TWL), on online tournament system, and had an active website and forum.[15] The clan experience made clear to me that gamers are eager to invest significant amounts of time on a game just to get some peer-acknowledgement.[16]

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[13] The German website AAOTracker provides a free tracking service. By opening an account, all the time spend online is displayed here. See ArmyOps-Tracker (powered by 4Players). 2005. AAOTracker. Available: http://aaotracker.4players.de/portal.php. February 25, 2005. From February 2003 until today I have over 300 tracked hours, which comes down to 24 minutes a day on average. My main account has an Honor of 59, see the next chapter for an analysis of the Honor system. Mostly playing on "official servers" in the early phases of my research but later on I picked various servers. The maps I like the most are, very average compared to the general population of players, SF Hospital and of course the map Pipeline. Before the launch of AAOtracker, the website www.trAAcker.com provided a tracking service for *America's Army* as well.

[14] The clan was not meant as an experiment and had initially nothing to do with my academic interest in the game. Only later I recognized what an educational experience it had been.

[15] See: TeamWarfare Community Based Gaming. 2005. Teamwarfare.com. Available: http://www.teamwarfare.com/default.asp. March 23, 2005. The clan stopped functioning properly because of the enormous amount of time it took for me and my friends to keep the clan running. It was an extremely fun and weird experience, spending a significant amount of time communication with complete strangers (e.g. from a 40 year old taxi driver from Amsterdam to a 14 year old kid).

[16] Halfway during the clan's existence, we (my friends and I were the 'leaders' of the clan) introduced a medal system. This system soon became one of the main reasons to play the game for many clan members. For instance, on medal was awarded for killing more than 25 opponents during seven rounds and a race started among clan members to be the first to reach this goal. The main reason these (Dutch) gamers chose to play *America's Army* was because of its price.

To provide a methodological framework for the systematic analysis of First Person Shooter games in general and *America's Army* in particular, two conceptual frameworks (i.e. Konzack, 2002; Aarseth, 2003) were used. A third text, that of Nieborg (2003b), presented at the PhD-course Game Analysis Methodology at the ITU in Copenhagen, provides an additional model. This model, mainly based on the method for computer game criticism by Lars Konzack (2002), is rather a systematic tool to produce a concise analysis of a game, than a clear cut method. Central to the approach is the claim to not only analyse ones object of study (games/simulations) and its reception, but also to focus on the production and publishing of games in order to come up with insightful questions and gain proper understanding of the object of research. In order to analyse a game with the inclusion of the analysis of the distribution and publishing of video games, three domains are proposed, first the domain of the production & publishing of a game, second the domain of the text (the game), and third the domain of the gamer, the reception of a game. All domains are equally important and highly dynamic. Adequate knowledge of all three domains, and their relevant elements, is key to proper understanding of a game and interesting questions lie in between the three domains.

1.4.1 Empower Yourself: Do Research!

It seems hard to detach oneself from a research object, especially games. Where a favourite television series can be watched once by the general public and a dozen times by television researchers, a scholar of game studies can get lost in a virtual world for weeks or even months in a row. Since my case study is one single game, I deemed it necessary to disclose my status as a gamer/researcher and provide full accountability of my views.

As a gamer I completely comply with the likely gamers description (see paragraph 2.4); a white male in his early twenties. The fact that I am a member of the majority of *America's Army* gamers does, in my opinion, not shut any doors or limit a critical view. I would even argue that being 'an average gamer' helps me to better understand this group as I am part of it. I am an insider, not an outsider. Growing up as "a digital native" with next generation consoles and the rise of networked FPS PC-games, I hope I can address and analyse the game and its community from an inside perspective and avoid the many pitfalls that led to misconceptions about the game in particular and FPS games in general.

The gameplay of *America's Army* provides a visceral thrill, no doubt about that. The thrill derives from the tactical gameplay and a mixture of military and gamers discourses. Playing the game can be a very physical experience, sweating, rapid heart beating, and the comforting knowledge that playing a round of *America's Army* will never have 'real' physical consequences. Getting shot in front of a friend during a round or failing to successfully supply cover or to deploy smoke, results in a lot of peer-pressure (all in the spirit of being good friends), but a mutual bond, forged during a chaotic fire-fights, and successful cooperative gameplay is the main source of pleasure.

I would label myself as a fan of the game. I would buy the game if it cost money, I feel happy when I can find some time to play it, and feel a sense of joy writing, thinking and talking about it. Does being a fan hamper my objectivity in any way? On a superficial level it would. However, during the time I learned, thought, read and wrote about the game I grew so fond of, a more critical view emerged. I started as a fan and became an academic, maybe not an uncommon journey for many researchers, although it would be a somewhat arrogant thought to feel any kind of remorse about even a remote influence of my writings on the enormous institution *America's Army* has become. It is as a journalist embedded during the second Gulf War. Only as an embedded reporter one can directly witness the events unfold. But in this thesis the report from the battlefield will not be "anecdotal, combat focused, mostly live and unedited" (Compton, 2004: 24).[17] My loyalty lies with academia/science and my primary goal is a critical, structural and annotated analysis.[18] All other emotions are subject to this. Objectivity is and should always be the primary goal, but is as unachievable as to complete *America's Army*. A privileged position from where one can approach ones object is absent when giving partial reports and particularized and contingent accounts (Jenkins, 1992). Being a fan of the game only adds to the supposedly subjectivity towards the object of research. But only by participating in the game, i.e. playing it, and by active participation in its community one can provide a more complete picture.

1.5 Move Out Soldier!

The next chapter, *America's Army* as a First Person Shooter, will define the case of this study. After a short history of FPS games, there will be a comparative analysis trying to position *America's Army* within the broader range of FPS games. Various data are offered as well as the nature and demographics of the *America's Army* player base. Chapter 2 will end with an insight in the development of the game and the Army Game Project's rationale.

In chapter 3, Military and/or Entertainment, the game is put in a broader perspective and provides an overview of the interplay between society and the (U.S.) military.[19] There is a

[17] "Critics were quick to point out that embedded journalists were only telling one side of the story, since, being in the middle of only the American action, they could see only one side. Furthermore, working in close proximity with soldiers who were putting their lives on the line, the journalists were almost always in sympathy with the effort underway. A few even took up arms and joined the battle" (Hiebert, 2003: 250).

[18] During my research the delicate status of the U.S. Army and its relation with *America's Army* were a constant factor. In this thesis, I will line up arguments in favour of and against the official U.S. Army game. However, I will not make any judgement calls on the practices of U.S. Army as an institution (i.e. their actions during the War on Terror) and not even the U.S. government and its foreign policy. The arguments and critical approach towards the game are meant to raise questions and line up arguments, but a final verdict, if necessary, on such issues as the ethic dilemma of using computer games as recruitment tools, have to be made by the reader. An all too subjective analysis of the game would hinder a factual debate and will, especially when it takes place online, result in rants and pointless discussions. Nevertheless, I never hesitated to bring up elements regarding the game, its development and use, which will not be favoured by producers, fans and gamers.

[19] To fully comprehend the rationale behind the War on Terror a list of books compensated the lack of firsthand knowledge as well as numerous news casts on U.S. and Dutch networks and various newspaper articles in U.S. and Dutch newspapers. Books on the politics of the War on Terror as well as the U.S. military operations during the War on Terror (Woodward, 2002; Woodward, 2004; Clarke, 2004; Hersh, 2004), the U.S. military operations in Somalia (Bowden, 2002), criticism on the war on Iraq and the U.S. government (Moore, 2004) and the U.S. operation in Afghanistan in 2002 (Naylor, 2005) and Iraq in 2003 (Atkinson, 2004). This list is complemented with various documentaries on Operation Iraqi Freedom and criticism on the

shift from the "unlikely alliance" between the military and the computer industry (Castells, 2001) towards a strong and intimate relationship between military and the entertainment communities - i.e. the military-entertainment complex. The historical development of this complex and its specific relation with *America's Army* will be analysed, supplemented by an overview of the use of games and simulations by the U.S. Marine Corps and the U.S. Army. The interest in and appropriation of commercial games and the linking of the entertainment industry and the defense industry can partially explain the creation of *America's Army*. As the role and use of technology within the U.S. Army changes, so does the logic of war (and peace) and the subsequent simulation of war in training simulations and commercial games. The representation and simulation of modern war in computer games changes the status of war in our society. This logic gives way to various paradoxes by interacting with various discursive elements regarding war and computer games. Chapter 3 contains three game studies of the games *Full Spectrum Warrior* (Pandemic Studios, 2004), *Desert Combat* (Trauma Studios, 2003) and *Kuma\War* (Kuma Reality Games, 2004) to illustrate the different arguments and concepts in this chapter.

Drawing on previous research, chapter 4, shows that *America's Army* is more than a marketing tool. Four different dimensions of the game are proposed: a recruiting tool, a propagame, an edugame, and a test bed and tool for the U.S. Army. Each of these dimensions will be discussed in great detail and will have their own specific theoretical and historical trajectories.

The implications of the four different dimensions of *America's Army* will be a starting point for further analysis (chapter 5). *America's Army* is a logical outcome of the very successful appropriation of popular culture and has earned its own place within in the broader range of FPS games. However, the realistic approach to both the production of *America's Army* and the representation of the U.S. Army in a virtual environment raises questions about the status of *America's Army* as a game. By textual analysis and a discussion of the various discursive elements regarding the games' proclaimed authenticity, there is a critical reflection on the game. Chapter 6 (Conclusion) will summarize the arguments and analyses in this thesis and while looking back, there will be a brief look at the road ahead.

The fan base of *America's Army* will most certainly have their opinion ready on the scope of this research: "Umm... someone has TOO MUCH FREETIME on their hands. Get a life whoever wrote that."[20] The overall reaction within the *America's Army* community to *any* critical approach towards the game has always been: 'RelaXx d00d, it's *just* a game!!!111oneone.' It is exactly this hegemonic view that I want to challenge and invalidate. *America's Army*

conduct of this war, such as the CBC special "Deadline Iraq - Uncensored stories of the war" (CBC News, 2003), National Geographic's 21 Days to Baghdad (2003), Fahrenheit 911 (Moore, 2004), Gunners Palace (Epperlein and Tucker, 2005) and the PBS documentaries The Soldier's Heart (Aronson, 2005), and A Company of Soldiers (Roberts, 2005).

[20] C.f. "149 page research article on AA", Topic-url: http://forum.americasarmy.com/viewtopic.php?t=108288, created on November 14, 2004.

encompasses much more than your ordinary FPS game. In the end, it is a free game, which leads many community members to end a discussion with: 'If you don't like it, do not play it'. The game may be free, and *cool*. But then again, there is more, much more. The game is a sophisticated and very successful marketing tool, a valuable educational tool for U.S. soldiers and a test bed for future weapon systems. If somebody, after reading this thesis, still thinks that *America's Army* is 'just a game', then it is 'mission failed'.

Chapter 2 – The Official U.S. Army Game

America's Army is first and foremost a game and the main goal of this chapter is to gain a better understanding of the inner workings of this PC-game by providing a short historical framework (paragraph 2.2), and by setting the game apart from other games with a similar theme (paragraph 2.3). While many specific details of the game will be discussed in the subsequent chapters and further details about the development process will be dealt with when appropriate, this chapter provides a bird's eye view of the subject matter at hand. This thesis would not be complete without a thorough descriptive analysis of the game *America's Army*. However, no written analysis of a game with a 214-paged manual (Tran, 2005) can give a hundred percent complete description and I urge those who want to really 'get' what the game is about, to play it for at least an hour, for one minute of gameplay can tell more than a thousand words.[21] In order to get a clear picture of what sets *America's Army* apart from other FPS games, as one of the reasons why the game is such an interesting research object, I will analyse the game by defining it as a 'realistic online multiplayer tactical squad-based First Person Shooter' (paragraph 2.1). Although the main attention in this thesis is on the game, there is a short discussion of the players of the game (paragraph 2.4), as they are the lifeblood of any online shooter. And leading up to the next chapter, which provides a theoretical and historical framework for chapter four, is paragraph 2.5, giving an insight in the project's development and rationale as well as the three key moments in the project's short history. This leads to the last sub-paragraph, discussing the implications of researching a game that is under constant development.

Ask a gamer 'what is *America's Army*?' and (s)he probably will tell you that it is a First Person Shooter game, but if you want a lengthy conversation ask him (or her) if the game is a part of the tactical FPS genre, just like the FPS *Counter-Strike* (Le, 1999). If you are looking for a (virtual) fight, ask him why *Counter-Strike* is more of a tactical game than *America's Army*. There has been a considerable academic debate on the issue of categorizing games into various game genres and as Newman (2004: 11-3) concedes, the various genre categorisations are problematic as they are nebulous and see game texts as hermetic and closed systems.[22] What to make of the game *Grand Theft Auto: San Andreas* (Rockstar Games, 2004)? Is it a simulation game, a driving game, a role-playing game, a third-person shooter or 'just a simple action game'? Herz made a distinction between seven genres - action, adventure, fighting, role-playing, simulations, sports and strategy games, stating that her list probably would "make it through the next videogame era (and maybe even into the next decade)" (1997: 25). Looking at

[21] See Hecht (2004) for a short essay of a journalist playing *America's Army* for the first time.
[22] As Espen Aarseth argued at the PhD-course 'Game Analysis Methodology' at the IT University (December 3-6, 2003); it is better to define ones object of study (in this case *America's Army*) than solely relying on the use of game genres. I concur with this view.

the discursive elements surrounding game genres today, this has proven to be a somewhat simplistic view as game reviewers may label *America's Army* as a 'shooter' (Gamespy.com) or a '3D-action game' (3dgamers.com). The majority of gamers most likely would still label *America's Army* as a First Person Shooter.

The idea of the process of recombining television genres may well apply to the discussion of genre in computer and videogames. This process signals the active repurposing by networks of television series, originally belonging to a single genre (e.g. a soap-opera), to multiple genres (e.g. a soap-opera combined with a cop series) in order to attract new audience enthusiasm (Tulloch, 1990 as quoted in Jenkins, 1992: 125). This process is similar to the current development of game genres. Many games do not fit in a single genre but have several generic features. As games become more sophisticated (both aesthetic and technological) and as game designers come up with original game concepts, clear cut divisions between genres melt away.

The genre problematic is certainly not unique for digital games, as television and film-scholars have struggled with it for ages. A refreshing and useful concept to look at (game) genres is discussed by Verhoeff (2002). In her study of the "Early Western" - films before 1915 with a Western theme – she (re)introduces Wittgenstein's notion of "family resemblance".[23] Framing games in this way allows emphasizing their "family traits", and in the particular case of *America's Army* the most significant traits would be the games' first person perspective and its action oriented gameplay. Throughout this thesis I will compare various games, from various genres, with *America's Army* from this perspective.

2.1 *America's Army* as a First Person Shooter

> "To play America's Army is like slipping into a fascinating experiment. As players come and go, you're witness to riveting displays of heroism and cowardice, brilliant tactical bluffs, and awesomely awful blunders" (Peckman, 2004).

America's Army is best described as a 'realistic online multiplayer tactical squad-based First Person Shooter'. By dissecting all these characteristics, the specificity of these different elements constituting *America's Army* as a game, can be stressed while acknowledging their overlapping traits with other games in the FPS genre. The complex question to what extent *America's Army* is developed and 'read' as a realistic game, will be dealt throughout this thesis. The game shows a constant negotiation of cultural, technological and economical elements, balancing between the expectations of gamers (shaped by First Person Shooter genre conventions), the games' design rationale (see paragraph 2.5), its four interactive dimensions

[23] This notion is based on the ideas introduced by Ludwig Wittgenstein in his book *Philosophical Investigations*. (1953). Wittgenstein introduced the notion of "family resemblance" to "explain the metaphorical relationship between language and games as a way of understanding the former" (Verhoeff, 2002: 90). Adding that "like a family, the genre of games consists of multiple elements that do not share any essential, exclusive feature, but is held together by a network of overlapping traits" (ibid: 90-1).

(see chapter 4) and various technical constraints such as current hard- and software limitations.

To give a hint of the different traits making up the 'family' of First Person Shooter games, a FPS can be defined as a game in which players from a first person perspective navigate through a three-dimensional virtual environment, interacting in single- or multiplayer combat sequences with multiple enemies by using a range of weaponry in order to complete a mission or objective (c.f. Nieborg, 2003b).[24] Each element in this preliminary definition can have a different emphasis in different FPS games. For example, the objective of - i.e. to win - a multi-player FPS game featuring 'deathmatch mode', is met by killing the most opponents until either a time limit or a score limit is reached.[25] *America's Army* is, arguably, part of sub-genre of the tactical FPS and in the following descriptive analysis of the game, the specific traits of this (sub)family will be discussed.

The developers label *America's Army* as a game-based simulation (e.g. Zyda et al., 2004), which combines the notion of a game, defined by game designers Zimmerman and Salen "as a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" (2004: 80), with the notion of a simulation, defined by Frasca (2004) as the "[…] act of modelling a system A by a less complex system B, which retains some of A's original behavior."[26] Simulation games or 'simulations/sims', are seen by many as a game genre (e.g. Herz, 1997). In his Masters thesis, Frasca (2001a: 12) uses the classification outlined by the Le Diberder brothers for games in the simulation genre. They define the genre of simulations as "having three main characteristics: they represent a 'world'; they pay great attention to detail and they have no clear goals".[27] In this sense *America's Army* is not part of the simulation genre as it only has two of the three characteristics – i.e. offering an authentic representation of the 'real' world and paying a lot of attention to particular details such as weapon modelling. The multiplayer missions of *America's Army* do however have very clear goals, to achieve a mission under strict Rules of Engagement. A game such as *SimCity* (Maxis, 1989) is more *paidea*-centred, players have to create their own *ludus* rules to toy around in the urban planning simulation. As with many games in the simulation genre, a simulation can be designed as facilitating both paidea and ludus environments, marking *America's Army* as a game-based simulation thus refers to offering an authentic simulation of infantry combat but,

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[24] This definition is for formal use only. A game such as *Tom Clancy's Splinter Cell* (Ubi Soft Montreal, 2003: PC version) shows many similarities with games falling within the FPS definition but by using a third person perspective this game would fall outside the FPS genre. The definition of First Person Shooter games as used by Nieborg (2003b) is partially based on the paper "Towards an academic method for analysing FPS games" by Heer, Keimpe de., Keeris, Eva., Lucht, van der Jelmer., and Nieborg, David B, presented at the DiGRA Level Up conference at Utrecht University (2003).

[25] As with any game, players can create their own *paidea* rules such as killing as much opponents without getting killed. The difference between *paidea* and *ludus* rules is made by Roger Caillois (2001). Frasca explains the difference: "Caillois describes games depending on the complexity of their rules. He classifies games with very simple rules as *paidea*, a Greek word that means both child and school. He uses the term *ludus*, the Latin word for game, to describe games which rules that are more complex. For example, merry-go-round would be an example of *paidea* and poker would be *ludus*. *Paidea* and *ludus* could be associated with the English terms 'play' and 'game', respectively" (2001a: 6).

[26] Note that Frasca talks about simulation here as a mode of representation - simulation and representation are two ways different ways of dealing with reality.

[27] C.f. LeDiberder, Alain et Frédéric (1993). Qui a peur des jeux vidéo? Éditions La Découverte, Paris.

as with all tactical FPS games, making it "game-based" because of its clear defined winning state.

America's Army is a multiplayer game, only a small part of the game is single player.[28] The single player part consists of training sessions, which are obligatory in order to play online or to play certain roles, such as a medic or a sniper.[29] While some gamers may spend hours to complete these parts of the game, the game is first and foremost meant as a multiplayer experience, played online, via the Internet, or on a Local Area Network (LAN). *America's Army* focuses on squad based combat. Two teams of two to sixteen players fight against each other on a virtual battlefield. A round stops when one of the two parties has won by eliminating all opponents or completing an objective (or hindering the enemy from doing so). Every map in *America's Army* has its own objective, varying from rescuing a VIP to identifying several weapons caches. Obviously the opposing team has to prevent this from happening.

The tactical dimension is the outcome of the possibility to make choices that affect the virtual battle. These choices can be made on the technical level of strategy, choosing the right weapon for the right circumstances or the right role (e.g. sniper, medic or machine gunner) in combat, or on the tactical level of strategy by using certain military tactics of movement such as flanking an enemy or using smoke to conceal ones position. One round in *America's Army* can take up to ten minutes and after seven rounds, the scoreboard resets and a new series of seven rounds starts.[30] The tactical dimension of *America's Army* derives from the fact the game is objective based and from the impossibility to respawn, i.e. coming back alive during a round (a time-limited game-session).[31] Because gamers can 'only' die once during a round, one's life becomes valuable to gamers. If a gamer dies, there is a change in perspective. Dead players can still chat with other death players and observe the remaining players finish the round. But when a gamer dies, (s)he has to wait (and wait and wait).[32] In comparison with 'twitch' games such as *Unreal Tournament 2004* (Epic Games, 2004), where in deathmatch mode gamers can die as much as they want, gameplay in *America's Army* is (relatively) slow-

[28] *America's Army* version 2.3 consisted of twenty-eight multiplayer maps and fourteen training missions. There is no data about the time spent by gamers on the training missions, my observations suggest that the more dedicated gamers spend far more time online than offline.

[29] A role consists of a rank (e.g. Private First Class) and a weapon class (e.g. rifleman). However, weapons are transferable, i.e. one can throw a weapon away and another player can pick the weapon up. During a round a player can be promoted to a higher rank (e.g. from Private First Class to Sergeant) when a higher ranking player dies. This does not affect the weapon class of a player. Using a weapon that does not correspond with the chosen weapon class decreases the combat effectiveness of a player - i.e. a grenadier picking up a sniper rifle will have considerable difficulty handling the weapon. The role of Medic (i.e. medic packs) is not transferable.

[30] These are standard settings. All official servers have these settings, by setting up a non-official ("private") server one can alter these parameters.

[31] In *America's Army*, there are three general types of missions. Escort missions (e.g. SF Hospital), static objective missions where reaching the objective(s) ends the round (e.g. Collapsed Tunnel) or changeable objective missions where objectives can be changed by both sides (e.g. Urban Assault). As in all multiplayer FPS games, a round also ends when all members of a team are dead.

[32] It is not uncommon to die within the first minute of a round and having to wait nine minutes, watching a fellow-player defending an objective while staying put for minutes (an action called 'camping'), tests the patience of a gamer to the limit.

paced and deliberate.[33] As a result the learning-curve of the game can be quite high for those who enter the game with no or little previous (tactical) FPS experience. An average online game session does not allow much room for exploration nor experimentation, and new players often experience multiple deaths wondering who shot them and from which position. Small gameplay elements, such as the absence of health or ammunition boosts and enhanced communication possibilities, set the tactical genre apart from standard FPS games.

The tactic dimension of *America's Army* is a relative notion. Games such as *Counter-Strike*, *Tom Clancy's Rainbow Six* (Red Storm Entertainment, 1998), and *Operation Flashpoint: Cold War Crisis* (Bohemia Interactive, 2001) are labelled as tactical shooter because they, in comparison with e.g. *Unreal Tournament* (Digital Extremes, 1999), *DOOM 3* (id Software, 2004) or *Painkiller* (People Can Fly, 2004), offer a wider range of tactical actions. FPS games with deathmatch (a.k.a. free-for all) or team deathmatch mode offer a smaller set of possible actions affecting gameplay.[34] Many FPS game offer different game modes, e.g. free-for-all or capture-the-flag, and each game mode has its place within the deathmatch-tactical continuum.[35] The tactic label is almost synonymous with 'realistic', i.e. tactical FPS games are based on authentic scenarios such as counter-terrorist or (para)militaristic warfare. A FPS game such as *Battlefield 1942* (Digital Illusions CE, 2002) is based on different authentic World War Two scenarios and offers a wide range of tactical choices, but its arcade look and feel and respawning feature make it a World War Two shooter more than a tactical FPS. There are FPS games, such as *Return to Castle Wolfenstein: Enemy Territory* (Splash Damage, 2003), introducing skills and classes such as medic, engineer or covert ops. Although not regarded as a tactical FPS, the choice between different classes widens tactical choices and thus tactical gameplay.

In *America's Army* gamers are part of a squad, similar to the U.S. Army. A squad consists of different so called fireteams and the leader of a squad is the Staff Sergeant. A fireteam consists of four soldiers. The fireteam leader is the Sergeant, assisted by a rifleman, a grenadier and an 'Automatic Rifleman'.[36] Gamers have to pick a role a the beginning of a round and cannot change their class during a round, they can however pick up weapons of deceased players. In some Special Forces maps, U.S. SF Operators are assisted by Indigenous Fighters

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[33] Of course, this depends on the group of gamers (new players versus experienced players or clan members) or on the map. So called CQC (Close Quarter Combat) maps, such as Pipeline, MOUT McKenna and Collapsed Tunnel may result in faster rounds than bigger and more open maps such as Radio Tower and River Basin.

[34] This argument depends as much on style of gameplay (deathmatch versus tactical) as on those who play the game. Those who thoroughly master the simulation model of a game such as *Unreal Tournament 2004* (Epic Games, 2004), such as tournament players or clan players, draw on a different set of tactical choices than 'average' gamers on public servers. So called pro-gamers are able to expand the rules of a game in a way almost unconceivable for those who have no experience of it, e.g. memorising spawn times and places of (powerful) weapons and having an almost mathematical approach to gameplay deploying elaborate and advanced strategies.

[35] The "circuit of marketing" (Kline et al., 2004) explains why game developers introduce 'new' game modes (e.g. "Double Domination" or "Onslaught" in *Unreal Tournament 2004*) with small variations on the Deathmatch, Team Deathmatch or Capture The Flag game modes.

[36] Contrary to *Counter-Strike*, gamers have to pick a position in a fireteam (a role in the U.S. Army). One can not buy extra weapons or alter the number of designated roles in a squad (e.g. there is only one squad leader). Depending on the layout of a particular map, fire teams can be bigger or smaller and consist of additional grenadiers and Automatic Riflemen (machine gunners) or advanced marksmen (i.e. snipers).

(IF).[37] IF forces carry non-U.S. weapons, such as AK-47's and Rocket Propelled Grenades (RPGs) and are part of a SF fireteam and have no specific rank. Being able to command or smoothly cooperate with different roles in the game can expand the tactical dimension of gameplay.

After a short introduction on the general characteristics, I will give a more in-depth comparative analysis of *America's Army* by comparing it with the tactical FPS games *Half-Life Counter-Strike* and *Counter-Strike: Source* (Valve Software, 2004), hereafter *Counter-Strike*.[38] A head-to-head comparison with the game after which *America's Army* is modelled (Zyda et al., 2004: 17), shows the implications of designing a FPS game that serves as entertainment, training, testing and marketing. From a design and development viewpoint the two games could not be more apart. While *Counter-Strike* is an open game, a collaborative result of a group of modders valuing fun over realism, *America's Army* is a structured and closed game preferring authenticity over entertainment. From a gameplay perspective *America's Army* and *Counter-Strike* show general resemblances, but differ in small but significant ways. After a short history of the history of the FPS in the following paragraph, the development and theme of *Counter-Strike* will be compared with that of *America's Army*.

2.2 First Person History

The history of the compilation of games soon to be known as so called First Person Shooter games, has all the characteristics of an adventurous boys' book.[39] In the book *Masters of DOOM: How Two Guys Created an Empire and Transformed Pop Culture* (2003) journalist David Kushner tells the story of the two developers of the first successful FPS game, John Carmack and John Romero. This talented development tandem, also known as the McCarthy and Lennon of the game industry, started a new era in the development of digital games, altering popular culture forever. Their development studio, id Software, developed several of the most well known FPS games to date, such as *DOOM* (id Software, 1994), *Quake* (id Software, 1996) and the first popular FPS game ever; *Wolfenstein 3-D* (id Software, 1992).[40] The somewhat deterministic claim made by Kushner fuelled some debate as many choices in the design of the first games of the two developers deliberately refused to fully employ the potential of this new medium. Au (2003) points to the preferences in design during the development of *Wolfenstein 3-D*, reducing the need for strategic thinking. Au uses an example of not being able to hide

[37] U.S. Special Forces team roles are different than regular U.S. Army units, but follow the squad / fireteam structure and each gamer has their own non-exchangeable role. For example, the leader of a Special Forces A-team consists of twelve men and is headed by the "18 Alpha" holding the officer rank of Captain.

[38] Note that there is no such thing as one *Counter-Strike* version. The game started as a mod and Beta 1.0 was release on June 19, 1999, the commercial game *Half-Life* (Valve Software, 1998) was needed to install and play *Counter-Strike*. A stand-alone retail version of *Counter-Strike* became available on November, 2000. November 2004, *Counter-Strike: Source* was released as the multiplayer component of *Half-Life 2* (Valve Software, 2004). Just as *America's Army*, *Counter-Strike* is in constant development (by modders and the developers of Valve Software).

[39] This sub-paragraph first appeared in Nieborg (2004c).

[40] *Wolfenstein 3-D* is a simple example of a conflict in which gamers wield a range of weaponry in order to kill all in sight until the end of a level and finally the end of the game. In the game players run through mazes occupied with all sorts of Nazi-stereotypes.

dead bodies to prevent the discovery of dead bodies by guards, to exemplify the simplistic design rationale. This element was dropped because is slowed down the pace of the game. According to Kushner (2003: 96), the design rationale of *Wolfenstein 3-D* can be traced back to the early text-based adventure games where the two main game objectives were to collect and to kill. FPS games could be seen as a niche market and countless other games sold many more copies than id's games did. On the other hand, as both Kushner and Herz (1997) argue, the new style of gameplay invoked horror for hundred of thousands of people. People got actually a visceral experience playing the game, something that is taken to a new level with *DOOM 3* (id Software, 2004). In this most recent instalment of the *DOOM*-series many adult gamers confess they will not play the game alone at night in a dark (bed)room.[41]

The first game using a first person perspective would be *Battlezone* (Atari, 1980) as reported by Kushner (2003: 20) and Herz (1997: 16). This graphically very simplistic game displays a wireframe view and was turned into *Army Battlezone*, a training tool for tank gunners. This example shows the urge and willingness of the U.S. military to transform commercial games into training simulations. In 1991 id Software would release *Hovertank* (id Software, 1991), also a simple fast-action first person view shooting game with a military theme. *Hovertank* soon led to *Catacomb 3-D* (id Software, 1991). Catacomb added a new design feature, the portrayal of the hands and arms of an avatar, often holding a weapon of some sort. Showing significant parts of a player's body is an innovation incorporated in every FPS game after *Catacomb 3-D*. A pure psychological and cosmetic choice meant to enhance the immersion of gamers navigating in a virtual 3-D world (Poole, 2000: 136-37).

The first FPS game would set the tone for games to come and with its straightforward gameplay *Wolfenstein 3-D* set a violent tone for FPS games to come. The choice to graphically represent and simulate death through blood and death animations, i.e. pre-programmed movements of a dying avatar, was a deliberate one.[42] The history of the FPS genre, in all likelihood, would have taken another turn if the developers of id Software had used their new 3D software to expand on their successful two dimensional game-series of *Commander Keen*. This series fits into the adventure game genre where narrative elements and puzzle solving skills are the principal form of gameplay and portrays an eight-year-old boy in a friendly fantasy setting. Coincidently or not, World War Two is until today the most simulated battle in the history of computer games with well known FPS game such as the *Medal of Honour*-series (2015 Inc, 2002), *Battlefield 1942* (Digital Illusions CE, 2002) and *Call of Duty* (Infinity Ward, 2003). There seems no end in sight, almost every month a new World War Two shooter is announced and the sequel to the sequel of *Wolfenstein 3-D*, i.e. *Return to Castle Wolfenstein 2*, is already being discussed.

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[41] I am no exception.

[42] An avatar is "the representation of a user in a shared virtual reality" – i.e. the hands of the player in *America's Army*, the bodies of team members and opponents are avatars as well. Source: Avatar (virtual reality) - Wikipedia, the free encyclopedia. 2005. Wikipedia.org. Available: http://en.wikipedia.org/wiki/Avatar_%28virtual_reality%29. March 23, 2005.

In 1993, *DOOM* emerged. This game, successful from both an economical and technological viewpoint, sold over 1.5 million CDs and distributed over 15 million shareware copies (Kushner, 2003).[43] The violent theme and fast-paced gameplay of *Wolfenstein 3-D* was expanded and *DOOM* simulated death as no other game had ever done before, with bigger weapons and even more blood and gore. The back-story of *DOOM* fits on a napkin and serves only as an excuse for some choices in design. The lack of a narrative spurred criticism; both the absence of a good story and the need for it still plagues the genre.[44] In *DOOM* the player is a nameless space marine trapped on a military base on Mars. Hordes of mutated animals have to be killed in order to survive, signalling the designers' preference for a subculture interested in horror and zombie movies and fantasy elements from tabletop Role Playing Games.[45] The theme of *DOOM* has undoubtedly put its marks on many FPS games to come and influenced a new subculture of FPS gamers. Many neologisms, such as 'respawning' and 'deathmatch', originated from the early days of *DOOM*. The FPS game Painkiller (People Can Fly, 2004) is an example of an advanced version of *DOOM* with similar level-design and an emphasis on extravagant weaponry and zombies, showing that *DOOM* spin-offs still regularly hit the market.

Except for the technological enhancements, such as the use of lighting and shadow, *DOOM* contributed to an increasing game culture by adding network technology to its game. Whereas Wolfenstein 3-D was a single player game, *DOOM* made it possible to play together with friends - in cooperation (co-op) mode - to attack demons together. Network play soon proved to be the invention of a lifetime. The solitary business of playing FPS games turned into a social interactive pastime with kindred spirits.[46] *DOOM* was soon followed by the sequel *DOOM II: Hell on Earth* (id Software, 1994).[47]

2.2.1 Counter-Strike

The reign of *DOOM* as the first massively online played FPS ended after an introduction of various clones. Luckily, new and innovative additions would expand and broaden the FPS genre. Valve Software, founded by former Microsoft employees, used technology from id Software to develop *Half-Life* (1998). Lauded by gamers and the gaming press, *Half-Life* added a narrative twist to the genre. The single player part of the game has a futuristic theme telling a story of

[43] The shareware version of *DOOM* packed only a minority of the levels available in the full game. The shareware version was free and mostly distributed via the Internet, enhancing its viral distribution.
[44] The lack of a narrative is explained in Kushner (2003: 128). Lead designer John Romero is quoted: "Story in a game is like a story in a porn movie; it's expected to be there, but it's not that important". This differs between various FPS games, but *America's Army* and *Counter-Strike* lack any overt plot whatsoever.
[45] Kushner (2003) gives numerous examples of the extravagant lifestyle of the *DOOM* developers whose hobby it was to trash their offices, working far into the morning living on cola and pizza. A stereotype still haunting today's gaming industry.
[46] The history and rise of network gaming and game communities is also described by King & Borland (2003). Network technology is not reserved for FPS games, thousands of people play online Role Playing games and Massive Multiplayer games on a daily basis.
[47] Three characteristics of *DOOM*, simulating 'realistic' 3D environments and weapons, the use of network technology and the ease of modifying the game, made the U.S. Marine Corps decide to transform the game into the training tool *Marine DOOM*. Paragraph 3.3 will elaborate on *Marine DOOM* as a military training tool.

the U.S. military, which is trying to hide experiments with aliens. With the use of cut-scenes and scripted sequences, the plot unfolds and a player is sucked into the world of *Half-Life*. The positive and active attitude towards modification developers made *Half-Life* even more successful with additions such as the World War Two mod *Day of Defeat* (2003) and the Real Time Strategy First Person Shooter mix of *Natural Selection* (2002).[48]

In 1999, Minh "Gooseman" Le and Jess Cliffe finished *Counter-Strike*, the most successful FPS modification ever and a total conversion modification for *Half-Life*.[49] The question whether the popularity of *Counter-Strike* is a result of its innovative gameplay is an intriguing question. One can argue that the availability of *Half-Life*, needed to install *Counter-Strike* as a mod, also fuelled *Counter-Strike's* success. Whereas early FPS games were chaotic high speed free-fire zones, providing deathmatch style gameplay in which the sole objective was to kill all, a new breed of FPS games focused on different aspects.[50] Au (2002) puts the game into its historical context:

> "Rainbow Six and other Tom Clancy-derived franchises sold well, as did NovaLogic's Delta Force series, but it was probably the growing popularity of Counterstrike that fostered the current audience for tactical shooters. And while African bodies were removed from the rubble of the double strike on U.S. embassies in Kenya and Tanzania in 1999, and lifeless sailors were lifted from the thrashed hull of the USS Cole in 2000, Counterstrike went from free mod to retail game, and kept right on drawing fans. But it was the gameplay, not hatred of terrorism, that made it a phenomenon."

The game has given way to a huge community of a variety of gamers (e.g. cheaters, clanmembers, hardcore versus newbies et cetera) as well as fans devoting their time on various fora and fan sites. The CS modding community is, coupled with the advent of *Counter-Strike*: *Source*, very active and develops all sorts of additional content such as admin-plugins, maps, skins, art-work, comic books and many more. In short, *Counter-Strike* has become a gaming culture of its own. As the most played tactical FPS game, *Counter-Strike* led to many spin offs with mod makers trying to develop "the next Counter-Strike".

Counter-Strike is an online only multi-player game where two teams, the Terrorists (T) and the Counter-Terrorists (CT), fight against each other in realistic settings using a wide range of real life weaponry. Almost all *Counter-Strike* maps are objective based, forcing players to work as a team to fulfil their mission. The three most popular scenarios are bomb-defusing

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[48] Many mods of the original *Half-Life* were bought back by Valve turning them into commercials games. Owners of *Half-Life* are still able to download *Day of Defeat* for free but can buy the game separately as well.

[49] As argued by Nieborg (2005), as users move in and out of commercially endorsed mod communities, they create border line cases that challenge the status of user-created nature of mods. Sotaama (2003) made a start towards the definition of a mod: "In case of computer games mod is usually used when referring to user-made modification to pre-existing game." The online open-source encyclopaedia Wikipedia adds to this definition that mods are in general required to be non-commercial and sometimes open source as well. "Mods in general are required to be non-commercial (free) when they include any parts from another mod, or the main game, which by their nature they always do. Some mods also become open source as well." Source: Mod (computer gaming) - Wikipedia, the free encyclopedia. 2004. Wikipedia.org. Available: http://en.wikipedia.org/wiki/Mod_%28computer_gaming%29. December, 15 2004.

[50] The first known tactical shooter would be *Tom Clancy's Rainbow Six* (Red Storm Entertainment, 1998) according to Ocampo (2004), followed by *Delta Force* (Novalogic, 1998).

situations and hostage rescue situations where one side has to prevent the other team from accomplishing its mission.[51] The focus on teamplay soon led to the formation of clans, the virtual equivalent of a soccer team. Since *Counter-Strike* started as a mod and the current developers still very actively support modders in every way possible, there is no fixed set of gameplay modes or maps. The retail version of *Counter-Strike* shipped with hostage rescue mission (beginning with the prefix cs_ (e.g. cs_office) and bomb defuse scenarios (e.g. de_dust). The mod community has thousands of custom (individually made 'non-official' maps), such as fy_ maps (standing for 'fun yard' or 'fuck you') or aim_ maps (small training maps most of the time focusing on one or two weapons). The level design of *America's Army* is clearly inspired by *Counter-Strike*, the popular map Pipeline in *America's Army* shows overlap with the *Counter-Strike* map De_Nuke and there are various other little similarities.

2.3. Some Family Traits

In order to play the latest version of *America's Army*, one has to simply go to one of the hundreds of websites where the game can be downloaded for free. The full (Windows) client weighs 780MB or if a gamer lives in the *U.S.* (s)he can visit a recruiter for a CD-version.[52] *Counter-Strike* has to be bought online via Steam or in a store. After installing *Counter-Strike* one can play the game instantly, no additional training is required. The first thing a gamer has to do before being able to play *America's Army* online, is creating an account by supplying a unique username and a working email address. Contrary to popular belief, giving the email address to the U.S. Army does not lead to any further contact (outside of the game) without explicit permission.[53] By creating a persistent "personnel jacket" a player virtually enters the U.S. Army. The persistent nature of an *America's Army* soldier is a break with FPS conventions. In online role-playing games, customisable and upgradeable avatars are common, but in the anarchistic realm of online shooters there is nothing to build upon and one can change a name indefinitely.[54] Before actually playing online, every 'soldier' has to go through Basic Training, which for an inexperienced player, can take more than 30 minutes.[55]

There are several gameplay elements that, in combination, set *America's Army* apart from other tactical FPS games. Other *America's Army* specific traits and additions to the genre will be discussed hereafter. New additions are as the Rules of Engagement (ROE), and the handling of damage, the Honor-system, the MILES-system, the elaborate system of ingame communication, and the impossibility to play as a 'terrorist'.

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[51] A third popular gameplay mode is the assassination scenario where a VIP (Very Important Person) has to be escorted or ambushed. Because *Counter-Strike* started as a mod there is a large amount of additional content such as gameplay enhancements, maps, weapons and player skins and thus additional gameplay modes.

[52] For *America's Army* downloads see: *America's Army* - Downloads - Full Client. 2005. 2005. AmericasArmy.com Available: http://www.americasarmy.com/downloads/. February 22, 2005. In late 2003, I visited two recruiting stations in the U.S. (one on West Sunset blvd, Hollywood and the other on Times Square, New York City), both did not have up-to-date copies of the game.

[53] Gamers may receive a newsletter with game related information by email.

[54] Every player in *Counter-Strike* has a name attached to his Steam account. This name does not have to be used online. Changing a name in *America's Army* is possible but only once every 24 hours.

[55] There is an extensive analysis on the role of ingame training in paragraph 4.2.4.

In the personnel jacket, the progress and status of a gamer is permanently stored.[56] Part of the personnel jacket is the Honor system. This system, which is unique to the FPS genre, debuted in *America's Army* version 1.3 and is a comparative statistic reflecting the time spent in the game.[57] The Honor scale measures from one to a hundred Honor points and a gamer starts with ten Honor. By winning a round or by killing an opponent, a player can earn experience (or Honor) points needed to raise ones Honor, while points are subtracted when a player violates the Rules of Engagement (e.g. shooting a team member).[58] The Honor scale has always been a topic for discussion in the *America's Army* community. Some gamers contest it for its emphasis on the individual (i.e. gamers focusing on points rather than team play), others would never play the game again if the Honor scale would disappear.[59] Since its introduction the Honor system has been plagued by numerous bugs and situations where gamers tried to exploit the system. The "full potential" of the Honor system was, according the developers, "never achieved" (Zyda et al., 2004: 23). And as noted by Van der Graaf & Nieborg (2003); one can still only imagine what will happen when *America's Army* will introduce additional features representing the level of skill, dedication and progress, e.g. a medal system. The Honor distribution among all *America's Army* players is very unbalanced. While the average Honor of *America's Army* players is 37, which takes more than 148 hours on average to acquire, 95 percent of the players had an Honor between zero and twenty, compared to 0.4 percent of the players having an Honor of 61 to 80 Honor.[60] There are very few players who reached the 100-Honor mark, an estimated 50 players reached this milestone.[61]

Although more organised players such as clan-members will use (third party) voice-communication software, *America's Army* facilitates gameplay oriented communication in public servers by an elaborate communication system. Players are able to communicate by text messages, pre-defined radio messages and hand signals. A report-in mechanism allows players to disclose their location to their team-mates, strengthening team play and thus social interaction. Tony Manninen (2001) concluded his analysis on virtual team interaction *Counter-*

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[56] There are seven tags available which are visible during online play, next to ones name in the scoring board. 'Normal' players do not have these tags - squares with a star in it. They are given to members of the Development Team (U.S. Army soldiers and developers), to Beta-testers, to Supercomputers Inc. Staff and Active Duty U.S. Army, U.S. Army Reserve and Retired U.S. Army soldiers. These stars give especially U.S. Army soldiers a distinguished role in the game and more status than 'regular' players, there are even rumours of gamers paying money for a .mil email account needed to get the ingame star. C.f. "Players Begging For ".mil" Emails :-/", topic-url: http://forum.americasarmy.com/viewtopic.php?t=108317, created on November 15, 2004.

[57] The Honor system primarily reflects the time spent in the game. However, gamers who are more proficient during online play may acquire points faster than their less-skilled peers.

[58] The Honor scale is exponential. It takes 10.000 points to reach twenty Honor, but 25.000 to get from twenty-one to thirty. Honor is only given on official Army servers. To get for example fifteen honor points, at least 60 hours of tracked gameplay (on average) is required, given that the player has never played *America's Army* before. These sixty hours are an average, based on general statistics available at AAOTracker. See ArmyOps-Tracker (powered by 4Players). 2005. AAOTracker. Available: http://aaotracker.4players.de/portal.php. February 25, 2005.

[59] The success of the German Tracker website, where almost half of regular *America's Army*-players have an account, shows the popularity of Honor-related statistics.

[60] Late February 2005, the average Honor of players registered at AAOTracker was 34 and their average playtime 148 hours. The average Honor of all *America's Army* (37) players is higher and the average playtime must be higher as well. Source: ArmyOps-Tracker – Stats. 2005. AAOTracker. Available: http://aaotracker.4players.de/trackerstats.php. March 19, 2005.

[61] Based on estimations on the AAOTracker statistics, these numbers are averages. It takes more than an average 1500 hours to acquire 100 Honor, but there are even instances of 100-Honor players with more than 2000 hours played.

Strike with: "The combination of different weapons and roles, added with environments that provide plenty of challenges for communication, co-ordination, and co-operation, seem to create intriguing examples of team interactions." As *America's Army* has even more gameplay oriented communication channels (e.g. hand signals and various pre-defined radio messages), ingame communication can be one of the main sources of meaningful play (c.f. Bouckaert, 2004; Wright, Boria and Breidenbach, 2002).

Figure 1. Ingame screenshot America's Army: Special Forces (Firefight) version 2.3.0.

The body of the player (avatar) is represented by the hands and a part of the arms - in figure 1 only the left arm is shown, supporting the gun barrel. The status of the player is primarily graphically represented. On the right bottom side of the HUD (Heads Up Display), a player can see his position (standing, crouching or prone) represented in the player-icon and by two vertical bars. The left (green) bar is the stamina bar, it drops when running and the right bar is the Combat Effectiveness Meter (CEM), representing the combat ability of a player (the speed of movement and aiming). The position of the CEM is influenced by fatigue, injury and the position of the player. The CEM bar is at its top when lying down, not being shot at and

with full stamina. In *Counter-Strike* players have unlimited stamina and will run by default, lying down is not possible and the crosshair represents the effectiveness of a players' aim.

Being wounded in *America's Army* is thus represented in the HUD, the CEM goes down and the player-icon will turn from green to yellow to red. Being shot starts immediate bleeding, represented by a blinking small red dot in the HUD. If a medic does not stop the bleeding – it is not possible to heal a player, a player can bleed to death.[62] When a player dies, the avatar falls down, still without any trace of injury, and the player has to wait until the next round begins. The only simulation of any injury is the declining stamina of a player, simulated by slower walking/running speeds. There are no ingame auditory clues when being shot or exhausted (e.g. screams when shot or heavy breathing after running), nor are there any outwards signs of injury. A player can not tell, besides the walking speed of a team-mate, if his team-mates are injured – e.g. by a limping animation or the depiction of blood-stains on the avatar as present in *Counter-Strike*. While in *Counter-Strike* an optional bullet-proof Kevlar vest and helmet are represented in the interface – starting at 100 and declining when being shot, there is no graphical representation of the amount of body armor in *America's Army*. Indirect armoured protection is modelled by the amount of damage a bullet inflicts to a certain body part – since the head is not protected, a 'headshot' can kill a player in *America's Army* instantly, opposed to taking multiple hits in the chest.

The military character and the top-down gameplay of *America's Army* are most apparent in the Rules of Engagement, or ROE. Unlike *Counter-Strike*, in *America's Army* 'friendly fire' is always on. When a player in any way hurts a team-member or a civilian (e.g. a nurse in the SF Hospital map), he will be punished by receiving ROE-points – these points will be directly deducted from the accumulated Honor-points. Depending on the severity and the moment of a ROE-violation, points are deducted which may lead to removal of a player from the server he's playing on. Directly aiming and shooting at a fellow U.S. Soldier at the beginning of a round can lead to more ROE-points than the death of a team-mate by a badly thrown grenade. Depending on the server-settings (default is minus 500 points), a player will be sent to a virtual prison cell in the Ft. Leavenworth military prison when playing too recklessly.[63]

A fairly unique feature of *America's Army* and different from any other FPS game is the ingame simulation of the U.S. Army's Multiple Integrated Laser Engagement System (MILES). The system is used by the U.S. Army at live-training sites to simulate the weapons fire using laser beams. Rifles are outfitted with laser-emitters and the helmets, uniforms of soldiers but also armoured vehicles can be outfitted with laser detectors, enabling soldiers to play an

[62] This element is not unique to *America's Army*, the World War Two FPS *Medal of Honor: Pacific Assault* (EA Los Angeles, 2004) allows players to bleed to death as well.
[63] The are discussions about adding more civilians to certain maps to reduce the heedless throwing of grenades. Hurting civilians leads to immediate ROE points.

advanced version of laser-tag.[64] The MILES component of *America's Army* is developed on the Army's request and an interesting example of the interaction between the gamers' wants and the Army's needs – maps with MILES enabled are not that popular among gamers. In real-life Army training the MILES system is mostly used in Military Operations in Urban Terrain (MOUT) training. After completing Basic Training the first online mission available to a player, is the McKenna MOUT map, a detailed replica of the McKenna training site at Fort Benning, Georgia. Several other maps, besides the McKenna map, are specially designed for the use of the MILES system - i.e. the maps HQ Raid, Collapsed Tunnel, River Basin, FARP Raid, Mountain Ambush and Swamp Raid.

America's Army-servers can be set up as live-fire or MILES-servers and the ingame server browser shows an icon setting the two apart. Before official servers could be leased by players and the only official server were supplied by the U.S. Army, there were no servers hosting MILES maps with live-fire enabled. This led to special 'live-fire-weekends' where a cluster of official MILES servers turned live-fire on. The simulation of the MILES system makes it possible to play the game without (virtually) killing opponents. Ingame, soldiers shoot at the Opposing Forces and blanks come out of the weapons. When hit, the player hears a distinctive 'beep' and the health indicator of a player turns from green to red. When a certain amount of damage is done to a player, there is a longer 'beep' and a player is taken out of the fight - the players' avatar sits down, takes off his helmet and as with all *America's Army* rounds, a players has to wait until a new round begins.[65]

The most distinct characteristic, setting the game apart from any other online multiplayer FPS game, is that a gamer always has the role of as a U.S. Army soldier. Through the use of a software trick every gamer sees himself and his team as U.S. soldiers and the other team as the Opposing Forces (OpFor). It is impossible to play as OpFor and together with the ROE this means that gamers never ever have to intentionally kill a U.S. Soldier. In some scenarios both parties are assisted by Indigenous Forces. Figure 1 illustrates the U.S. Army gameplay perspective. The player is, as is always the case, a U.S. soldier and he sees his team-mate (on the left) also as a U.S. soldier. The soldier on the right is an enemy combatant, who on his turn sees the other two players as OpFor. After some initial changes, the enemy soldiers have various ethnicities and uniforms. The first versions of *America's Army* simulated the enemy as skinheads and turban-wearing Arab stereotypes. In later versions, the opposing forces are most of the time uniformed, wearing masks and caps and in some urban maps the enemy wears civilian clothing. The enemies are explicitly not linked to any country and the enemy consists of a mix of irregular forces. The OpFor speak a different language from U.S. Army soldiers. With the help of the Defense Language Institute, the development team created a

[64] For more information on the MILES 2000 system see the Federation of American Scientists. Multiple Integrated Laser Engagement System. 1999. FAS.org. Available: http://www.fas.org/man/dod-101/sys/land/miles.htm. January 23, 2004.
[65] The release of version 1.1.1. included MILES-grenades. When a player is hit on a live-fire server, this influences his stamina and health, when a players is hit in a MILES scenario, he can still run at full speed.

fictive enemy language, referred to by gamers as 'OpForian'.[66] The Indigenous Fighters (IF), assisting Special Forces in certain maps, seem to all have an Arab ethnicity and look similar to OpFor avatars but with lighter uniforms. Looking at the enemy players will not see a difference between Special Forces OpFor or IF OpFor.

Comparing *America's Army* to *Counter-Strike*, the former can be labelled as a top-down FPS, having strict ingame rules (of Engagement). Since *America's Army* is a simulation of the U.S. Army, many 'unrealistic' elements from the FPS genre are changed. For realism's sake, the gameplay is much more structured and bound by the rules of physics and warfare. Players become soldiers with a persistent record. Shooting team members is ruled out, maps, weapons and roles cannot be changed and one can only play as a U.S. soldier. Before discussing the rationale of the *America's Army* project, there will be an analysis of those who play the game.

2.4 Army Gamers[67]

The Electronic Software Association (ESA, 2004) gives in its annual Essential Facts about the Computer and Video Game Industry an overview of the state of the U.S. gamer demographics. The average player is said to be 29 and 59% percent are male, while 43% of all U.S. gamers play online, the gender breakdown of online players is similar to the overall picture. The most popular computer game genre for PC games is 'Strategy' (27,2%), followed by 'Shooters' (13,5%).[68] It must be said that the PC game market is shrinking while the console market steadily grows.

The Online Games White Paper 2003 by the International Game Developers Association (IDGA, 2003) makes a distinction between six different online games, following their categorisation *America's Army* should be labelled as a 'web-based PC-game' because of the online distribution of the game. Looking at the scope and gameplay of the games in the 'PC CD-based' category, *America's Army* has more in common with these games (e.g. *Battlefield 1942* and *Counter-Strike*). Since *America's Army* is, apart from the growing success of the online distribution platform of Valve's Steam, one of the first online only distributed FPS games.[69] The U.S. market size of "PC CD-based" online games is estimated at less than five million gamers, the "PC Web-based" category on the other hand is estimated at 50 million (or more) gamers. As *America's Army* is both free and online only distributed its possible market size consists of

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[66] "Voice-overs of foreign students were recorded to create realistic shouts and enemy radio commands while ensuring that no speakers of an actual foreign language would be depicted as enemies of the United States. As a bonus, because the enemy language had its roots in reality, players found they could learn and understand the commands issued by opposing forces" (Zyda et al., 2004a: 26). Examples of OpForian shouts are "Brosite Granate" (Frag out), "Priomo" (Roger) and "Proveriteni Storoni" (Check your flanks). See (or listen): English -- Opfor Dictionary. 2005. AAops.de. Available: http://www.aaops.de/specials/snow.htm. March 23, 2005.

[67] Parts of this sub-paragraph first appeared in Van der Graaf & Nieborg (2003).

[68] Popular as in units sold. The ESA do not give a definition of the 'Strategy' or 'Shooter' genre; it seems likely that games as *The Sims*, *Zoo Tycoon* and *Roller Coaster Tycoon* are labelled as strategy. The best selling PC-games in 2003 were, among others, T*he Sims*-series, the RTS games *Command and Conquer: Generals*, *Warcraft III* and the FPS *Call of Duty*.

[69] Together with *Wolfenstein: Enemy Territory* (Splash Damage, 2003).

at least five million gamers.[70] Traditional retailers still dominate traditional gaming (IGDA Online Games Committee, 2003) however, the growing broadband penetration in the U.S., Europe and parts of Asia proofs to be invaluable for the distribution and play of *America's Army*. As game technology gets cheaper and more pervasive, the group of online PC-gamers is projected to steadily grow over the coming years.[71]

There are various perspectives to categorize the players of a game. First there is an overview of those who play the game - the online gamers, by outlining the size of this group and their demographics. Equally important to the U.S. Army and a natural component of FPS game culture where "knowledge culture meets commodity culture" (Jenkins, 2002), are the offline activities of gamers – e. g. engaging in discussions, developing websites, organising LAN-parties and various other activities. Obviously, there is no such thing as *the America's Army* community member, but by giving multiple categorisations; a portrait of various members emerges.

An in-depth analysis of online gaming cultures in the UK, U.S. and Nordic Countries done by the Game Research team (2002), paints a more detailed picture of the average online gamer being a 23-year old male, single and still studying, playing *Counter-Strike* at home for 24 hours a week, preferring (long) online playing sessions of over two hours.[72] An interesting observation is made in the report, marking online FPS games as *Counter-Strike* (and thus *America's Army*) as games which "[…] can be considered important male sports of our time" (2002: 18) and describing online play as an inherently social activity. *Counter-Strike* players are characterised in the report as somewhat narrow-minded and loyal to the action genre: "*Counter-Strike*, by all measures, may be regarded as the mainstream game of hardcore online gamers" (2002: 24). *America's Army* may be as well, since both communities share a common ground. Hardcore gamers are defined by the IDGA (2003: 23) as "young, predominantly male", representing the smallest group of online gamers, while spending the most time playing games - over twenty hours on average.[73] The games in the "hard core game category" are labelled as large in size (requiring CD's or large downloads), having immersive environments and a steep learning curve – all elements present in *America's Army*.

The authors of the Game Research report (2002: 42) distinguish among three categories in the hardcore players segment, the enthusiast, devotees and the professionals and although there is no data available to support it, I would argue that, as with *Counter-Strike*, a large

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[70] An additional one million possible U.S. players can be reached by the upcoming online console version *America's Army: Rise of a Soldier* (Secret Level / U.S. Army) to be published by Ubisoft in July 2005 (for the Playstation 2 and Xbox).

[71] The average gamer playing online FPS games, has an Internet-connection with more than 256Kbps downstream, more than enough to play online games. An average PC running on Microsoft Windows XP, with an Intel (53%) or AMD (47%) chipset, has more than 256Mb RAM, has English as his default Window language (77%), followed by German and French (both 7%), has an Nvidia (49%) or an ATI graphic card (38%) and a DVD-drive (78%). These figures are based on an online survey by *Counter-Strike* developer Valve Software. These figures give a good impression of the average equipment of today's online games, as the survey is based on more than 1.2 million unique samples. Valve Survey Summary. 2004. Available: http://steampowered.com/status/survey.html. November 25, 2004.

[72] This differs considerably from the average age of 29 given by the ESA. However, the Game Research study used a different methodology and primarily focused on online gaming communities, inhabited by more 'dedicated' and 'hardcore' gamers.

[73] The IDGA report only researched the U.S. market as did the ESA.

number of *America's Army* players fits into one of the categories of the hardcore player segment.[74] The label "likely gamer", perfectly fits the majority of *America's Army* players. The only easy accessible official statistics about *America's Army*-players are on the official site providing global information – e.g. the number of registered players. As of March 2005, there are more than five million registered accounts. Although many official (marketing) communications always cite the total number of registered players, the only players eligible to play online are the 2.8 million accounts with Basic Training completed.[75] This group has an average Honor of 37 and plays over 94.000 hours per day on average. Luckily, the fan-operated community website of ArmyOps-Tracker provides various detailed statistics about the *America's Army* player base.[76] An estimated 28.000 players log in every day and half of the online population are registered with the tracker.[77] The hardcore nature of the players is underlined when looking at some data – the average Honor of Tracker-players is 34 and the average playtime is a whopping 148 hours.[78]

There is a small group of players, mostly clan members, whose dedication to the game is astonishing; their dedication/addiction is shown in the average of three hours played per day for over two years. Gamers new to the genre are likely to be put off by the stringent training requirements and the steep learning curve of the game, making it not a game to begin playing FPS games with. The focus on team play and the specific roles of soldiers (e.g. a fireteam leader, a sniper or a medic), and environments demanding co-ordination, may result in the heightening of player interaction (Manninen, 2001). Playing as a team is key if one wants to win a round and going at it alone not only will make it more difficult to complete objectives, teamwork is also one of the cornerstones of the Rules of Engagement. Ignoring orders from the leader of a squad is ground for removal from a server. However, in practice 'Rambo-ing' and selfish behaviour is seldom externally punished on public servers. The (created) need for team play and the militaristic structure of the game motivates aficionados to get organized to both

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[74] In terms of hours played, working servers and online gamers, *Counter-Strike* is the most popular online FPS game ever. The social and cultural value of this game is given shape by the 90.000 to 200.000 gamers online every moment of the day on more than 70.000 servers. The publicly available statistics of Valve show a whopping 5.8 billion minutes of *Counter-Strike* gameplay per month. Since all players must connect to *Counter-Strike* via the online content platform Steam, Valve has detailed statistics of the use of their games. On a random Tuesday in February (2005) there are 116.000 gamers playing *Counter-Strike*, *Counter-Strike: Condition Zero* or *Counter-Strike: Source*. See Steam Network Status. 2005. www.steampowered.com. Available: http://www.steampowered.com/status/status.html. February 22, 2005.

[75] This number as well is somewhat deceiving as many players have inactive or multiple accounts. The number of players online gives a far more insight into the popularity of the game. The registered accounts are never purged and many players stopped, are banned or have inactive accounts and the number of five million players is thus somewhat deceiving.

[76] See: ArmyOps-Tracker (powered by 4Players). 2002. ArmyOps-Tracker. Available: http://www.armyops-tracker.com. March 15, 2005. ArmyOps-Trackers offers various 'exclusive' services not offered by the official developers. The game has a very active forum and tracks statistics such as the kill/death ratio, the time spent online and numerous other features. The 'buddylist' element, showing which fellow-gamers are online as well as their statistics, is also a vital element of the website. AAO-Tracker has all the typical characteristics of participatory community, developed, maintained and supported by peers (c.f. Jenkins, 2002).

[77] The Tracker homepage shows the amount of 'soldiers' (players registered with Tracker) and 'guests' playing. The stats are never 100% percent accurate as they do not track all servers available and the tracking system not always functions properly. Regardless, the statistics give a very interesting insight in the overall trends. The Trackers has 172.000 registered users on March 15, 2005 and the number of Tracker-members is still on the rise, 50.000 members registered the last six months.

[78] The average 'fragrate' (kill/death ratio) of Tracker-players is 1.26 which means that they are more proficient in the game that non-Tracker-players.

survive and win; a good example of this phenomenon are clans.[79] Li (2004) conducted interviews with members from various U.S. clans and especially his interviews with clans (or 'units') to some degree related to the U.S. military (e.g. consisting of veterans) are most intriguing. Clans are the virtual equivalent of a sports team, differing in size, nationality and involvement. On AAOTracker there are more than 6300 *America's Army* clans with a total of 54.000 members. Clans are hierarchically structured and many clans follow the same philosophy, structure and training principles of the U.S. Army. And just as in the U.S. Army, *America's Army* enforces in-game social interaction by ways of interpersonal dependency.

Whereas the official *America's Army* website is very U.S.-oriented, the Tracker-website shows the true global nature of the games' community. Of those players who revealed their nationality on the Tracker-website, half of them are U.S. players, followed by German, Dutch, Canadian, Polish and Portuguese players.[80] *America's Army* even has a special localised version for South-Korean players. This special version can be solely played by Korean players on special servers. The Korean Army has a draft and thus *AA Online*, as the Korean version is called, is primarily used as a public relations and branding tool for both the Korean and U.S. Army.[81] The U.S. Army logo on the AA Online homepage with a link to GoArmy.com is disabled.

The production and reception and therefore the discourse of FPS games, is dominated by men, which led to criticism from both within the games industry and academia (Cassell and Jenkins, 1999). These figures are backed by a survey about the salary of game developers, only six percent of the survey respondents were female (Olsen and Zinner, 2001). *America's Army* seems to be the definition of a "militarised masculinity" (c.f. Kline et al., 2004: 255) - a gender-biased game which has a "shared semiotic nexus resolving around issues of war, conquest, and combat." In all the countless hours of playing *America's Army*, I only encountered an (openly) female player once. This is not surprising looking at the AAO Tracker statistics, whereas 100.989 players are male, only 3.473 are female.[82] The research of Nieborg (2003a) concluded as well that *America's Army* and its community consists solely of men.

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[79] Organising 'scrims' as is done in *Count-Strike* is far less popular among the players of *America's Army*. "Scrims (short for scrimmages), also known as PCWs (practice clan war) or FWs (friendly / fun wars) in Europe, however, are more team-oriented. These teams may be composed of individuals not on in a clan/team (a pug or pick-up game) or committed individuals on in a clan/team. Typical play is five versus five, and the scrim is usually officially started (declared live) after making sure the server settings are correct, and then restarting the game three consecutive times (live on 3)." Source: Counter-Strike - Wikipedia, the free encyclopedia. 2005. Wikipedia.org. Available: http://en.wikipedia.org/wiki/Counter_strike. March 23, 2005.

[80] These stats are truly fascinating in their own right as there are 30.000 U.S. players, 8.200 German, 7.100 Dutch, 5.800 Canadian, 4.700 Polish players. The demographics of these player are out of sync with the statistics of the multiplayer online gamers, e.g. the Nordic countries are absent. Source: ArmyOps-Tracker – Stats. 2005. ArmyOps Tracker. Available: http://aaotracker.4players.de/trackerstats.php. March 15, 2005

[81] The company InfraBasic is an Official Hosting Licensee of *America's Army* in Asia, distributing *AA Online*. Historically, the presence of U.S. Armed forces in South-Korea has been substantial and the United States Forces Korea (USFK) and the South Korean military work and train closely together. See AA online. 2005. Available: http://www.aaonline.co.kr/ for the official Korean/America's Army website. See The Bunker - Forums View topic - Korean official servers or just servers. 2005 AA-Bunker. Available: http://aa-bunker.us/forum/viewtopic.php?t=190. March 21, 2005 for additional information.

[82] 69,600 AAO Tracker members did not disclosed their gender. Source: ArmyOps-Tracker – Stats. 2005. ArmyOps Tracker. Available: http://aaotracker.4players.de/trackerstats.php. March 21, 2005

America's Army has given way to an online community that is initiated by the U.S. Army on www.americasarmy.com. The game exists of several community clusters that give way to the U.S. Army brand culture. The community consists of 'developers' (can be reached via email, the official forum, or IRC), 'moderators' (for fora and AGA in-game), beta testers, server admins, and the gamers. The most important communication channel where these clusters communicate is the official forum where everybody – i.e. in-game officials and gamers - can post and respond to messages. The official forum had by mid-March 2005 over 160.000 members, who posted more than 1.6 million messages.[83] The official site also hosts, among others, a support section, tournament results, various media material, and links to GoArmy.com. Part of the enormous community are thousand of clan sites, fan sites, tournament sites, un-official fora, sites tracking statistics, and sites hosting *America's Army* downloads.[84] And although this thesis focuses mainly on the game, the *America's Army* community is a rich site worth exploring and vital to the goals of the U.S. Army.

2.5 The Sense of it All

The project rationale of *America's Army* is influenced by various factors and has never been a stable set of principles but a collection of various fluid concepts.[85] The rationale of the design of the game interacts with the four dimensions of *America's Army* (as an advergame, edugame, test tool and propagame) and chapter 4 will provide a more in-depth analysis of each dimension interacting with the rationale of the Army Game Project (AGP). Being an online multiplayer FPS game, the designers are constantly struggling between developing a realistic and at the same time fun game while experiencing limitations of various FPS game design conventions and numerous technical constraints. This sub-paragraph will give a look at the game from the developers' and publishers' – i.e. U.S. military - perspective and in later chapters these views are replenished, agreed with or criticised.

In the *America's Army* Style Guide, "the single resource for *America's Army* guidelines", *America's Army* is described as:

> "A thrilling first-person action game that takes players to the world's most dangerous hotspots, challenging them to use all their skills and abilities to fulfill their mission and defend freedom. Embodying the core values of the U.S. Army, the game encourages players to grow as leaders, fully embracing teamwork and bravery to achieve their combat—and personal—goals. Real weapons, combat units and battle environments, as well as a well-rounded exploration of Army training, augment the excitement of this nonstop adventure" (Army Game Project, 2003: 3).

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[83] See http://forum.americasarmy.com/ for the Official *America's Army* forum.

[84] See for an exhaustive list of community sites: *America's Army* - Community - Community Sites. 2005. AmericasArmy.com. Available: http://www.americasarmy.com/community/comsites.php. March 21, 2005. Many countries all over the world have an *America's Army* fan site (e.g. South Africa and Argentina).

[85] The official website has an extensive Frequently Asked Questions-section - developed by the Social and Political Sciences academic staff at OEMA (Li 2004). See: *America's Army* - Support – Home. 2005. Americasarmy.com. Available: http://www.americasarmy.com/support. March 15, 2005. The answer to the question: "Is this a recruiting tool?" is: "… it provides young adults and their influencers with virtual insights about the Army…"

The AGP has been initiated by the Office of Economic and Manpower Analysis (OEMA) in collaboration with a group of professional game developers and modelling and simulation researchers and graduate students from the Modeling, Virtual Environments and Simulation (MOVES) Academic Program of the Naval Postgraduate School (NPS), complemented by various 'third-party' members (e.g. Super Computer Inc, for the hosting of games servers).[86] The MOVES institute is a research institute within the U.S. military and heads different Modelling and Simulation research projects for the U.S. Navy, Marine Corps and the U.S. Army.

The game was primarily meant to raise brand awareness thereby aiding recruitment. Having commerce at the core of its brand identity, the game exemplifies the linkage of commercial goals with a cultural text through creating engaging experiences (Van der Graaf & Nieborg, 2003). It was the advergame dimension that became at the conception of the project, the guiding design rationale. The AGP does not label *America's Army* as a recruiting tool or an advergame, but as a 'strategic communication tool' (e.g. Davis, 2004). The goal of the game is to inform popular culture rather than to persuade and to raise awareness rather than directly recruit, which is done by U.S. Army recruiters. Raising both the awareness of the U.S. Army brand and the U.S. Army as a possible career are central to the design of the game and its community.[87] With less influencers, people with a positive attitude towards the Army and willing to communicate this attitude present in the U.S. society (e.g. former soldiers), the Army has to rely on other mechanism to enter the "consideration set" of America's youth. "So when a young person turns 18 -- 17, 18 -- and they start to think about what their options are for the future, what does that list look like? Go to college? Get a job? Hang out with my friends? We want "join the Army" to be one of those lists of options" (Department of Defense, 2001). With this statement, the former Secretary of the Army Louis Caldera articulates one of the main goals of the Army of One campaign.

As Li noted, the game is an all-military project, funded, developed and published with oversight of the U.S. Army and the MOVES Institute and thus differs from various military-entertainment projects as they are discussed in paragraph 3.3. "And furthermore, particularly with the political sensitivity of the game violence debate, OEMA has placed great emphasis that the game is not for simulation or training purposes, and should be regarded as a strategic communication initiative which embraces an increasing important part of American youth

[86] The AGP team is an extensive group, constantly changing in size and composition. The game was first envisioned by U.S. Army Colonel Casey Wardynski who works for the Office of Economic and Manpower Analysis (OEMA), within the Department of Social Sciences at United States Military Academy (USMA). In August 1999, the game was introduced for the first time and the development began in June 2000 (Li, 2004).

[87] Li (2004: 35) clarifies the difference between the U.S. Army and the *America's Army* brand: "Notably, the *America's Army* brand was developed as a separate identity from the U.S. Army brand (which has its own established marketing group). This decision was made in part to create distance between the entertainment/pop culture brand and the real military organization."

popular culture" (2004: 14).[88] This statement conflicts heavily with the mindset and academic culture of the MOVES Institute and the elaborate analysis of *America's Army* as an edugame - i.e. a training tool - for soldiers in paragraph 4.2.5, demonstrating that the game from its earliest conception has been used not only as a test tool but as a training tool as well.

In the end, numerous factors influence the design of any game, but in contrast to commercial FPS games, the developers of *America's Army* always had a unique set of 'bottom-lines' in shaping their design principles:

> "[…] America's Army was self-defining – that is, if a game were to give the player the experience of performing an infantryman's job, it would be a first-person action game with team play based on real missions (themselves inherently dramatic and easily adaptable), in which the primary design constraints are training prerequisites, the Army's code of conduct (including consequences for infraction), and a teen rating" (Davis et al., 2004: 9).

There are several factors which form the basis of *America's Army*'s overall design rationale and by taking these various factors apart, the understanding about the game can be deepened. First of all, the game had to be 'a game' and instead of creating a whole new genre or a new design template, the originators draw inspiration from existing PC-games. Two games which inspired *America's Army* the most, are *Tom Clancy's Rainbow Six* (Red Storm Entertainment, 1998) and *Half-Life Counter-Strike* (Le, 1999).[89] Both are military-themed FPS PC-games with a strong focus on realistic gameplay (e.g. gamers play in teams to complete an objective other than just killing each other and players have only one virtual life during a round) and both games can be seen as the originators of the tactical FPS sub-genre.[90]

Although *Counter-Strike* focuses heavily on the simulation of death and the graphic portrayal of violence, the game is for most players a pure social experience (c.f. Wright, Boria and Breidenbach, 2002). As a multiplayer online game, to play *Counter-Strike* is engaging with the games' rules in a creative fashion as well as to communicate with peers. Zyda et al., (2004) recall the early stages of development – in August, 2001 - when the AGP was understaffed and did not share a common design rationale. As a solution a mission statement was formulated where the main goal was to develop a game as attractive as *Counter-Strike* but with the emphasis on a more authentic combat experience, the inclusion of the U.S. Army values and a significant role of training. As the team and the project grew, the U.S. Army laid down their requirements:

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[88] C.f. "While the game was aimed at attracting the next generation of U.S. soldiers, Col. Wardynski's team concluded early in the development process that the project was capable of being much more than a marketing device. The game's sophisticated simulations made it a natural training tool" (Roth, 2003).

[89] "We're engaged in a multi-year project to explore repurposing educational Web-based product and a real-time multiplayer training system similar to games like *Rainbow Six*. We've found that game-engine technology can provide an excellent software platform for high-fidelity virtual environments" (Capps, 2001), and "The Action game is planned to be similar to *Rainbow Six*, with the focus on team play" (Zyda, 2000: 4).

[90] *Rainbow Six* is a commercial game and *Counter-Strike* a mod, another significant difference is the planning stage in *Rainbow Six*. Before commencing an attack, gamers can pick (computer controlled) team members and devise a plan of attack. The multi-player only *Counter-Strike* throws a gamer directly into the action.

> "that the game be played absolutely straight, as an honest representation of the service, especially regarding ethics, codes of conduct, and professional expectations, and extending to accurate depiction of hierarchy, missions, weapons, equipment, uniforms, settings, discipline, tactics, procedure – in short, this was to be a game a platoon sergeant could play without wincing" (Davis et al., 2004: 9).

In short, the goal was to create a virtual replica of the U.S. Army.[91] Many elements such as authentic weaponry, missions, settings and tactics were already present in *Counter-Strike* and *Rainbow Six* and could be tweaked and bended. But the games as bounded universes accepting "both disorder and creative player actions" (Wright et al., 2002), adding compulsory training and Army values not only contributed to the strategic communication – advergame dimension of *America's Army*, but made it less a magnet for young anarchistic boys. This dialectic of designing a game that is both authentic and fun proves to be an ongoing challenge for the members of the AGP:

> "All parties understood that setting the right tone was key to avoiding public-relations disaster. The Army could not be perceived as celebrating trigger-happy Rambos, nor, by downplaying lethal force, be guilty of deceit and hypocrisy; must not pander to the testosterone of the demographic, yet must keep teens engaged; must avoid charges of jingoism, mesmerism, cynicism, cliché, exploitation of vulnerable youth, incitement to violence, or a hundred other incorrectnesses" (Davis et al., 2004: 9).

To make *America's Army* even more 'correct', the game is designed in such a way that it is eligible for a "Teen (T)" rating by the Entertainment Software Rating Board (ERSB).[92] *America's Army* has the descriptors 'Blood' for the depiction of blood and 'Violence' for scenes involving aggressive conflict. Because of the games' Teen rating, it is deemed appropriate for ages 13 and older and according to the ESRB "titles in this category may contain violence, suggestive themes, crude humor, minimal blood and/or infrequent use of strong language."[93] The representation of blood and human suffering is kept to a minimum in the game, avoiding the 'Blood and Gore' descriptor as well as the 'Intense Violence' descriptor for graphic and realistic-looking depictions of physical conflict possibly involving extreme and/or realistic blood, gore, weapons, and depictions of human injury and death. Why the descriptor 'Violence' is chosen over 'Intense Violence' is most likely the result of the unrealistic portrayal of blood, the absence of gore and the lack of dismemberment, all other elements of the 'Intense

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[91] *America's Army* as being a realistic game is emphasised in the games' official taglines: "No other Army game is this real, because nobody gets the Army, like the Army. Designed, Created and Developed By The U.S. Army" and "Empower Yourself. Defend Freedom. The Official U.S. Army Game" and "The Most Authentic Army Game Ever! The power to succeed. The courage to exceed" (Army Game Project, 2003: 12).

[92] The ERSB is a self-regulatory organisation founded by the Electronic Software Association issuing ratings to games based on their content. Currently, there are eight rating categories for games - Early Childhood (eC), Everyone (E), Everyone 10+ (E10+), Teen (T), Mature (M), Adults Only (AO), Rating Pending (RP) and Not Rated (NR). Content descriptors can be added to the rating category to inform a potential consumer. There are 29 descriptors such as 'Language' - mild to moderate use of profanity - or 'Blood and Gore' - Depictions of blood or the mutilation of body parts. Source: ESRB Game Ratings - Game Rating & Descriptor Guide. 2005. ESRB.org. Available: http://www.esrb.org/esrbratings_guide.asp. March 15, 2005.

[93] Ibid.

Violence' definition are present in the "The Most Authentic Army Game Ever!" The ESRB logo is shown in the main-menu of the game and on the every page of the official website (together with the U.S. Army logo). Nevertheless, everyone can download the game from various websites without coming across the ESRB notice and during the games' installation the rating is not mentioned. It is relatively easy for those under the age of thirteen to download the game, install and play it without any serious barriers, such as a store clerk permitted to sell the game to young children. The Teen rating and its two descriptors may also be a result of the games' parental controls. In the games' main-menu, the Parental Control tab allows to enable a language filter – preventing profanity of other players via ingame chat, a no blood filter, a 'no advanced marksman' filter, preventing players from playing as a sniper and a 'MILES only' filter. The Parental Controls can be protected with a password.

2.5.1 Patching the Army

In comparison to television series or a movie, games are unstable texts and especially PC-games can be under constant development.[94] The process of patching – altering elements of a games' software code - is a common procedure for online FPS PC-games and can be done to add content, ranging from bug fixes to additional content like maps, skins, the addition of anti-cheat measures et cetera. While single player games may be 'done' when a game 'goes gold', the emergent nature of online gameplay and the rampant online cheating demand the constant tweaking of online games. Massive multiplayer games, both FPS and Role Playing Games are, more so than CD-based FPS games, in constant development in order to keep the game exciting and up-to-date, examples of MMO FPSs are *Planetside* (Sony Online Entertainment, 2003: PC Version) and *World War II Online: Blitzkrieg* (Cornered Rat Software, 2001: PC Version). Online multiplayer games thus have a different development cycle and interesting developments such as Valve's online content delivery platform Steam - providing access to the *Counter-Strike* and *Half-Life*-series, let the process of constant game development spill over to CD-based FSP games as well. Critics blame developers from shipping non-finished games, patching the game in the months or even years after the initial game is published. The FPS *Battlefield 1942* (Digital Illusions CE, 2002) shipped in September 2002, is a notorious example of a game that has extensively been patched.[95] One of the latest patches for *Battlefield 1942* updated the game to version 1.6 and weighed more than 267.8MB.

The Army has provided sixteen patches for *America's Army* during the two and a halve years of its existence, varying in size and complexity. The patches were first envisioned to be regular (monthly) updates with new training modules, maps, bug fixes and enhancements, but

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[94] Games developed for the PC can be patched fairly easy. With the advent of online capabilities for consoles such as the Xbox Live-service, console gamers are able to download and install additional content as well.

[95] C.f. "Players installing Battlefield may be a little surprised the first time they boot up the game and find out they need to download and install a patch before they can connect to an online server. (We're still trying to figure out why the game simply wasn't held back a week or two, since the patch was essentially ready the day Battlefield hit shelves)" (Accardo, 2002).

this plan was soon dropped.[96] The subsequent release of a 'new' game raises difficulties from a game analysis perspective. Which game is analysed and talked about when referring to *America's Army*?[97] Gameplay on all levels can be altered in various ways by the issuing of a 'simple' patch. New content, e.g. the introduction of the Special Forces theme consisting of training parts, new maps and new weapons, can breath new life into the game but on the other hand the precious game balance can be easily be distorted by fixing or adding a bug or changing weapon layouts.

In the case of *America's Army* there are cases that certain bugs led to a certain style of gameplay favoured by gamers, but dubbed unrealistic by the designers. The example of 'spawn grenades' resulted in numerous alterations of the game.[98] The development team started making changes to the use and distribution of grenades ever since version *America's Army* version 1.3:

> "It seemed that the development team would forever be adjusting and balancing the way grenades were depicted in the game. While we wanted to depict grenades accurately, we discovered that a realistic grenade in a game does not necessarily equal a fun experience, leading to constant rebalancing and enhancing of the feature." (Zyda et al., 2004: 24)

Another example of the unstable nature of the game, is the representation of adversaries (the Opposing Forces). Initially the enemy in desert-maps were turban wearing bearded men, but after criticism of this stereotypical display of the 'Arab fighter', the representation of the opposing forces were replaced by a more generic representation of evil-doers. There are numerous other examples of *America's Army* as a highly unstable text, making careful and systematic annotated analysis a significant factor in research on every online (FPS) game. Henry Lowood (Davis et al., 2004: 18), curator of History of Science and Technology Collections at Stanford University, underlines the importance of the historiography of games: "Archivists must consolidate not just source code and programbuilds, but data such as art, e-mails, design documents, websites, and game replays into a new curatorial model amalgamating the traditional roles of archives, libraries, and museums." The 'post-mortem' of *America's Army*, titled *From Viz-Sim to VR to Games: How We Built a Hit Game-based Simulation* (Zyda et al., 2004) is a good step in this direction, but independent and more thorough historiographies are more than welcome. One of the goals of this thesis is to provide such a thorough academic historiography of a single game.

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[96] During the June 2003 Electronic Entertainment Expo (E3) Wardynski noted: "Between now and Christmas, we will release monthly expansion packs that will add six new occupations and twelve or more new levels to the game. These new occupations will make up a Special Forces detachment and will include the exploration of activities such as escape and evasion training." Source: Army Ops. 2003. Armyops.de. Available: http://www.army-ops.de/modules/news/article.php?storyid=121. March 15, 2005. There were only two major patches released between June 2003 and the end of that year.

[97] As said before, *America's Army* in this thesis refers to all games up until version 2.3. When a feature is discussed which is unique to a specific version this is clearly stated.

[98] 'Spawn grenades' are grenades thrown to the opposing forces at the beginning of the game. By practicing and memorizing their landing spots, experienced players can kill new players unaware of this practice.

Three important developments are noteworthy and acknowledge the importance of the continuing coverage on *America's Army* as an online game. First is the shift from a branding tool to a platform. This shift is discussed earlier and will be discussed in detail in chapter 4. A second remarkable shift during the early development is the failing of *America's Army: Soldiers*. From the outset the AGP envisioned *America's Army* to consist of two games, the *America's Army* action game, which became *America's Army: Recon* and then *America's Army: Operations* and the *America's Army*: *Soldiers* career game (Zyda, 2000). For the MOVES Institute both games had a strong research component "to determine if games can be instrumented to be able to determine the aptitude, leadership abilities and psychological profile of the game player" (ibid: 4). Where the action game draw its inspiration from FPS games, the career game was build with no direct reference to a game genre or an existing game. With the lack of existing software, the *Soldiers* game had to be build from the ground up. A special engine, consisting of four sub-components (a story engine, location generator, animation engine and text-to-voice system) generated a story for the player in real time using Full Motion Video (FMV).

In his PhD-thesis, Osborn (2002: 144) cited the main design rationale of the game: "The *America's Army: Soldiers* project is a game with a message. The Army recognizes that in order to attract young people to the military, it must first educate them as to what the Army has to offer." The target age group of the *Soldiers* game is 18 to 24 year olds. The goal of the game is to guide a character, a U.S. soldier generated by the player at the beginning of the game, through his career in the U.S. Army. Similar to the action game, the seven Army values play a vital role in the gameplay - the personality and the behaviour of the main character directly reacts with a player (not) living up to the values.[99] The *Soldiers* game should be more like a role-playing game mixed with adventure game elements, simulating a career in the U.S. Army. While the action game focused on force-on-force confrontations, the Soldiers part was to simulate the off-duty life of a U.S. soldier. Players could get a sense of how the Army runs, giving an insight view of U.S. Army bases, offices, barracks and facilities.

Both the *Operations* and *Soldiers* parts were in development over two years, but while *America's Army: Recon* debuted on July 4, 2002, *America's Army: Soldiers* was announced as "Soldiers, Role-playing Sim, Coming Soon" on the *America's Army* homepage for several months up until April 2003. Then all of a sudden the project was cancelled and a formal explanation was never given, except that portions of the *Soldiers* game would be integrated in *America's Army: Operations*.[100] Version 2.3, *Americas Army Special Forces (Firefight)*, has traces from the *Soldiers* initiative surfacing in the training elements of the Medic classes and the Special

[99] On the official homepage *America's Army*: Soldiers was initially defined as "an immersive role-playing sim. Build and train your soldier as you experience the full range of basic training and military life. Live the code of the Army: loyalty, duty, respect, selfless service, honor, integrity, and personal courage. The path to success is within grasp. Take it." *America's Army*. 2003. *America's Army*.com. Available: http:// americasarmy.com/soldiers/index.php. February 7, 2003.
[100] Community rumours indicated that the Soldiers game was too dull.

Forces training introduction.[101] Paragraph 4.2 will discuss the role of *America's Army* as an edugame in detail and the various training segments in the game.

A third and recent shift in the project's history was the U.S. Army taking full control over the AGP. In March 2004, "the differences between MOVES and Army management saw the game's production take a different turn. For many on the project, the whirlwind development cycle had taken an emotional and physical toll over the years" (Zyda, 2004: 32). This move is regrettable from an academic viewpoint as the open and academic mindset of the MOVES Institute provided much more research material than the secretive OEMA and U.S. Army. In a recent 'behind the scenes' look an anonymous developer looked back at his time in the *America's Army* development team, noting that since the Army took over, many (20) developers left the team and that working on the game was a very stressful experience.[102] The Army is said to turn the game into a for-profit corporation by "a new pending law that would allow the Army to apply its profits against the cost of developing and maintaining the videogame".[103] With new initiatives such as *America's Army* action figures, a webstore with official merchandise, and a console version of the game, the *America's Army*-brand is spread through popular culture.

2.6 Concluding Remarks

As this chapter made clear, the Army Game Project is a rich site for a deeper look of the ties between the U.S. military and popular culture. The project might have been much more successful than anticipated or even dreamed off by the Army brass. The history of the project is full of small gems worth exploring. The countless stories of new patches and thousands of players worldwide storming server to play a new map, engaging in fierce discussion on the merits of the new material, is something to write a book about. Playing *America's Army* for me still is a visceral experience. Laying down in the corner of a map with a zoomed in sniper rifle, waiting for the enemy while you have only one shot to finish him off and to win the round, makes one forget that this game is the (logical) outcome of a vast branding effort.

Albeit the game is part of the sub-genre of tactical FPS games, *America's Army* is not 'just a game'. It is a free game, but unlike the free triple-A FPS World War Two-themed *Return to Castle Wolfenstein: Enemy Territory* (Mad Doc Software / Splash Damage, 2003), *America's*

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[101] And with future releases the role of training will expand.

[102] The former developer criticises the Army saying that "The Army is basically clueless when it comes to making games and they don't know how to treat people, especially game developers. They had an A-level team, but I honestly don't see them building another one (particularly since they weren't the ones who built the first one)." Source: Game Matters America's Army -- Behind the Scenes. 2005. Game Matters. Available: http://dukenukem.typepad.com/game_matters/2005/03/americas_army_b.html. March 17, 2005.

[103] Source: U.S. Army Licenses Training Game to Ubisoft. 2004. AWN Inc. Available: http://news.awn.com/index.php?ltype=top&newsitem_ no=10841. March 15, 2005.

Army comes at a cost.[104] You have to join *America's Army*. You have to commit yourself to the cause. You have to do training and you have to empower yourself and defend freedom! The official Army game turned out to be not just some experimental Army project but a game where young kids spent four hours every day on, for over a year. The dedication and appreciation of gamers shown towards the game might seem strange for those critical towards the U.S. Army or violent shooter games. The next chapter is aimed at this question, how is it that the U.S. Army has been able to create a game that is up to par with other games and even create its own niche. Using cheap and configurable computer game technology enables adolescents to interact with simulations of infantry combat developed to create a promotional discourse of the U.S. Army brand and its accompanying values. But such a technological deterministic claim oversimplifies the socio-cultural, economical and historical evolvements of the project.

America's Army changed the Rules of Engagement, implying that there were rules to begin with. Which historical developments within military modelling and simulations communities took place before the Army Game Project was launched? And how is it that the AGP can easily tap into existing development communities. How is it possible that the Army can use the same game for training and entertainment? Why is it possible to instrument the game to measure the aptitude of gamers and maybe even more interesting why does the U.S. Army want to measure the gaming skills of adolescents? As *America's Army* is a virtual copy of the U.S. Army, a closer look at the practices and culture of this vast organisation is essential to answer these cases. The relation between war and game culture results in fascinating interactions as game designers try to simulate the most horrific acts men can perform. As the war in Iraq drags on and upcoming wars are discussed, *America's Army* is not the only medium simulating and representing war and images of combat. Television series, news casts, movies and documentaries all contribute to an overall view of 'what war is like', but what no other program, game or movie can claim is that they are officially developed by the U.S. Army. Chapter 3 aims at providing answers to these questions to give way to chapter 4 where the four dimensions of *America's Army* get their fair share of attention. In the next chapter the relation between, (post human) war, society, games, television, game culture, military training, military technology, the U.S. Army, First Person Shooters, the logic of war, and *America's Army* will be further explored.

[104] The game was envisioned as an expansion pack for *Return to Castle Wolfenstein* (Gray Matter Studios / Nerve Software, 2001) but after an ill-developed single player mode the multiplayer part of the game was released to the game community for free. *Enemy Territory* is, along with *America's Army*, a constant member of the top-5 of most online played FPS games and focuses on cooperative play. *Enemy Territory* is, in number of players, often more successful than *America's Army*.

Chapter 3 – Military and/or Entertainment

After the introduction of *America's Army* at the Electronic Entertainment Expo (E3) in Los Angeles in May 2002, *America's Army* was published online on the fourth of July, 2002. The game was a runaway hit, which took the developers by surprise:

> "Initially, the Army stood up only 140 servers for the launch of the game. The average server could accommodate 24 players. With the game downloaded over 500,000 times that weekend, the servers were swamped and many players had to wait days to play" (Zyda et al., 2004: 18)

Servers crashed and the U.S. Army was unprepared for the sudden overwhelming demand for their game. Why is it that *America's Army* has been embraced by gamers all over the world and why, after becoming such a popular online game, is it possible for the U.S. Army to repurpose the game, turning it into a platform, serving different roles – i.e. strategic communication, training, testing and propaganda.[105] In the next chapter, these four dimensions will be explored in detail, but to give the different dimensions a necessary framework, this chapter will reflect upon the different communities *America's Army* tapped into. As Kline et al. agree with Raymond Williams, I agree with them that "the cultural impact of a new medium cannot be diagnosed until we understand the historical circumstances of its development" (2004: 28). As the invention of television is not the outcome of a "single event", the history of digital games has to be grounded in the "specific institutional contexts and social settings in which media influence markets and culture" (ibid: 49). The development of *America's Army*, as a game developed by the U.S. Army, is grounded in on the one hand military research and development communities and on the other hand electronic entertainment (development) communities. This chapter will elaborate upon the interaction between game development communities and the U.S. military from a technological, socio-economic and cultural perspective. It starts with the observation that the use of commercial games and game technology for military training has a long history and that this use expanded significantly over the last decades (paragraph 3.1). An overview of the practices of the U.S. military shows a willingness to use game technology to prepare for real war (paragraph 3.3).

One of the results of the military-entertainment symbiosis is a technological as well as an aesthetic overlap of modern weapon systems and the games modelling these technologies, using the same hardware and software interfaces to fight a mediated war. The U.S. military is ordered to actively reinvent itself and the way it fights its (future) wars. The concept of post human warfare, as played out by million of adolescents, is anticipated by the military and simulated by modern interactive entertainment and will be discussed in paragraph 3.2. The

[105] See paragraph 2.5 for a detailed analysis of the project's rationale. The primary goal of the Army Game Project was to raise brand awareness and to inform popular culture about the U.S. Army.

relatively cheap modelling and simulation technologies have become a valuable alternative to train a new generation of soldiers, changing the status of games as a leisure technology. To function successfully in the wars of the future, U.S. soldiers have to become computer literate and todays online games are one way to provide this training. If *America's Army* shows anything, it is that the role of games as entertainment is in a state of change, as military games are used to train soldiers and test weapon systems. The constant process of anticipating new technologies and war itself, coupled with the blurring of military and entertainment discourses, changes the logic of war and peace and as war is the basis of this process, this logic is full of paradoxes (paragraph 3.4). The U.S. military and a global game culture are profoundly interlinked on a technical, cultural and social-economic level and the representation and simulation of modern war in computer games is on the same time a result as well as a catalyst of this bond (paragraph 3.5).

A concluding reflection on the representation of war in games and its interaction with news media, allows us a look at the image of war in our (Western) media-saturated post-Fordist society (paragraph 3.6). The role of (military) games within contemporary popular culture is both the outcome and extension of the military-entertainment complex and looking at the wider discourse of games within news media, signals the changing status of war in the age of digital reproduction. The ability of the U.S. military to tap into popular culture has only been possible because of the various historical and ongoing developments outlined in this chapter. The paragraphs in this chapter provide the back-story for the four dimensions outline in the chapter 4. The pervasive role of the U.S. military in the Army Game Project calls for a proper context, the role of technology and the use of games in the military, the logic of war and the representation of war in games and news media, frame the multi-dimensional character of *America's Army*. Paragraph 3.3 and 3.5 both are complemented by two 'game studies' of *Full Spectrum Warrior* and *Desert Combat*. These studies focus on games that are exemplary of the content in the respective paragraphs and offer a more extensive take on the subject matter.

3.1 The Military-Entertainment Complex

The U.S. military spurred a range of significant technological developments since the beginning of the Cold War.[106] On January 17 1961, U.S. President Dwight D. Eisenhower issued a warning during his farewell radio and television address to the American people, against the total influence of the, by then, immense military establishment: "In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist."[107] Nevertheless, the generous U.S. military complex was able to pour billions of dollars into corporate and academic projects, resulting in numerous inventions within the

[106] The role of military communities in stimulating and triggering various media technologies (e.g. radio, television, radar) took place all over the world long before the cold war (Douglas, 1985; Uricchio, 1998; Zielinski, 1999).
[107] See: NLE Farewell Address. Archives.gov. Available: http://www.eisenhower.archives.gov/farewell.htm. March 23, 2005.

industries of communications, electronics and computer imaging (Schiller, 1994; Kittler, 1999). One of the most well known results of the "unlikely alliance" between military and academic communities and culture was the ARPANET, the forerunner of what is now known as the Internet (Castells, 2001).

With the end of the Cold War, the structure of the U.S. military and the way U.S. forces would wage future wars, changed dramatically (Binnendijk, 2002).[108] Simultaneously, the research and development into modelling and simulation techniques flourished in the commercial entertainment industries. The booming innovation of commercial simulation technology did not go unnoticed by the U.S. military and the military-industrial complex transformed into the military-entertainment complex (Herz, 1997; Lenoir & Lowood, 2003).[109] Since the military-industrial-academic complex provided the base from which the information age would be launched, military communities could easily tap into the electronic entertainment industries and deepen their ongoing symbiotic relationship (Kline et al., 2004). The reach of the military-entertainment complex is beyond the realm of games/simulations. Co-developed films, television series, toys, and various other entertainment products are direct outputs of the complex (c.f. Hall, 2003). The focus in this chapter and thesis is primarily on the role of simulation technologies and its place within the military-entertainment complex.

The decision to use simulations for military training seems obvious from both a socio-economic and technological perspective.[110] The declining costs of computer hard- and software made simulations relatively cheap substitutes for military training. Live-exercises can be very expensive, the three-week exercise 'Defense Department's Millennium Challenge' with 13.500 participants cost 250 million dollars (Silberman, 2004). Not only are huge sums of money spent (or spoiled) on such live exercises, but a lot of (costly) time as well. Simulations, using portable platforms such as personal computers, laptops or game consoles, enable soldiers to train "anytime, anywhere", up to a point where soldiers can rehearse and evaluate different battle plans just before the start of an operation. In addition, the dispersed nature of the U.S. military benefits from local training, strengthening readiness.[111] Child (1997), focusing more on stand-alone simulators than digital simulations, sees low risks as the principle reason for simulator use. The employment of specialized military equipment, especially complex weapon systems, can be hazardous and many skills and procedures can be trained in the safe environment of a simulator. Most military weapon systems contribute by default to

[108] This process is discussed in detail in the next paragraph.
[109] According to the website TheWordSpy.com the term 'Military-entertainment Complex' was first coined by Bob Swain in "Specially effective fun," The Guardian (London), August 25, 1994. Swain used the term to describe the technological interaction between Theme Park Attraction designers and battlefield simulation developers in the U.S.. TheWordSpy.com defines the Military-entertainment Complex as: "Cooperative ventures involving personnel and technologies from both the military and the entertainment industry". See: The Word Spy - military-entertainment complex. 2005. Wordspy.com. Available: http://www.wordspy.com/words/military-entertainmentcomplex.asp. March 1, 2005.
[110] Unless stated otherwise, the term 'simulation' in this thesis always refers to digital simulations on such platforms as personal computers, laptops or game consoles. 'A simulator' refers to stand-alone training devices physically modelling parts of a system in detail. As a rule, simulators are more expensive than simulations.
[111] Up to a point where troops make use of "embedded simulations", simulation integrated within existing weapon systems, blurring the line between training and real warfare and signalling the shift towards even more mediated forms of warfare.

environmental pollution and legislation that is more stringent forces many commanders to use stand-alone simulators and digital simulations instead of wasteful tanks and jets.

The military-entertainment complex has a long history and an analysis of the historical development of this complex is needed in order to define *America's Army's* place within the broader range of military and commercial simulations and within the military and entertainment industries. The first steps leading to the development and the current use of *America's Army* can be traced back to the early eighties and the expansive implementation of digital tools in various military training material and exercises. The following paragraphs offer a wide range of examples of new hardware and software simulations used by the U.S. military.

Before the massive investments in many kinds of (military) simulation technologies, the military already used computers as aides during their non-digital war games. At first computers were just simple scorekeeping devices but during the arcade craze in the 1978's, the Defense Advanced Research Projects Agency (DARPA) licensed the primitive wire frame game *Battlezone* (1978), developed by Atari, to build a 'deluxe training toy' for the U.S. Army (Herz, 1997). In the early 1980s, the construction of SIMNET (SIMulator NETworking) replaced both live exercises and costly high-end stand-alone simulators and signalled a shift from individual towards collective training.[112] The new training tool became operational just before operation Desert Storm in 1991, enabling soldiers to practice right before plunging into the real fight. According to the Program Executive Office for Simulation, Training & Instrumentation, SIMNET provides a virtual battlefield to train the "synchronized execution of collective warfighting skills in a combined arms and joint arena".[113] SIMNET was an improvement over expensive stand-alone simulators - complex and advanced training machines that modelled the original weapon in meticulous detail which were twice as expensive as the system it modelled.

Connecting the different simulators was an important step towards the training of tactical movement skills. The actual use of SIMNET suffered because the system was designed as a proof-of-concept platform and additional funds for the use of SIMNET in training were restricted (Child, 1997). The Close Combat Tactical Trainer, an application of the SIMNET concept, cost 850 million dollar and shows the enormous investments in SIMNET and its spin-off technologies (Lenoir, 2003). After the, from a military perspective, successful First Gulf War, SIMNET proved to be useful to simulate an important tank battle in the war – The Battle of 73 Easting. By collecting data from the deserted battlefield in the Iraqi desert, and by analysing satellite photos, black boxes and through various debriefings, the battle was re-playable for tank commanders and those who wanted to learn lessons from the U.S. victory. By simulating

[112] SIMNET was initiated in 1982 by DARPA and incorporated "the lessons the military learned from Atari" (Kline et al., 2004: 101). From 1987 to 1989, experiments with the new system were carried out and the network became operational in January 1990 (Lenoir, 2003).

[113] PC-Based Technology Invades Army Simulation. 2005. U.S. Army PEO STRI. Available: http://www.peostri.army.mil/products/pc_based_tech/. March 1, 2005. The Program Executive Office for Simulation, Training & Instrumentation (PEO STRI, formerly known as the Simulation, Training & Instrumentation Command or STRICOM) is in charge of the acquisition of training devices, instrumentation, threat simulators and targets.

history in great detail, commanders were able to learn lessons for battles to come (Herz, 1997: 197 & Lenoir, 2003). Sterling signals the convergence of entertainment hardware and military training tools and gives a vivid account of being inside SIMNET:

> "A wired Armed Forces will be composed entirely of veterans - highly trained veterans of military cyberspace. An army of high-tech masters who may never have fired a real shot in real anger, but have nevertheless rampaged across entire virtual continents, crushing all resistance with fluid teamwork and utterly focused, karate-like strikes. This is the concept of virtual reality as a strategic asset. It's the reasoning behind SIMNET, the 'Mother of All Computer Games.' It's modern Nintendo training for modern Nintendo war" (Sterling, 1993).

It was commanding general Norman Schwarzkopf who labelled the first Gulf War of 1991 as a 'Nintendo war.'[114]

3.1.1 The 1990s - building on SIMNET

The SIMNET experiments proved to be just the beginning and military modelling and simulation efforts expanded into different directions. In 1994, the Federal Acquisitions Streamlining Act started a new era in the simulation and networking endeavours of the U.S. military. Policymakers were ordered to look into the possibilities of using commercial off-the-shelf (COTS) alternatives for virtual training purposes, a move which should serve the commercial sector as well. Expensive custom made material, developed and produced by special defense contractors should be a last resort during the acquisition of new defense material. The act became effective in a period when the commercial gaming industry was booming. By 1994, thousands of gamers were playing *DOOM* (id Software, 1994), millions of copies of the literary adventure game *Myst* (Cyan Worlds Inc., 1993) were sold and kids were massively hooked up to *Mortal Kombat* (Midway, 1993).

The new legislation was the outset of a massive expansion of the military-entertainment complex and blurred the boundaries between commercial and military techniques, industries and discourses. Even though SIMNET technology had its commercial spin-off, the combination of more and more households with some sort of home entertainment device and a U.S. military developing several modifications of commercial games on different platforms profoundly changed the relation between entertainment and military technologies. In 1997, a more structural approach towards the appropriation of commercial techniques came into play when the U.S. National Research Council (NRC) issued a report to investigate the possible collaborations between defense and commercial research and development efforts (Zyda & Sheehan, 1997). One of the report's conclusions was that the defense and entertainment industries had different and partially conflicting business models. The most

[114] Lister et al. (2003: 262) see the representation and simulation of the 1991 Gulf War as emblematic of the troubled status of our understanding of the real world in media culture: "This 'simulation' was explicitly figured in terms of video games, as the 'Nintendo war'."

notable differences (still) are the duration of research and development programs, a different market structure, and concerns about intellectual property (omnipresent in the entertainment industry). Technological innovations within the entertainment modelling and simulation branch such as networked virtual environments, computer-generated autonomy, standards for interoperability, and tools for creating simulated environments are of direct interest to the U.S. military.

The NRC acknowledged the technological lead of commercial game developers within the field of networked virtual environments and argued that there could be a beneficial flow between the two communities. This flow needed, according Zyda and Sheehan, to be backed up, supported and most of all institutionalised by the U.S. military. A joint research agenda for defense and entertainment modelling and simulation was the outcome of this report as well as the founding of the Institute of Creative Technology (ICT), a department within the University of Southern California, and the MOVES Institute, a department within the Naval Postgraduate School located in Monterey, California.[115] Both initiatives are examples of successful collaborations between military, academic and commercial game development communities. The two institutes showed energetic actions of all involved and fulfilled many of the NRC objectives.

The U.S. Army founded the Institute of Creative Technology in 1999 and its main aim was to bring the commercial entertainment industry ('Hollywood' and 'Silicon Valley') together with academics under the auspices of the Department of Defense.[116] Entertainment companies like Time Warner, Viacom Paramount, Sony, Disney, Lucas and Dreamworks are associated with the University of Southern California and thus with the U.S. Army. The commercial game *Full Spectrum Warrior* (Pandemic Studios, 2004) a well-planned outcome of the ICT efforts and shows the willingness of the Army to allow civilians to play with Army training tools.[117] The Joint Fires and Effects Trainer System (JFETS) is another ICT creation serving as a "tactical decision aid". Silberman (2004) gives an insight of the military-entertainment character of this simulation device:

> "Instead of GAME OVER at the end of a virtual engagement, a tactical decision aid will display the message mission FAILED - TOO MANY US SOLDIER CASUALTIES. Still, researchers often refer to soldiers as players and say things like, "When they're still talking about it in the mess hall afterward, you've got a game!""

The JFETS is a fully immersive virtual environment, training military personnel from all branches focussing on the rules of engagement and general fighting skills, and the execution of

[115] The MOVES institute was the primary source of technical and academic input for the Army Game Project (AGP) and thus a direct result from the NRC report. The MOVES involvement in the AGP ended in March 2004 when the U.S. Army took formal control over the development of the game due to differences between the MOVES institute and Army management. For a more detailed analysis on the role of MOVES in the AGP see paragraph 4.3.5.
[116] The goal of the ICT is to create high fidelity learning environments and immersive simulations (Macedonia and Rosenbloom, 2001). PEO STRI (formerly known as STRICOM) initially directed the ICT.
[117] See paragraph 3.3.1 for a detailed game study of *Full Spectrum Warrior*.

standard call-for fire tasks in particular.[118] This is done by creating a theme-park like environment where surround sound and flat-panel displays create a Holodeck-like environment. The JFETS looks like the dream of every gamer and *Star Trek* fan.

The question whether the U.S. military increasingly uses virtual simulation training techniques because of better training results or just because it is possible to do so, is a question that has not been answered to full satisfaction.[119] It will not come as a surprise that those who use (and promote) simulations, e.g. Michael Macedonia, chief scientist of PEO STRI (Program Executive Office for Simulation, Training & Instrumentation), are enthusiastic about the capacities, versatile abilities and results of using simulations as training tools:

> "The result 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 military R&D" (Macedonia, 2004).

The words of Macedonia need to be put into perspective when looked at operational activities during operation Desert Storm. The infamous 'Highway of Death' incident where hundreds of fleeing Iraqi soldiers were killed by aircraft, is just one example of the remote and lethal character of the operation. No soldiers were killed during this 'battle', because they were high in the sky using fire-and-forget weaponry or in other instances behind computer screens programming Tomahawk missiles. The U.S. troops that did engage in man-to-man combat used a range of technologically superior weapons and faced a demoralised enemy. The first Gulf War was for a great deal indeed the "clean war" as portrayed on television (c.f. Kellner, 1992), a war fought by jet fighters and stealth bombers with as few troops as possible directly engaging the enemy.[120] The difference in casualties between the first and second Gulf War underlines this argument. In the first Gulf War, U.S. casualties stopped at 148 battle related deaths.[121] The Kosovo war in 1999 heavily depended on the use of smart bombs, cruise missiles and thus resulted in even fewer U.S. casualties. There were more journalists killed in the Kosovo campaign than U.S. military personnel (Der Derian, 2003).

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[118] ICT calls JFETS "an immersive cognitive training tool". Join Fires and Effects Trainer System - Institute for Creative Technologies. 2005. Institute for Creative Technologies. Available: http://www.ict.usc.edu/disp.php?bd=proj_concept_jfets. March 1, 2005.

[119] No comprehensive data is available whether the growing adoption of new digital tools within the military actually leads to better results. In my experience, comparative and comprehensive analysis done by the military seems to be not available (i.e. classified) or not simply not yet conducted. However, the vast military research and development complex is too big to rule out such reports.

[120] During the first Gulf War, the Powell Doctrine was enforced, resulting in a substantial number of soldiers invading Iraq. Although there were hundreds of thousands of soldiers in Iraq and Kuwait, on the tactical level there was far less infantry combat compared to the Second Gulf War where U.S. Soldiers entered Iraqi cities as Falluja and Baghdad. Powell Doctrine - Wikipedia, the free encyclopedia. 2005. Wikipedia. Available: http://en.wikipedia.org/wiki/Powell_doctrine. March 1, 2005.

[121] Based on: Gulf War - Wikipedia, the free encyclopedia. 2005. Wikipedia. Available: http://en.wikipedia.org/wiki/Gulf_war. November 15, 2004. And: Invasion of Iraq - Wikipedia, the free encyclopedia. 2005. Wikipedia. Available: http://en.wikipedia.org/wiki/2003_invasion_of_Iraq#War_casualties. November 15, 2004.

During the U.S. invasion of Afghanistan starting in October 2001, the U.S. military did put 'boots on the ground'. Even though the Pentagon proclaimed this campaign to be a success, which could partially be explained by Macedonia's virtual training argument, the U.S. Army suffered significant opposition and casualties (Hersh, 2004).[122] The first Gulf War and the Kosovo war were much more 'remote' – i.e. fought from the air, in comparison with the Afghanistan conflict and ongoing operations in Iraq. Here U.S. troops, although well trained and better equipped, fight a deadly guerrilla war in urban terrain. As a result, the U.S. death toll in the Second Gulf war topped 1450 battle related U.S. deaths and is still rising – sharply contrasting the low casualties of previous U.S. conflicts in the last two decades.[123] As Hanson (2003) makes clear, the post-modern U.S. society suffers from the "body bag syndrome" and is reluctant to suffer (too many) military casualties. This rationale may well be the reason for the increasing need for distanced combat and eventually post-human warfare. The role of military training – i.e. no money is spared to train the troops – is another important result of the risk-avoiding attitude of today's U.S. military.

The advent of, what some have dubbed 'the Fourth World War', only resulted in more funds to the U.S. military and thus accelerated military simulation efforts.[124] The Department of Defense budget for 2003 passed at 369 billion dollar with an option for an additional package of ten billion dollar to keep fighting the War on Terror (Office of Management and Budget, 2003). The United States defense budget for Research and Development (R&D) is four times as that of the European Union, while the Gross National Product of both unions is the same.[125] The total budget for "Research, Development, Test, and Evaluation" consisted of 54 billion dollar in 2003 with 20.000 people active in laboratories and research centres and four billion dollars allocated to simulation and training material (ibid). With this enormous financial backing, the U.S. military can afford experimenting with new, often commercial, technologies. On the other hand there seems, and the 1997 NRC reports is proof of this, a general 'believe' in the possibilities of using simulations and commercial games for military testing and training.

Before providing an overview of the use of games and simulations within the U.S. military, I will reflect on the role of technology in today's military by discussing the process of what the U.S. Department of Defense termed 'Transformation'. This process is of importance for it

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122 Investigative journalist Seymour Hersh (2004) describes in the chapter "The Other War" the failing of "Operation Anaconda". Special Operation units and regular U.S. Army soldiers initially suffered substantial losses when they attacked Al-Qaeda and Taliban units in the mountains of Eastern-Afghanistan.

123 The war started on March 20, 2003 until today (February 2005). These figures come from Iraq Coalition Casualties. 2005. Icasualties.org. Available: http://icasualties.org/oif/. February 15, 2005. During the same period, more than 10,700 soldiers got wounded in action.

124 The term Third World War is used to describe a hypothetical global nuclear war or the Cold War of the 20th Century. See: http://en.wikipedia.org/wiki/Third_World_War. Last visited: 15 November 2004. The concept of a Fourth World War is not a widely used term by politicians or the press. However, I would like to introduce the term here because it signals the global nature of the U.S.-led War on Terror. See: http://en.wikipedia.org/wiki/World_War_IV. Last visited: 15 November 2004.

125 See for a full report on the DoD R&D FY 2003 budget: Koizumi, Kei. R&D in the Fy 2003 Department of Defense Budget. 2003. American Association for the Advancement of Science. Available: http://www.aaas.org/spp/rd/03pch6.pdf. 30 September 2004.

interacts directly with the content and themes of *America's Army* as well as its multi-dimensional role. The shifting role of the U.S. Army and the implementation of various new 'high-tech' weapons will profoundly alter the face of war in the coming decades, changing the course of war (and peace). As developers of military games are more than willing to incorporate every change in technology-based warfare into their simulation models, the next paragraph provides a dissection of the process of military transformation.

3.2 War in the Age of Digital Reproduction

> "'It's possible,' Lt. Col. David Branham of the USAF says, 'that in our lifetime we will be able to run a conflict without ever leaving the United States" (Brzezinski, 2003).

The U.S. military is deliberately undergoing a process of transformation in their ongoing struggle to keep up with the modern ICT technologies, newly developed high-technology military weapon systems as well as confronting present-day terrorist threats and waging several wars at the same time. The end of the Cold War and the Industrial Age and the advent of the War on Terror and the Information Age profoundly changed the role of U.S. military forces. The emergence of Information Age Warfare, as analysed by Alberts et al. (2001), creates the need to understand the core principles of new military doctrines and concepts such as Information Superiority and Network Centric Warfare.[126] U.S. Defense Secretary Donald H. Rumsfeld is one of the fiercest advocates of the process of military transformation, defined as: "Changes in the concepts, organization, process, technology application and equipment through which significant gains in operational effectiveness, operating efficiencies and/or cost reductions are achieved" (Hone and Friedman, 2002: 31).

As early as in 1997, the National Defense Panel wrote a report on the national security of the U.S. in the twenty-first century where a transformation strategy of the armed forces was named as one of the highest priorities. The world in 2020 was described as one in which technologies such as robotics and unmanned vehicles will be a part of everyday life. ICTs rapidly integrate into the very fabric of the U.S. military and the need to adapt to new threats and technologies is still seen as one of the most vital tasks of today's U.S. military. In 2002, the Office of Force Transformation was established within the Department of Defense to "sustain American competitive advantage in warfare."[127] An enormous amount of research is conducted to let the military transform in order to maintain the military superpower-status of the United States of America.[128] The U.S. military has a very pragmatic approach to technology - harnessing technologies that work and getting rid of old or useless material and doctrines. Two

[126] In a Congressional Research Service (CRS) Report for Military and National Security, Network Centric Warfare (NCW) is named as "a key component of DOD planning for transformation of the military. NCW relies on computer processing power and networked communications technology to provide a shared awareness of the battle space for U.S. forces" (Wilson, 2004).
[127] See: Office of Force Transformation What is Transformation? 2004. Office of Force Transformation. Available: http://www.oft.osd.mil/what_is_transformation.cfm. December 12, 2004.
[128] C.f. Mead's (2004) reflections on the super-power status of the post-9/11 United States. Not only military (sharp) power is part of the U.S. as a global power, but also its sticky (economical) and soft (cultural) power.

elements of transforming the military are particularly interesting within the scope of this thesis.

First, there is the growing need to train U.S. military personnel on an ongoing basis. As weapon systems rely more and more on (computer) technology, soldiers are required to use information-age digital skills to take part in a networked military (Schaab & Dressel, 2003). Individual competencies such as stress resistance, situational awareness, information management, adaptive thinking and system management skills are to be trained by TADSS - training aids, devices, simulators and simulations (Campbell, Throne, Black and Lickteig, 2003).[129] The need for digital training – i.e. games and simulations – will only increase as tasks become more complex and high-fidelity simulations become cheaper to develop. As the next paragraph will show, the use of simulations within all branches of the U.S. military is common and will only expand. Similarly, the role of *America's Army* as a training tool, explored in paragraph 4.2, will also expand. As the role of training simulations and simulations as weapon systems blur, computer literacy becomes a vital skill in a transformed military.

Being computer literate, from a military perspective, means possessing "the ability to perform effectively in an information rich and changing environment" – i.e. to be able to display information and communication technology skills to operate digital systems (Schaab & Dressel, 2003: 1). Singh and Dyer (2002) assessed the computer backgrounds of soldier in the U.S. Army and name seven common computer features as vital for computer literacy – (operating a) mouse, using the Internet, email, software with menus, software with icons, graphics and games.[130] The link between computer literacy and *America's Army* is made by Zyda et al. (2003b: 3): "The Army was concerned about falling recruitment and perceived the need for new initiatives aimed at computer-literate recruits for today's high-tech Army. The discussion turned to the medium of the PC game."

Second and of direct interest of the theme of this chapter, is the use of new technologies which make post-human warfare a reality. The human body will be ever more removed from the battlefield through such technological inventions as Unmanned Aerial Vehicles (UAVs), satellite imagery, Robotics, Global Positioning System (GPS) technology and the like. The process of military transformation as it takes place today coincides with the growing technological advancements in gaming technology and what we see is a blurring of the status of mediated war. There is a convergence of the representations, simulations and interfaces of real war (e.g. an Apache Helicopter pilot using a control-stick, shooting down Iraqi insurgents by looking at a computer screen showing thermal vision imagery) and fake war (e.g. a gamer piloting an Apache Helicopter using a joystick, shooting down Iraqi insurgents by looking at a computer screen showing thermal vision imagery).

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[129] Campbell et al. (2003: 22) issue the following warning: "Simulations – whether fixed site, distributed, or embedded – are not the universal training solution (the silver bullet) but they do have some specific utility."

[130] On average Singh and Dyer found that higher-ranking military personnel had the most computer expertise and medical personnel more than infantry soldiers did.

Hereafter I will briefly go into the history, current use and future use of Unmanned Aerial Vehicles and Robotics within the U.S. military because it is my belief that the use of these technologies will profoundly alter the face of war.[131] In addition, the interaction of these new technologies with the test bed and tool and edugame dimensions of *America's Army*, call for a further exploration of war in the age of digital reproduction. The notion of the Information Age can be substituted by such concepts as 'industrial capitalism', 'information capitalism' or 'post-Fordism' and new digital weaponry and security systems are vital elements of a post-Fordist U.S. society. Kline et al. link the concept of the post-Fordist society with technology and signal the results of this shift:

> "Discussions about the increasing role of high-technology innovation and digital networked in 'post-Fordist' capitalism connect with debates about the nature of a postmodern culture characterized by ever-escalating difficulties in separating illusion from reality, image from substance, and virtual from actual" (2004: 61).

Paragraph 3.4 discusses the interaction of this shift with the logic of warfare and its subsequent effects on military games and simulations. In the following sub-paragraph I will focus on the role of military technology turning war into a hyperrealistic event.

3.2.1 Towards Post-Human Warfare

> "One of the more important things we're doing in this administration is transformation. There are some really interesting technologies. For instance, we are flying unmanned vehicles that can send real-time messages back to stations in the United States. That saves manpower, and it saves equipment. It also means that we can target things easier and move more quickly, which means we need to be lighter and quicker and more facile and highly trained" (The Second Bush-Kerry Presidential Debate, 2004).

President George W. Bush made clear during the second presidential debate with Senator John Kerry that the military doctrines of the United States are changing. This quote sums up all key elements needed to transform the U.S. military in a highly trained, technologically advanced, small fighting force, ready to wage war from beyond the horizon. Modern technological - i.e. distant - warfare is preferred over attrition warfare. In his analysis of military technology and American culture, professor of military history Victor Davis Hanson (2003) sees the mass production of drones, similar to the mass production of airplanes and tanks in World War Two, as a possible future of how the U.S. military will fight its future wars.[132] The mass production of cheap(er) Unmanned Aerial Vehicles may be the perfect combination of the United States' reliance on high technology to avoid casualties of war. The removal of human agents from a

[131] This belief is based on a plethora of reports, interviews and newspaper articles presented in this chapter.
[132] "Sending a fleet of 100 Predator drones with Hellfire missiles against a target might be as cheap and effective as a couple of multimillion-dollar Air Force F-22 strike fighters with high-priced cruise missiles" Hanson (2003).

potentially hostile environment seems like the perfect solution to combine technology with the fear of death of U.S. soldiers.[133] Western societies avoid war casualties at all costs and have a hard time accepting the death of their soldiers:

> "Much American support for the war in Iraq comes with the expectation of few casualties and quick success. And our new defense culture takes shape within these twin parameters of personal safety and reliance on high-technology - so that we can inflict many, but not incur any, losses, and so that we can kill with greater precision from ever further away" (Hanson, 2003).

As argued before, the millions of deaths in the two world wars, the ten thousands of U.S. casualties in Vietnam, the Gulf war with less than one thousand coalition fatalities ultimately led to the zero death count in the Kosovo war in 1999. The role of remote technologies obviously contributed to this trend. UAVs were used as early as in the Vietnam War, for the gathering of intelligence and to provide situational awareness. Later on, in the first and second Gulf War and during the Kosovo war, as well as during operations in Afghanistan, UAVs were used for various tasks. The role of mere reconnaissance has expanded and operational UAV programs such as the Predator, Pioneer and Hunter, enable operations in mission areas such as Force Protection, Signals Intelligence, Suppression of Enemy Air Defenses, Anti Submarine Warfare and other military tasks (Office of the Secretary of Defense, 2002).

The success of UAVs ultimately led to the initiation of the development of Unmanned Combat Air Vehicles (UCAVs) and even autonomous UCAVs. The Predator UAV is said to make its first "remote-controlled kills" in 2001 in Afghanistan (Brzezinski, 2003). In a CNN-article named 'Remote Technology Spares U.S. Soldiers' (2004), several new technologies and upcoming weapons are reviewed. Their use on the battlefield of Iraq gets more diverse, more accepted and more popular by the day. See figure 6 for a picture of the Talon robot and paragraph 4.3.3 on how this weapon system is integrated in *America's Army*. Ranging from infrared jammers, blocking remote-controlled detonators of Improvised Explosive Devices (IEDs), to the well-known UAVs and remote controlled robots, the U.S. military relies more and more on sophisticated remote technologies to fight an asymmetrical war. Other unmanned options are explored, such as digital cameras packed into mortar shells. The shell hanging beneath a parachute, transmits digital photos to a soldier's laptop, giving soldier a birds-eye-view of the battlefield. Unmanned Ground Vehicles (UGVs), e.g. armed robots, are considered to take part in the war in Iraq as well (Shachtman, 2004).

U.S. Congress ordered in 2000 that before 2010 a third of the military ground vehicles and deep-strike aircraft must be computer-controlled (Weiner, 2005). War always worked as a catalyst for military innovation - demanding new technologies with only one goal in mind, no

[133] As Luttwak (2001) makes clear, the logic of war makes such 'dreams' nearly impossible; every weapon system provokes a counter reaction (on both the technical and tactical level of strategy). As the NATO-led war in Kosovo shows, simple diversion and camouflage tactics of the Serbian Army avoided the destruction of this army. This logic is acknowledged by Hanson (2003).

U.S. casualties. The ongoing war in Iraq shows the pressing need for the removal of human agents from the battlefield. On July 9 2003, in a prepared testimony for the U.S. Senate Armed Services Committee, U.S. Secretary of Defense Rumsfeld and U.S. Army General Franks gave a presentation about the 'lessons learned' during Operation Iraqi Freedom (OIF). General Franks highlighted the need to include laser designation and precision weaponry delivery for the Global Hawk (a UAV), as one of the main areas of requiring additional work – i.e. more funding, production and development of this technology. The Armed Predator is seen as an "advanced technology", which "demonstrated great potential" and "will be a high payoff system in the future" (Franks & Rumsfeld, 2003).

The future is bright for unmanned flight and Army robots, so it seems. The Pentagon budget for 2010 is estimated at 502.3 billion dollars and the military is said to invest "tens of billions of dollars in automated armed forces" as part of the Future Combat Systems (Weiner, 2005). There are however numerous obstacles to overcome before military robots can take over. The rivalry between the different U.S. military branches makes every new military technology a challenge but also bandwidth problems, information overload at military command posts, a skilled adversary, proper communication protocols and numerous other factors can hamper the possible 'success' of killer-robots. In a similar story, Talbot (2004) reports how military technology failed in late 2003 during military operations in Iraq. During the fight against regular Iraqi forces, U.S. Army troops had to stop several times during their expedition in order to download critical intelligence data, leaving them vulnerable for counterattacks. Besides technical and economical boundaries, there are ethical questions surrounding the use of autonomous lethal robots, indirectly addressed by such Hollywood productions as *I Robot* (Proyas, 2004) and *Terminator 3: Rise of the Machines* (Mostow, 2003).[134]

The development of remote warfare technologies causes a derealization of combat and the wars of the future may well be fought remotely from behind a computer screen. War has become a simulation because of its reliance on perceptual technologies. The perceptual characteristic of military engagements, a war of pictures and sounds replacing a war of objects, causes a derealization of combat (Virilio, 1989) And, as Baudrillard (1991: 41) argues, when war has become information, "it ceases to be a realistic war and becomes a virtual war." As training is a crucial element to prepare soldiers to function in a transformed army, digital simulations can be used to both prepare and to fight. The following paragraph will give an overview of the use of games and simulation within the four branches of the U.S. military. The

[134] For the U.S. military, with its only goal to spare the lives of their soldiers, post-human warfare is one of the main goals of its process of transformation. C.f. "Decades ago, Isaac Asimov posited three rules for robots: Do not hurt humans; obey humans unless that violates Rule 1; defend yourself unless that violates Rules 1 and 2. Mr. Angle was asked whether the Asimov rules still apply in the dawning age of robot soldiers. 'We are a long ways, he said, from creating a robot that knows what that means' (Weiner, 2005). Colin M. Angle, 37, is the chief executive and another co-founder of iRobot, a private company using robotic technologies for different applications.

U.S. Air Force and U.S. Navy, the U.S. Marine Corps and the U.S. Army all use different custom made as well as commercial games to train their personnel. An analysis of the current use of games and simulations within the U.S. Army puts *America's Army* in the military context where it originated.

3.3 The Use of Games and Simulations by the U.S. Marine Corps & the U.S. Army

As outlined in the opening remarks in the paragraph on the military-entertainment complex, the U.S. military has very diverse motives for using simulations and games. Zyda & Sheehan (1997) sketch three major efforts of the Department of Defense in Modelling and Simulation, being training, analysis and acquisition. Training is the most common and well-known motive for the usage of simulations. Paragraph 4.2 will deal more in depth with questions regarding the use of games and simulations for education and military training and *America's Army's* place within these fields. The use of Modelling & Simulation can also be put to effect for the evaluation and analysis of various defense actions ranging from logistical matters to analysing past battles and "to systematically analyze alternative force structures". A third motive for Defense Modelling & Simulation is "acquisition" – i.e. using virtual prototypes of defense products before actual entering into production. Chapter 4.3 reflects on these three motives and gives an in-depth analysis of the use of *America's Army* for training, analysis and acquisition.

Military simulations share many characteristics with their commercial counterparts and therefore providing an overview of the use of both commercial off the shelf games and customised training simulations within the U.S. military sheds light upon past and emerging trends thereby exemplifying the (successful) linking of entertainment and defense. The following overview is not exhaustive and is primarily meant as an illustration. The time in which particular military or commercial projects (and the respective games and simulations) were initiated is hard to pinpoint and many developments within the military and entertainment industries run in parallel. The following classification of the exertion of games as tools within the military focuses on two of the four branches of the U.S. military. This despite the fact that the Pentagon loves to emphasize the "joint" character of modern warfare - i.e. the combination of sea, land and air assets in one single battle (Atkinson, 2004), inter-service conflicts are still part of today's U.S. Military (c.f. Hersh, 2004). As the use of games in the U.S. Marine Corps resembles the use of games in the Army, this branch is included. For the sake of completeness an analysis the use of games and simulations within the U.S. Air Force and the U.S. Navy is to be found in Appendix D.

The Senior Leader Reference Handbook "How the Army runs" sheds light on the considerations of the U.S. Army for relying on virtual training:

> "Simulations. OPTEMPO (Operating Tempo) and ammunition costs are expected to continue to increase for the foreseeable future. This coupled with a decline in manoeuvre and range land will warrant the continued expansion and integration of simulations into the training base. Embedded or strap-on simulation systems in the future will provide the leaders and operators with realistic training within units by training on the actual equipment. Seamless simulation technologies can expand training horizons available beyond the confines of a unit" (U.S. Army War College, 2001: 363).

The U.S. Army uses games/simulations to train their personnel from all ranks, simulating combat from the technical level to the level of grand strategy. All commercial game genres seem to have found their own military training equivalent, from digital Flight Simulators to Massive Multiplayer Online Worlds where soldier are prepared for anti-terrorist warfare and familiarisation with foreign (e.g. Iraqi) culture (c.f. Miller, 2003).

The Army uses at least two commercial off-the-shelf FPS games, *Operation Flashpoint* (Bohemia Interactive, 2001) and *Delta Force 2* (Novalogic, 1999).[135] The Army uses *Delta Force 2* in conjunction with their Land Warrior training system, which is an integrated system combining advanced technology (radio, GPS receiver, helmet-mounted LCD display) and adding thermal and video sights and laser ranging to with regular rifles (Macedonia, 2004). The *Delta Force 2* game is used to familiarize soldiers with the Land Warrior system. However, the U.S. Marines, the smallest branch within the U.S. military, were the first to use a modified First Person Shooter for training. In 1995, USMC officer Scott Barnett from the Marine Corps Modelling and Simulation Management Office started the project to create *Marine Doom*; a modification for *DOOM II* (id Software, 1994). The futuristic weapons of *DOOM II* were changed into M16 and M249 automatic weapons and all the maps got a more realistic appearance, including barb-wire fences and marine logos (Kushner, 2003). A fireteam of four marines could fight against humanlike computer controlled enemies. The military modification focuses on training teamwork, according to a sergeant from the U.S. Marines Corps:

> "[Marine Doom] is about repetitive decision making. (…) We're trying to get these things ingrained by doing them over and over, with variations. A real firefight is not a good time to explore new ideas. (…) Kids who join the marines today grew up with TV, videogames, and computers. So we thought, how can we educate them, how can we engage them and make them want to learn? This is perfect" (Riddel, 1997).

This quote again underlines the tapping into newly acquired skill sets of those who grew up with videogames. By hooking into existing popular computer games (i.e. the *DOOM*-series), the Marines take advantage of the already acquainted computer skills of (future) soldiers. In the case of playing *Marine Doom*, computer literate recruits are able to focus more on the task at hand - i.e. communication - than trying to master the simulation, a risk of many (unknown) virtual training tools. Riddel (1997) signals several shortcomings on *Marine Doom* as a training

[135] Source: Department of Defense Game Developers' Community. 2004. Available : http://www.dodgamecommunity.com/modules.php?op=modload&name=News&file=index&catid=5&topic=&allstories=1. November 20, 2004.

tool, such as the relatively poor graphics capabilities for the games' virtual architecture and its limited network capabilities - only four Marines can fight within the same game session. According to the Marines, *Marine Doom* is an effective training tool, although no virtual environment can ever replace field training. *Marine Doom* was the first in a long range of customized FPS games to be used by the U.S. Marines Corps and U.S. Army. The USMC uses the commercial World War II FPS *Medal of Honour: Allied Assault* (2015 Inc, 2002) and the FPS *Soldier of Fortune* (Raven Software, 2000) at its Infantry Cognitive Skills Labs.

A more recent example of a custom FPS game used to prepare Marines for combat is *Close Combat : First to Fight*, published in early 2005 and developed by the commercial developer Destineer.[136] Where previous games in the *Close Combat*-series were historical Real Time Strategy games, the new games are designed with the aid and support of the United States Marine Corps, serving as both commercial games and training tools. *Close Combat : First to Fight* puts the player in the command of a four-man fireteam in a Middle Eastern setting. The first game in the *Close Combat*-series was *Close Combat* (Atomic Games, 1996), the first real-time-strategy game "to model the effect of morale and command in a serious way" (Cobb, 2004). *Close Combat: First to Fight* is defined by its developers as being realistic because of its (unique) simulation of the human will: "No military game can call itself authentic unless it considers the most simple, driving force of all actions in war: the human will" (Tamte, 2004a). How and in which way the simulation of such an abstract entity as the human will, is simulated in the game by Destineer has yet to be seen.[137] *Close Combat : Red Phoenix* also developed for the USMC by Atomic games, will be a real-time strategy game to be released in 2005.

The Marines use a custom created training simulation called *VBS1* (Bohemia Interactive & Coalescent Technologies Corporation, 2001) short for *Virtual Battlefield Systems One*. *VBS1* is based on the commercial tactical FPS game *Operation Flashpoint* (Bohemia Interactive, 2001), enabling Marines to plan, play and then review tactical operations and procedures. *VBS1* is based on game technology but offers additional After Action Review and data recording capabilities, essential for proper military training and analysis. The U.S. Secret Service members and U.S. Army Nation Guard personnel as well as defense communities all over the world use *Operation Flashpoint* and *VBS1* for training and analysis.[138] As national armies and branches within a single army have different doctrines and weapons, only FPS games offering a significant level of customisation can be employed as training tools. Barlow, Morrison and Easton (2002), members of an Australian defense community, modified *Operation Flashpoint* to

[136] See the official website for more information: http://www.firsttofight.com/.
[137] The operationalisation of the Human Will in gameplay is as follows: "The Human Will: The actions of every friendly and enemy character in First to Fight are governed by a psychology model. This allows players to employ real military tactics like flanking and combined arms" (Tamte, 2004a).
[138] "The *VBS1* system is also fielded by the Australian Defense Force and being evaluated for fielding in the United Kingdom, Israel, Singapore, the Czech Republic (…)." Source: Customers. 2005. Virtualbattlefieldsystems.com. Available: http://www.virtualbattlefieldsystems.com/military_customers.htm. March 1, 2005.

fulfil their needs, showing the versatile capabilities of current commercial entertainment technologies.

The use of *Operation Flashpoint* and the successful preliminary evaluation of the game as a potential infantry-training tool, prove that tactical FPS games are as 'realistic' as their developers claim them to be in their marketing lingo. With minor adjustments, the game became an "above average training aid for teamwork and sub-unit cohesion" (Barlow, Morrison and Easton: 6). *Operation Flashpoint* has an extensive mod community, developing a wide range of military themed modifications (e.g. weapon skins and combat scenarios), enabling gamers to virtually fight all over the world (Sotaama, 2005).[139] As paragraph 4.2 will show, *America's Army* allows to train all skills introduced by *Marine Doom* and shows many similarities with the capabilities of *VBS1*. This commercial game may eventually be replaced if the U.S. Marine Corps is willing to adopt a U.S. Army training tool.

The virtual training simulations used by the U.S. Army can be divided in three broad categories based on their origin. The Army uses commercial games (COTS) for training as well as custom made games to fit specific training needs, custom games can be developed by both dedicated military contractors (e.g. Mäk technologies) or commercial game developers (e.g. There Inc.). A third category is that of 'hybrid games', moving between defense and entertainment. The games in this category can be custom made Army simulations that got commercial spin-offs (e.g. *Full Spectrum Warrior* and *Close Combat: First to Fight*). *America's Army* can in this respect be regarded as the 'über-hybrid', encompassing the domains of Army training, testing (analysis) and marketing as well as being a successful entertainment game. A special paragraph is devoted to a special game in the hybrid category - *Full Spectrum Warrior*. This Army training tool gets around existing game genres and focuses on asymmetric warfare.

3.3.1 Game Study: Full Spectrum Warrior

A direct outcome of the ICT (the Institute of Creative Technology) and thus of the 1997 NRC report (Zyda and Sheehan, 1997), is the game *Full Spectrum Warrior* (Pandemic Studios, 2004).[140] Designed as military training tool, preparing recruits for military operations in urban terrain, *Full Spectrum Warrior* is the embodiment of the military-entertainment complex. As *America's Army* is a co-operation between the (academic mindset) of the MOVES Institute and the U.S. Army and thus has a firm grounding in existing modelling and simulation communities, *Full Spectrum Warrior* combines military (U.S. Army) with academic (the ICT and USC) expertise bound together with the knowledge of 'Hollywood' and the gaming industry

[139] For instance, there is a mod-group for *Operation Flashpoint* active in the Netherlands that developed a particular training ground, the "Leusderheide", consisting of dense forest and sand-dunes. This training ground is a familiar landmark only miles away from my home and now serves as a play ground for gamers to practice their (amateur) virtual tank skills.
[140] The game is published for both Windows PCs and the Microsoft Xbox. I played both versions; the Army version is Xbox only.

(publisher THQ and developer Pandemic Studios). The vision of ICT is "to develop the art and technology for synthetic experiences so compelling that participants will react as if they are real, feeling fully immersed physically, intellectually, and emotionally" (Macedonia & Rosenbloom, 2001: 88). The participants in this vision are U.S. Army soldiers and the technology is that of computer games. *Full Spectrum Warrior* is not sponsored or endorsed by the U.S. Army, as *America's Army* is.

The design rationale of the game has a familiar ring when memorizing the concept of Army Transformation: "ICT's programs are designed to train the individual soldier in a decentralized, networked model of warfare in which even the lowest-ranking officer can call in an air strike or a tank battalion" (Silberman, 2004). The game models the command and control of two U.S. Army fireteams (two teams of four soldiers) from a third person perspective. Similar to *America's Army*, there is an extensive training scenario to familiarize gamers with the Army's code of conduct, the members of the fireteams and the game controls. The gamer can move his two teams around in an urban environment set in the fictional country of Zekistan, where the squad is part of a larger peacekeeping force. In several 'realistic' scenarios, gamers have to fight their way through a city, fighting 'terrorists' (or 'Tango's'). The game differs from FPS games, such as *America's Army*, because of its third person perspective and the inability to command the individual soldiers directly. Gamers can issue orders to one of the fireteams, such as crossing a street, covering an objective or laying down suppressive fire, while the actions themselves are performed by the games' Artificial Intelligence. As a result, the game is less 'head-on', whereas in FPS games the gamer actively looks for enemies, the asymmetric character of warfare as modelled in *Full Spectrum Warrior*, results in slow paced and deliberate gameplay. The gameplay thus differs from mainstream wargames, for it centres primarily on using (military) tactics, while the actual act of directly firing a weapon (by a player) is non-existent. In a way the game resembles a game of chess, i.e. planning phase of the game is more important than the final attack itself.

Only days after the Xbox version of *Full Spectrum Warrior* was sold, gamers found a way to unlock the Army version, for some reason present on the game disc, with a cheat code. The Army version is 'more realistic', graphically inferior and has smarter opponents. Small gameplay elements set the Army version apart from the 'entertainment' version, such as smoke grenades that take longer to deploy. Special attention is paid to replicate actual Army tactics and procedures for small units, which should accurately reflect Army doctrine. The Army version allows setting up a custom map, e.g. tinkering with parameters such as the aggression of the enemy or the civilian population. The Army version also encompasses an After Action Review (AAR), an indispensable and common element in any army simulator. During an AAR, trainers can playback the game session and go through the various procedures with the trainees. It would be an interesting exercise to explore the differences between the two versions more in-depth.

The menu's and interfaces of both versions of the *Full Spectrum Warrior* have more the look and feel of a game than that of a military simulation and those who do not know, might never guess that this is a game actually used for army training. In contrast to *America's Army* (see chapter 2.5), the rationale of making *Full Spectrum Warrior* publicly available through a commercial developer has economic reasons not marketing reasons, since *Full Spectrum Warrior* was primarily envisioned as a training tool for U.S. Army soldiers. From a military perspective, the game has several advantages. In their spare time, soldiers can play the game and still train. When the Army is deployed overseas, soldiers bring the easily transportable Xbox with them (c.f. Wadhams, 2005) and play their favourite games in between battles.

Developer Pandemic Studios and publisher THQ received five million dollar from the U.S. Army for the development of *Full Spectrum Warrior* as well as the permission to sell a commercial spin-off of the game. Within half a year, nearly one million of the PC and Xbox version were sold, with the Playstation 2 release in the offing (Adair, 2005). The game did receive some criticism from within the U.S. military, regarding the fear of games as training tools in general and negative-training as a result (Thompson, 2004). In a similar way Adair reports that *Full Spectrum Warrior* is looked upon by the U.S. Army as "a mediocre training tool" because of Pandemic's focus on the commercial version.[141]

The military-entertainment industry is ever growing, a development as many argue, that will benefit both the U.S. military and the entertainment industry.[142] With initiatives like *Full Spectrum Warrior*, *America's Army* and *Close Combat: First to Fight*, military modelling and simulation may regain a technological lead in the area of combat simulation and thus their hegemony in the area of technological innovation.[143] As the example of *Full Spectrum Warrior* shows, simulations can move outside their training environment and into popular culture and the entertainment industry. These synergies offer, from the perspective of the U.S. military, advantages from economic, technological and socio-cultural perspectives. On the other hand, they drastically change the way a post-Fordist society makes sense of war. Games used and (partially) developed by the U.S. military gain status over 'normal' games as being 'more realistic', ignoring the fact that military simulations have very specific training objective and goals that go beyond entertainment. Thus, contrary to the marketing discourse of games such as *Full Spectrum Warrior*, these games/simulations can never be seen the providers of authentic contemporary combat experiences.

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141 Adair (2005) also cites a U.S. Army trainer: "Paquette's complaints were echoed by Lt. Col. Riley, who tested Full Spectrum Warrior at the infantry school at Fort Benning. He said his soldiers were disappointed by the game's lack of realism and did not learn the intended lessons."

142 While the Xbox version and later the PC version of *Full Spectrum Warrior* just hit the shelves, another high-profile simulation project for the Army has been announced by Quicksilver Software Inc. The development of this game/simulation has begun as a training tool, just as *Full Spectrum Warrior*, and will be adapted for the consumer market. The game, *War Dogs* will be "the first game where players can fully control the firepower of up to 30 soldiers" and is marketed as a "genre-breaking platoon-based tactical action game." *War Dogs* also an outcome of the ICT project and has been in development for over three years. Source: QSI_INTRO. 2004. Available: http://www.quicksilver.com/. October 13, 2004.

143 The military-entertainment complex is a challenge to the assumed hegemony of military organisations in the area of technological innovations according to Richard, quoted in Crogan (2003a: 278-79). Notice that a technological lead only is needed in certain areas of the modelling and simulation of combat.

As war is an inherently paradoxical event, the representation and simulation of war is not only reductive, but it does not escape the logic it models. The logic of games in the FPS genre seems to conflict with the logic of war, resulting in interesting paradoxes. Games in the FPS genre are able to train only a particular set of military skills (e.g. squad-communication) and the example of *Full Spectrum Warrior* illustrates that developers of military simulations are eager to expand the training capabilities of their tools. These new tools are created as defense/entertainment hybrids, finding their own place in popular culture. In paragraph 3.5, I will discuss the perceptional merger of military and entertainment technologies as well as the constant anticipation of war pursued by both development communities.

3.4 The logic of War (and Peace)

War is full of paradoxes. For many, war is associated with pain and sorrow, death and destruction. For others it is a force that gives meaning to their lives, fuelled by the myths surrounding all wars, myths built on discourses of heroism, freedom & liberty and good versus evil (Hedges, 2002). Hall (2003) acknowledges the contradictionary logic of war where the act of killing is naturalised as an act of institutionalised violence by a nation-state, and so becomes legitimate. War can bring peace and freedom to those who need it the most or bring death to those who do not deserve it and it is only in the realm of strategy, that such paradoxical propositions are accepted as valid.[144] As military historian Edward N. Luttwak (2001) makes clear, war is a highly contradictory activity, only in a war can something 'bad' be 'good', to defend something one must attack and if you want 'A' (e.g. peace) strive (or prepare) for 'B' (e.g. war). The paradoxical nature of war is reflected in acts of play, the representations and simulations of something so horrible and frightful is a source of joy and happiness for any other.

Today's mass media seem to have incorporated militarised themes in every way possible. Television newscasts show embedded reports live from the battlefield, Hollywood movies use every special effect at their disposal to bring an even more spectacular view of war while various forms of digital interactive entertainment facilitate hyperrealistic immersive experiences (paradoxically) disguised as play. As a result, war has become increasingly delightful to those who have no experience of it. In what Hall dubs as the "logic of inversion", the paradoxical logic of war extends into the living room:

> "Within this logic, two seemingly contradictory instances can be simultaneously true, and truth and falsehood can become disconcertingly interchangeable depending on context and audience. War can exist in our living rooms and yet in a land so far from us that we cannot imagine being connected to its effects. Life can be sacred and valued

[144] Luttwak (2001: 2) defines strategy as "the conduct and consequences of human relations in the context of actual or possible armed conflict".

> and yet destroyed in great numbers with no negative moral consequences. The pain of embodying such violent contradictions can instill numbness that is excruciating" (Hall, 2003: 32).

The commodification of war is what constitutes the military-entertainment complex and as it name suggests, the First Person Shooter genre is the virtual equivalent of a division of armoured tanks spearheading the attack in a worldwide blitzkrieg spreading military culture. The en masse appropriation of military simulations, but also the representation of the cruelties of war on television and computer screens, show that there is a dynamic relationship between various forms of (military) entertainment and the logic and status of war. Philosophers as Virilio and Baudrillard wrote extensively about the transformation of war and peace and the role of the military-entertainment complex in this conversion. Patrick Crogan expanded the ideas of Virilio into the realm of computer games in a series of publications, making them useful to link the logic of (virtual) war to cyber culture. Crogan (2003b: 2) uses the following syllogism to explain his approach to games:

> "1. Human culture and civilization are always already indissociable from the military and the 'business' of war.
> 2. Computer games are part of human culture, technology and civilization
> 3. Therefore, computer games are a valuable means of interrogating the relation between war and peacetime culture, technology and civilization."

In this thesis my aim is to do exactly this.

An insightful look at the relation between war and (mass) media and the osmosis between industrialised warfare and cinema is given by the French cultural theorist Paul Virilio (1998). He asserts that the classical radio signal is replaced by the video signal and in the end, virtual simulations will replace the war of objects - i.e. projectiles and missiles (ibid: 2). Military logistics, anticipating and engaging in war, are central to the understanding of warfare in the post World War Two-era. It is the constant anticipation of war in our post-Fordist society that led to the "pure-war tendency".[145] The thriving military-entertainment complex only fuels the pure war tendency and facilitates a constant anticipation and even engagement in war by gamers and soldiers alike.

The world is in a constant state of global war, hundred of thousands of 'soldiers' are every moment of the day engaged in brief digital encounters on simulated battlefields. This way of virtual warfare not only encompasses large groups of adolescents, but also members of various military forces using technologically advanced digital games. The ontological character (i.e. the ergodic temporality) of computer games acknowledges the pure war logic, for they "enact the anticipatory function of computer simulations" (Crogan, 2003a: 291). Playing a game/simulation is always a form of training or mastering a games' simulation model (c.f.

[145] Crogan defines the concept of the "pure-war tendency" as "a mutated form of war that exists in a 'pure' state, permanent preparation for and anticipation of actual warfare" (2003a: 277).

Friedman, 1995). The interaction between military and perceptional technologies has resulted in a derealization of military engagements and coincides with the pure war tendency. As military and commercial simulation technologies merge, the distinction between soldiers and gamers anticipating a virtual war is no more.

Virilio remarks that "despite the massive accumulation of documents, publicity and films, young army recruits still say in response to questions that they cannot imagine what a war would be like" (1989: 47). The lack of imagination tarnishes because of the derealization of modern warfare, the perceptual character of modern war and the expansion of military simulations. The Gulf War took place, as Virilio argues: "In the artifice of television, much more than in the reality of the field of battle" (Der Derian, 1997). As "we have pressing need for simulation, even that of war", media have a drug-function (Baudrillard, 1991:75) and FPS games are the simulations that can (safely) satisfy one's hunger for war.[146] Primarily males are attracted by violent entertainment and it appeals to them mostly in groups (Goldstein, 1998). When war has become entertainment, and this is most apparent in contemporary game culture, then First Person Shooter culture, a male group-activity *par excellence*, takes the pure war tendency to a new level, complementing or taking over the role of military themed movies and war coverage on television. While the first Gulf War took place on television and was represented, the second Gulf War extended this representation and took place in parallel (i.e. in virtual reality) and was simulated and experienced over and over again (Nieborg, 2004c). In the following paragraphs, I will take a closer look at interaction between the representation of war in movies and television and the representation and simulation of war in games.

When war has become information, as the French philosopher Jean Baudrillard (1991) explains in his essay The Gulf War did not take place, it stops being a real conflict and becomes a virtual war. War has become a simulacrum, a simulation of a simulation, a "soft war". While Baudrillard and Virilio both acknowledge the pure war logic, Baudrillard argued that the first Gulf War did not take place while Virilio stated that it was a world war in miniature, a fractal war: at once local and global (Der Derian, 1997). I will argue not only that the Gulf War did take place, but that it never stopped – the Gulf War still takes place, today, online.

The process of Army transformation (see chapter 3.2) seems to validate the pure war tendency as it constantly anticipates future warfare. The U.S., striving to remain a super-power, acknowledges the paradoxical logic of strategy – i.e. to defend is to prepare and to attack. As a result, soldiers are in constant preparation for a future war with "next-gen" technology. The technological dimension of U.S. military transformation emphasises the removal of human agents from the battlefield and further mediates and subsequently derealizes combat.

[146] As Hall (2003) and Baudrillard (1991) warn, the price of the 'drug function' of war is a numbing effect. "[…] the current U.S. entertainment climate is saturated with simulated violence that causes numbness, amnesia and trauma in order to suggest why I feel that play and witnessing have progressive potential" (Hall, 2003: 26).

3.4.1 First Person Paradoxes

"Winning is keeping the target in constant sight" according to Virilio (1989: 2) and this perceptual characteristic of modern warfare is emulated in the (simplistic) combat simulations focusing on interpersonal engagements. The battlefield has always been a field of perception where seeing the enemy equalled the enemy's death. Those who played FPS games will agree that it boils down to 'kill or be killed', seeing an adversary in a virtual firefight will always have a mortal outcome. Only a small number of gamers are permitted the luxury of retreating or fleeing the chaotic and confined worlds of the FPS gamespace. In today's digital wargames, the process of seeing has also lost its innocence. The limited line of sight in a FPS game is directly related to the act of killing.

The "militarized masculinity" of FPS games, exhibits a strong gender (i.e. masculine) bias where violent themes are ubiquitous (Hall, 2003; Kline et al., 2004: 246-68). Almost every war fought over the last hundred years is simulated in numerous commercial and user-created games. In the user-created modifications of the World War Two themed *Battlefield 1942* (Digital Illusions CE, 2002) almost every significant conflict involving a Western country has its own user-created modification, from the Korean war to the Falklands war to the conflict in Somalia (Nieborg, 2005).[147] If the history of the FPS genre shows anything, it is the constant need for technological progress that advances the games' technology (Klevjer, 2003; Kline et al., 2004). Gamers demand 'realistic' games serving as authentic audiovisual simulations where the main goal is to offer immersive virtual worlds where everything serves the ultimate goal of experiencing 'real war'. FPS games offer wider arenas (i.e. battlefields) to fight in, become less linear, and allow more interaction with the gamespace. More gamers are simultaneously online than ever before in almost photorealistic worlds where gravity and bullet trajectories are modelled in real-time. With the advent of the first Massive Multiplayer Online FPS games, e.g. *PlanetSide* (Verant Interactive, 2003), virtual war became persistent.

In the simulations of war themed FPS games, one paradox of war (bringing 'freedom' as well as sorrow) is omnipresent. On a similar note, the contradictionary nature of war simulated by games in the FPS genre is noticed by Klevjer (2003), as representing a "celebration of, as well as an escape from, the technocratic nature of modern, complex societies". Wargames are fun as well as frustrating and, especially in the tactical FPS genre, there is a constant negotiation between the goal to entertain and offering an authentic experience. The complex and paradoxical nature of war is modelled in a less complex form of entertainment. Killing ones opponent is 'the name of the game', the hegemonic consensus of any multi-player FPS round, is to win (bringing 'pleasure') and thus to 'inactivate' an opponent (bringing 'pain'). If you die, you simply wait some minutes before respawning and coming back to life. A messy and deadly war is at the same time a clean war deprived from any reflection. In its pure war tendency,

[147] Many of these mods never got beyond their alpha status (i.e. released a significant and playable mod). See for a complete list: List of Battlefield 1942 mods - Wikipedia, the free encyclopedia. 2005. Wikipedia. Available: http://en.wikipedia.org/wiki/List_of_Battlefield_1942_mods. February 24, 2005.

this paradoxical element of simulated war anticipates post-human warfare – i.e. war with a restart button.

FPS games are explicitly marketed as simulations, thereby (un)consciously stressing the objective nature of digital simulations creating an aura of objectivity (Crawford, 2003). As a result of the reductive character of simulations, another paradox is present in the games. Although the genre seems to coincide with the soft war tendency described by Baudrillard, FPS games primary focus is on the spoils of war, i.e. the carnivalesque simulation of death accentuating the corporeal nature of combat combining blood, gore and dismemberment (Kingsepp, 2003a). One can only interact within the confined environment of a multiplayer map with 'the other'. The absence of civilians and politics allows (or even urges) gamers to shoot anything that moves. Gamers even have a name for such an action: "Ramboing". Gamers in *America's Army* fight head-to-head, in close combat with the enemy. There is no possible solution to the war fought online in the maps of *America's Army*, no peace offerings are available, no armistice; in a FPS game one has to look for an enemy and kill them personally. The trend of the derealization of combat and the perceptional character of a distance war, and the simulation of technological superiority of recent U.S. military operations, are absent in the closer-quarters-combat session in *America's Army*. At the same time, the fight in *America's Army* is ironically fair and balanced. Multiplayer online games can only function properly as both sides are completely equal in strength.[148] Weapons, gear and ammunition are carefully balanced and war in *America's Army* is in perfect symmetry. There are no artillery strikes, no Tomahawk missiles, no reinforcements, and no cavalry, there are only boots on the ground. The one thing that can destabilise this equilibrium is to cheat.

In order to simulate the technological superiority (of "combat overmatch capabilities") of the U.S. Army, the development team of *America's Army* announced the upcoming expansion called '*America's Army: Special Forces (Overmatch)*.[149] This future version is in accordance with recent lessons learned from the War on Terror, where "21st century overmatching power is more important than 'overwhelming force' " (Franks & Rumsfeld, 2003). In this future version, gamers will cooperate (co-op) as a squad of outnumbered Special Forces soldiers who wage war against an artificially intelligent-operated enemy, simulating past military operations in the Iraqi and Afghani theatres. The version will also include artillery, vehicles and (fire-and-forget) missiles. This release will be a blatant break with the hegemonic multi-player FPS conventions, demonstrating that the unbalanced nature of modern war can only be simulated by a removing the human agent from the virtual battlefield by using an AI-operated enemy.

[148] One can say that in a way combat in *America's Army* is skill-based. The element of chance can, as in real warfare, be significantly reduced through (extensive) training and ingame cooperation.
[149] Which will probably be version 2.5 or 2.6, scheduled for release somewhere in the near future.

This example shows that as war transforms so do games and military simulations. The logic of war finds its way into game culture and the reductive combat simulation gives a completely new twist to the contradictions of war. In the next paragraph, I will take a closer look at the representation and simulation of modern war in computer games. Computer games with a contemporary war theme have taken on the properties of the pure war tendency, soft war, info war and virtuous war all within in one seamless simulation. Uricchio aptly summarizes the merge of perception and action: "Curiously, indeed almost perversely, the closer we come to the merge of perception and action, the more the systems and discourses that we employ look like the games we play. But in an era where Hollywood films inspire the largest defense expenditures to date, and where videogames anticipate our most sophisticated weapon systems, perhaps this should come as no great surprise" (1999: 168).

3.5 The Representation & Simulation of Modern War in Games

> "Nintendo and Sega consoles needed ammunition for their multibillion-dollar cartridge war, and CD-ROM drives were just breaking into mainstream use. Operation Desert Storm was just the ticket. It was the greatest thing to happen to the interactive entertainment industry since Sonic the Hedgehog. Everyone had seen missile footage through laser-guided sights on television. Now they could play the war on their very own home computer" (Herz, 1997:207).

As outlined in the introduction of this chapter, the U.S. Military and (the development of) computer games have a long shared history. Many of the early digital games are not only in some way connected to the military industrial complex, but have some sort of militaristic theme at the basis of their simulation model. One of the first digital games, the abstract space simulation game *Spacewar* (Russell, 1962), was about the elimination of an opponent's spaceship while constantly fighting the gravity of the sun in the middle of the screen. Herz (1997) lets her 'natural history of videogames' begin with Russell's invention within the academic setting of the Massachusetts Institute of Technology (MIT). The academic mindset of the MIT students at the time made further development and the free distribution of Spacewar possible (Kent, 2001). There is debate whether the first digital game is developed within a well-known university or within the vast military industrial complex of the 1950's. Steven Poole claims in his book *Trigger Happy: the Inner Life of Video Games* (2000: 29-31) that the first digital game has been developed by the American computer scientist W.A. Higinbotham, employed at the military research facility for nuclear technology. Kent (2001: 18) agrees that although the invention of Higinbotham of an interactive tennis game, "appears to be the first interactive game, it is an isolated instance." Kent does not explain why isolated incidents in history have no historical value. The first home videogame console, the Magnavox Odyssey, also has its roots in the military. The Odyssey's come-about was made possible by Ralph Bear, an engineer at the military contractor Sanders Associates (Herz, 1997: 33) and seen by Kent (2001) as one of the 'forgotten fathers' in the history of videogames. Coming from different

communities Russell, a student, and Baer, an engineer, had different views on copyrights and intellectual property. It was the view of Russell that would prevail.

The computer game industry has build up a considerable amount of expertise regarding military themes and content in all sorts of games, ranging from real time strategy to vehicle simulations to FPS games. This makes it worthwhile to look at the various games with a contemporary military theme. Paragraph 2.2 on the history of the first FPS games shows that many, if not all, early shooters had overtly militaristic themes and created discourses that were borrowed from concepts of war, armed-conflicts, death and destruction. From early arcade games to the sophisticated persistent worlds of Massive Multiplayer Online Games, war is a popular and common theme in any game genre on any platform. The Cold War fears, represented and simulated in early games as *Spacewar*, *Space Invaders* and *Missile Command* have transformed into games referring to a new kind of fear – i.e. the more ubiquitous and anonymous fear of 'terrorists'.

Games, more so than movies and even television series, explicitly use themes of and references to recent military conflicts, such as the first and second Gulf War, Operation "Restore Hope" in Somalia and the ongoing War on Terror.[150] The War on Terror, fought by Special Forces in what is called a-symmetrical warfare, is for a great deal implicitly represented in games such as *Counter-Strike* and *America's Army*. The hybrid training-entertainment game *Full Spectrum Warrior*, does not explicitly mention a specific real-world connection with a specific operation of theatre of war, but early in the development of the game, the theatre of operations did change from Eastern Europe to the Middle-East. All these military themed shooters use an aesthetic that leaves not much room for speculation about the geography – i.e. the Middle-East - and the kind of war gamers fighting in – a war on terror(ists). The implicit reference allows gamers to deconstruct, reread and re-appropriate games with a counterterrorism theme to fit with their notions of contemporary war (as shown on a TV near you!). Some games, most often low-budget productions, use a more opportunistic approach and explicitly link their game to an event or theme related to wars in Iraq and Afghanistan with Al-Qaeda and evil-doer Osama bin Laden. A short overview of these games and the scope and depth of the representation and simulations of the before mentioned conflicts follows. The games discussed hereafter are examples of a wide-range of electronic entertainment with a contemporary military theme and action oriented gameplay, such as first and third person shooters. The Real Time Strategy genre is left out of the picture but is a rich site as well to explore the intertextual relation of modern war and electronic entertainment.

In the same month when the U.S. congress passed a resolution which explicitly authorized President Bush to use the U.S. military as he deemed appropriate and eleven years

[150] The movie *Black Hawk Down* (Scott, 2001) is an exception to the rule. Almost two years after the start of the second Gulf War, this may change. Soranio and Oldenburg (2005) report that soaps integrate military themes (Iraq related stories) into their schedule and a drama series about an Army unit serving in Iraq is created, while movies such as *No True Glory: The Battle for Fallujah* (West, 2006) and *Jarhead* (Mendes, 2005) are currently in production.

after the end of the first Gulf War, the third person shooter *Conflict Desert Storm* (Pivotal Games, 2002) was published for the PC, the Playstation 2, the GameCube and the Xbox. In this game, players can command a U.S. or UK Special Forces fireteam, consisting of four soldiers with their own specialties. The goal of the game is to fulfil a wide range of missions such as destroying SCUD missiles and eliminating Iraqi leaders. The gaming press wrote mediocre reviews about the game, lacking good graphics and having control issues.[151] The following remark in a review of the Nintendo GameCube version of the game is revealing in many respects:

> "But the Iraqis in this parallel universe seem to have transmitters implanted in their heads, so preventing alarms ringing can be excruciatingly difficult. Of course, when one goes you're likely to be overrun by angry Muslims, so play it slow and safe" (Fischer, 2003).

All enemies in the game are uniformed Iraqi soldiers and the connotation of the reviewer with "angry Muslims" is clearly based on stereotypes. Racist stereotypes of Arabs as turban wearing bearded fanatics and confusing Arabs with Muslims, (and vice versa) are pervasive in U.S. movies and television discourse (Shaheen, 2000). This "vilification" and dehumanisation of Arabs and Muslims seems to be ingrained in U.S. popular culture and apparently games cannot escape this flaw. Gamers seemed to like *Conflict: Desert Storm* and the game was a financial success. I would argue that the Gulf War theme heavily contributed to this, also because the game did not have a major marketing campaign. A year later the game got its sequel with *Conflict Desert Storm II – Back to Baghdad* (Pivotal Games, 2003). The game was developed during the start of the second Gulf War and was published in October 2003.

During and after the 'official ending' of the second Gulf War, the market was flooded with simplistic low-budget PC-titles such as the third person tank simulation game *Desert Thunder* (Brainbox Games, 2003), the third-person action game *Airstrike II: Gulf Thunder* (DivoGames, 2005) and the first person driving/flying game *Terrorist Takedown* (CITY Interactive, 2004). The shooting game *America's 10 Most Wanted: War on Terror*, also known in the *United States as: Fugitive Hunter: War on Terror* (Encore, 2003), makes a game out of the top-10 most wanted terrorists. However, this is not as over the top as one would think, one only has to remember the infamous deck of cards U.S. soldiers got after the start of the second Gulf War. This deck consisted of 52 high-ranking Iraqi's, where Saddam Hussein was the Ace of Spades. *America's 10 Most Wanted : War on Terror* is a FPS game set in Afghanistan, Utah, Paris, and Miami and lets a player hunt for Osama Bin Laden. The game combines first person combat sequences with video clips and third-persons hand-to-hand mini games. Here again a

[151] The website gamerankings.com gives an insightful overview of reviews of the game for all platforms. The game got a 73 percent overall rating, based on twelve media outlets. Gamers gave the game a 6.2 out of 10 (n = 41), which is also relatively low. See: Conflict Desert Storm Reviews. 2004. Gamerankings.com. Available: http://www.gamerankings.com/htmlpages4/473410.asp. November 20, 2004.

reviewer implicitly refers to dichotomies of good versus evil, 'someone' versus turban-wearing terrorists (c.f. Kellner, 2003b) with the ultimate goal "to bring Bin Laden to justice":

> "With low-budget quality in every different aspect of the game, it's only the appeal of going after Osama bin Laden that drives this title. With bin Laden out of the news ever since the Iraqi war started, even this distinction has faded a bit. I could only recommend it if someone were to have a deep down urge to kill a lot of people wearing turbans" (Lewis, 2003).

Ironic is the notion of the newsworthiness of the war theme in this review, the war in Afghanistan seems already old while the war in Iraq is new and hot! The stereotypical Arab fighter, wearing a turban and a beard, is present in all games mentioned here. The early versions of *America's Army* displayed Middle East opposing forces in its desert maps in a similar way but later versions showed a more neutral (i.e. men wearing black masks) representation of the enemy.[152]

As with all games mentioned previously, the 'action-game' *Desert Fury* (Anarchy Enterprises, 2003: PC) acknowledges the post 9/11 'with us or against us'-logic and the Bush administration discourse.[153] The marketing and praise for the game on its official website speaks for itself: "You've been recruited to lead the 'War on Terror'. In over 80 action packed missions you'll have to fight the terrorist army in your quest to protect the world! The game features "dozens of 'Good Guy' units including: Stealth fighters, tanks, rocket launchers and Delta Force soldiers."[154] This discourse acknowledges the claim made by Hall in her study on the role of combat spectacle in U.S. popular culture. *Desert Fury*, in the same way as Hollywood combat films, "[educate] a generation not only to recognize themselves as leaders of the free world, but also training them visually, symbolically, ideologically and physically to stand, walk, talk and hold the posture of leadership" (2003: 18). These simple action games, with less complex gameplay than tactical FPS games as *America's Army*, primarily simulate combat spectacle and thereby reinforce the "imperial U.S. identity". The enemies you are up against are the inevitable terrorists using scud missiles, MIG fighter planes and, as terrorists so often employ, "suicidal paratroopers". The link between the famous Scud missile, the infamous weapon used during the first Gulf war and Iraq may seem clear here, although terrorist groups owning sophisticated MIG fighter jets and transport plains to deploy paratroopers are just as scarce as the amount of found weapons of mass destruction after the second U.S. invasion of Iraq. The developers apparently preferred a familiar theme to historical accuracy. The

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[152] The critical review of *America's Army* by Hodes and Ruby-Sachs (2002) is telling in this respect: "As quiet stretches were punctuated by bursts of gunfire, conversation went back and forth between our teammates, all participating in the same virtual battle from their homes, offices or dorm rooms. "Take that, you dirty Arabs," one player radioed after a successful strike. This sparked a debate among fellow players regarding whether Afghans are actually Arab. The squadron eventually concluded that it doesn't really matter, since "ragheads are ragheads."

[153] This logic and discourse are discussed by Kellner (2003b) and Compton (2004).

[154] The game can be bought online only. See: Desert Fury. 2004. Anarchy Entertainment. Available: http://www.anarchyent.com/desertfury/index.asp. October 13, 2004.

terrorists in *Desert Fury* do have Weapons of Mass Destruction: "Some enemies will drop cluster bombs or poison gas!"[155] The game manual of *Desert Fury* is short and ends with a last tip:

> "Good Guys vs Bad Guys. Good units are colored with green stripes. Enemies units are colored with red stripes. Simple rule of thumb: if it's red, shoot it!"[156]

Desert Fury makes an explicit link with the good-guy versus bad-guy ideology of so many Hollywood movies. In the State of the Union at September 20 2001, U.S. president George W. Bush laid out the fundamentals of what would be known as the Bush-doctrine: "Every nation, in every region, now has a decision to make. Either you are with us, or you are with the terrorists."[157] The simulation of this dichotomy is present in almost every war game with a contemporary military theme. There is only a binary choice in many of the games discussed here, Coalition versus Iraqi Forces, U.S. Forces versus Arab/Muslim terrorists, good versus evil. Herz (1997: 87) explains: "We all crave the perfect enemy; it is a "deeply satisfying" concept absolving the player of any sense of guilt that might accompany the exhilarating catharsis of violence."[158] The logic of these action games but also of the majority of FPS games is simple; if you see anything moving and it is not a teammate, kill it!

3.5.1 First Person Simplicity

There are no other parties than the two engaged in fighting a mortal struggle. The level of grand strategy, where complex power relations and diplomacy become more visible, are absent in the majority of bestselling-shooter games. As Southern (2001) argues: "[Military] games simplify what in reality are complex, cross-cultural power relations into 'good and evil'". To 'play' a civilian, a politician or a female is impossible, although 2.0 version of *America's Army* allows gamers to play as Indigenous Forces fighting alongside Americans.[159] Gamers take on the role of a faceless soldier, a soldier who is urged not to reason why, but to do and die. The justification to go to war and to play a mission is not up to gamers, they just want to have a good time. Historical accuracy is not the bottom line, entertainment and fun is. There are few examples of games that challenge the good versus evil dichotomy and emphasize the spoils of war. Interesting in this respect is Newsgaming's simulation game *September 12th*. The introduction states that the Flash-application is not a game but a simulation, using a simple model to explore some aspects of the war on terror.[160] The simulation has no end, 'gamers'

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155 According to the online manual. Source: Desert Fury. 2004. Anarchy Entertainment. Available: http://www.anarchyent.com/desertfury/manual.asp. October 13, 2004.
156 Ibid.
157 See for a full transcript of the State of the Union address: President Declares Freedom at War with Fear. 2004. Whitehouse.gov. Available: http://www.whitehouse.gov/news/releases/2001/09/20010920-8.html. October 13, 2004.
158 Also quoted in Southern (2001).
159 Then again, one can criticise this concept by arguing that the game makes it looks like countries are always willing to fight alongside U.S. troops.
160 Source: Newsgaming .com -- September 12th. 2004. Newsgaming.com. Available: http://www.newsgaming.com/games/index12.htm. October 13, 2004.

can bomb a middle-east town with rockets and by doing so, turning harmless bystanders into terrorists by killing their beloved.

The FPS genre and the tactical FPS subgenre in particular, include many games referring in various degrees to some aspects of modern war – i.e. the realistic portrayal of close combat modern (counter-)terrorist warfare and the display of modern military equipment. *The Delta Force*-series, published by Novalogic, the *Tom Clancy's Rainbow Six* series (Red Storm Entertainment), as well as *Operation Flashpoint: Cold War Crisis* (Bohemia Interactive, 2001) and *Söldner: Secret Wars* (Wings Simulations GmbH, 2004) all feature contemporary (para)militaristic themes. The developers of *Söldner: Secret Wars* market their game with the feature "realistic weapon systems from the research laboratories of the weapon industry."[161] Many FPS games mentioned here are to a certain degree related with the (U.S.) military, varying from the relying on military to model weaponry, to the use of military experts aiding game development to functioning as military training or marketing tools. A considerable amount of the before mentioned games have a firm grounding in the military-entertainment complex and are online played by hundred of thousands of gamers all over the world at every moment of the day.

American and European game developers are not the only ones developing games simulating war in the Middle-East theatre of operations. The FPS game *Under Ash* (Supersoft, 2001) is developed in Syria and allows Arabic-speaking gamers to fight against Israel during the first *initifada* – the Palestinian uprising from 1998 to 1992. Afkar Media plans to publish *Under Siege*, the sequel to *Underash*, in 2005. This sequel will "cover the history between 1994 and 2003 when the honeymoon between Arabs and Israelis was ended. It reflects the pulse of Arabic street against the Israeli genocide by focusing on events that lead to the explosion of this anger [during the] second *intifada* of 2000" (Kasmiya, 2004). Radwan Kasmiya, executive manager of Damascus-based Afkar Media argues that the games are there to provide "a new kind of digital dignity":

> "Under Siege," he explains, should not be seen as an answer to top-selling games like "Delta Force" or "America's Army," which often feature stereotypical images of Arabs as enemy combatants. "This is not a game about killing … We are telling a story," he says" (Battah, 2004).

The FPS *Special Force* (2003) developed by the Hizbullah Central Internet Bureau has a more political goal, the developer of *Under Ash* labels *Special Force* interestingly enough as "political propaganda" (Kasmiya, 2004). The mission in *Special Force* is to eliminate Israeli Prime Minister Sharon while players learn: "The history of what really happened in the south of Lebanon … and deliver a message that man should defend his country and land against the usurpers and occupiers" (Wiltenburg, 2003). The article of Mary Wiltenburg of the Christian

[161] See: Official SÖLDNER - Secret Wars Gamesite. 2004. Available: http://soldner.jowood.com/?RubrikIdentifier=718&lang=en. 29 December 2004.

Science Monitor is somewhat provocative when she poses the question: "What do a white supremacist group, an Islamic resistance group, and a superpower army have in common (besides their guns)?" The answer is, of course, computer games. The Neo-Nazigame *Ethnic Cleansing* (National Alliance, 2002), *Special Force* and *America's Army* are all labelled as "political advergames".

FPS games are known for their lack of a clear and comprehensive narrative. The primary function of FPS and 3D-action games is the simulation of combat spectacle and gamers construct a different narrative each time they play.[162] The first person paradoxes, the simplistic representation of the enemy and the unavoidable good-versus-bad dichotomy let these games construct a distorted view on war. In the following game study of the FPS modification *Desert Combat*, this problematic will be explored more in depth. As a simulation of contemporary combat, *Desert Combat* has a theme directly related to the last Gulf Wars, all the concepts I have addressed in this chapter apply to *Desert Combat*. The game is grounded in the military-entertainment complex, is used as a military training tool, and by simulating war it does not escape the logic of war and the subsequent first person paradoxes. The study of *Desert Combat*, which has an active fan community developing war themed texts, raises questions about the construction of a military discourse and paragraph 3.6 will reflect on the mediated character of war and its implications.

3.5.2 Game Study: Desert Combat

The user-created modification *Desert Combat* (Trauma Studios, 2003) is an example of a First Person Shooter PC-game with an explicit contemporary military theme and an active community of enthusiasts. *Desert Combat* is a modification of the popular World War Two themed FPS game *Battlefield 1942* (Digital Illusions CE, 2002) published by Electronic Arts.[163] Battlefield 1942 was one of the first commercially successful (military-themed) FPS games combining accessible arcade style gameplay with vehicular combat.[164] The team of Digital Illusions CE in combination with members from the mod-team of Trauma Studios, are currently working on *Battlefield 2*, as well as a console version of the game – i.e. *Battlefield: Modern Combat* for the Playstation 2 and the Xbox, all to be published in 2005. *Desert Combat* is a so-called total conversion modification of *Battlefield 1942* focusing on modern day combat, which

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[162] As argued by Frasca (2001b): "Games are ontologically different from narrative because they are not just based on representation. Instead, they rely on simulation, which is a way of portraying reality that essentially differs from narrative." He goes on to say that: "(…) for an external observer, the outcome of a simulation is a narration. But the simulation itself is something bigger than narrative."

[163] The Battlefield franchise consists of *Battlefield 1942* (Digital Illusions CE, 2002) and its two expansion packs *Battlefield 1942: Secret Weapons of World War II* (Digital Illusions CE, 2003), *Battlefield 1942: The Road to Rome* (Digital Illusions CE, 2003) and the sequel *Battlefield Vietnam* (Digital Illusions CE, 2004). The Battlefield franchise is, based on the real-time statistics of http://www.xfire.com and http://archive.gamespy.com/stats/, a permanent member of the top-5 of most played online FPS games, rivalling with *Counter-Strike* (Source), *Call of Duty*, *America's Army* and *Wolfenstein: Enemy Territory*.

[164] In large maps, players can fly planes, drive tanks and jeeps or even steer aircraft carriers in the midst of World War Two. The World War Two instalments of the *Battlefield*-series sold over three million units according to publisher Electronic Arts. See: PC Games E3 2004 Battlefield 2. 2004. IGN.com. Available: http://pc.ign.com/articles/514/514523p1.html. November 30, 2004.

results in fast-paced action sequences.[165] According to the developers, the mod is centred on present-day conflicts in the Middle East from the Gulf War, Somalia, and Afghanistan to possible future conflicts.[166] The theme and gameplay changes are elements that may well have contributed to the mod's popularity.[167] The World War Two U.S. M4 Sherman tanks are replaced by Abrams M1A1 main battle tanks and swift M2A4 Bradley fighting vehicles. Supersonic jets outfitted with missiles replace propeller aircrafts and of course, the AH64 'Apache' Attack Helicopter, is available for flight in one of the desert-maps. The German weaponry has been replaced by modern Iraqi equipment, such as the T-72 battle tank and the SCUD launcher.

The analysis of the *Battlefield 1942* 'Market Garden' map by Koehorst (2004) makes clear that the relation in *Battlefield 1942* with the actual events during World War Two are much more trivial than the marketing slogans of the game suggests.[168] The developers used World War Two because of its popularity among gamers as well as the knowledge of the conflict. The Market Garden map for example, is far from a realistic representation of the town of Arnhem during 1944.[169] The setting serves more as a summary of the battle for Arnhem, showing two bridges (instead of one), a river (the river Rhine), a small town (an abstraction of Arnhem), a windmill (as a symbol of Holland) and a lot of grass. *Battlefield 1942* could well be labelled as a sandbox shooter, a typical game of emergence (Juul, 2002), for its relatively small set of simulation rules. Simple arcade style gameplay is preferred over historical realism thus enabling gamers to toy around in a given combat scenario free of historical constraints. The game is not a historical specific game, nor a process-oriented game (c.f. Uricchio, 2005). The World War Two theme in *Battlefield 1942* is used as a mere backdrop, a pool of condensed concepts of this global conflict. The primary "value" of wargames would then be a reflection on war instead of interpreting historical war (Crogan, 2003c). One of the most notable historical misrepresentations in the Market Garden map is the Axis (bad) versus the Allies (good) two party structure (in accordance with FPS design conventions). The Americans fight against the Germans on the Market Garden map, while British and Canadian troops are absent.

The developers of *Desert Combat* have a similar approach to the condensed representation and simulation of the conflict(s) in the Gulf. The mod offers many Gulf War themed maps such as, Khafji Docks, Bashrahs Edge, directly referring to historical battles of

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165 "A total conversion is a complete overhaul from an existing game. It changes, varying on the status of the mod, the theme of a game which results in a modification of (almost) all elements of a game" (Nieborg, 2004a).
166 See: Desert Combat. 2004. Desertcombat.com. Available: http://www.desertcombat.com/?page=info. November 30, 2004.
167 According to data of the *Battlefield* statistic tracking websites BF Tracks, there are more gamers playing mods (mainly *Desert Combat*) than the original game and its expansion packs. See http://www.bftracks.com/appl/bft/Metadata/view for real time data. See also: Battlefield 1942 - Wikipedia, the free encyclopedia. 2005. Available http://en.wikipedia.org/wiki/Battlefield_1942#Mods. December 9, 2004.
168 Toon Koehorst was one of my students attending the course 'New Media and Popular Culture: Computer games'. I aided with the planning and conception of his research but the actual analysis and conclusion are his.
169 C.f. the World War Two FPS Brothers In Arms: Road to Hill 30 (Gearbox Software, 2005). The developers of this game modelled various towns in Normandy in excruciating detail.

both Gulf Wars. Being under constant development the developers added maps to the game with a direct Gulf War Two theme, such as the map Al Nas and Gulf War II. It has been a long way from SIMNET (the billion dollar 'Mother of All Computer Games') to the free modification of *Desert Combat*. As an ironic twist in the evolvement of the military-entertainment complex, Army commanders are now able to use the mod *Desert Combat*, to simulate The Battle of 73 Eastings. In this *Desert Combat* map: "It's all out war with the battle to secure 73 Eastings. No flying units are available, it's pure heavy armor."[170] As almost any high-profile FPS game, *Battlefield* has its links with the military-entertainment complex. The Swedish military is reported to use *Battlefield 2*-technology for "training simulators and demonstration facilities" (Van Autrijve, 2004) and the studio that developed the mod *Desert Combat*, also developed a mod called *Shield of Freedom* to function as a training tool for the U.S. Coast Guard.[171]

Desert Combat and its community are interesting in several respects. In a time where Hollywood shies away from developing movies and television series based on the two Gulf Wars, the FPS mod culture provides a virtual playground to (re)visit and (re)play the war in Iraq. The community began to grow and all the typical elements of a game fan culture began to emerge with the mod at the centre of attention. Fan made clips, movies, wallpapers, additional mod content, and tournaments show a dynamic mix of commercial game culture, mod and fan culture and the discourse and aesthetics of both Gulf Wars. A mod that reformats the maps of *Desert Combat* into a tournament-style campaign is *21st Century Warfare: Desert Combat*, where players "participate in a simulated war, complete with commanding officers, divisions, and a grand strategy map showing the progress of the war from week to week."[172]

Desert Combat fan made movies and videos are the most vivid examples of the unmistakable interaction of the contemporary intertextual commodity the Gulf Wars has become. One fan made movie stands out in complexity and length – the movie *SSM: Navy Seals* (MrGood, 2004) is a 30-minute a group of outnumbered U.S. Navy SEALs who defeat their Iraqi enemies in a range of spectacular battles.[173] The movie is particularly interesting regarding the re-appropriation of FPS elements, actual concepts and themes of the Iraq war and war movie genre conventions, mixed in a sophisticated above average fan production. The binary logic of FPS games does not permit any other structure than two perfectly balanced parties and if this means revising history, even mods developers dedicated to making the most authentic simulation of history have to acknowledge this hegemonic convention. However, the narrative conventions of war in movies and news media takes over in the fan made movie and the perspective of the enemy is lost again.

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[170] Desert Combat. 2004. Desertcombat.com. Available: http://desertcombat.com/?page=maps. November 18, 2004.
[171] "Shield of Freedom is a multiplayer program that puts personnel in various roles (Coast Guard, civilians, terrorists, instructor, facilitator, and so forth) in situation-based scenarios, which allows for the testing and validation of communication and tactical procedures, as well as the performance of the individuals involved." Source: Serious Games Summit 2005. 2005. cmpevents.com. Available: http://www.cmpevents.com/GDw05/a.asp?option=G&V=3&id=378866. March 12, 2005.
[172] Desert Combat - 21st Century Warfare. 2005. Available: http://www.21stcenturywarfare.com/about.asp. November 18, 2004.
[173] The movie is directed by "MrGood" (2004) of DCR Productions - a web based company that produces Machinima Movies (Machine Cinema) for the striving gaming community. The movie is available at http://www.dcresource.co.uk/.

As the success of *Desert Combat* shows anything, it is the need for the simulation of the recent Gulf War(s). Proof of this is the Middle-East theatre of operations theme of *Battlefield 2*, to be released in summer 2005. This sequel will also contain a demo-feature called "Battlefield TV", which allows even more control over ingame footage and will undoubtedly result in a new wave of fan made war movies, blurring the line between 'real' war, military games and training tools. Players of *Battlefield 2* do not have to turn their TV on to watch the war in Iraq; they can make their own news/war. In the next paragraph, I will look at the various discursive elements regarding the role of war as a pervasive theme for games as well as the interplay between games and news media. As games become part of the intertextual commodity war has become, they have to function in accordance with other texts, acknowledging the manufactured consent of the pervasive images of war.

3.6 This is real war – the Military and the News

The discourse of war within Western societies is shaped by many media. Television is, for many, still the most important (news)medium, bringing the war (on Terror) directly into the living room.[174] And when there is a lull in the fighting, there are numerous military themed television series, games, toys and comic books. The convergence between military and entertainment discourses even has a name: "Militainment - news coverage of, or television shows about, war or the military (military + entertainment)."[175] But 'Hollywood' movies help out as well with their (anti-)war statements and provide additional context and ideas of what 'war is like'.[176] As a (new) medium, PC games reach millions of adolescents - the same that go to war and fill the ranks of the All-Volunteer-Army. The general theme of war has always been a part of game culture for it is easy to model and a familiar concept to many gamers (Kline et al., 2004). In this paragraph, I will analyse the representation of war in movies, television and its relation with (FPS) games.

The Persian Gulf TV War in 1991 transformed the conflict into a hyperrealistic war that only took place in the confined space of the living room (c.f. Baudrillard, 1991). The quagmire of Vietnam was the first conflict where war reports were live broadcasted on television, directly influencing public opinion on the war's progress. U.S. politicians and the Department of Defense learned their lessons from the Vietnam War and devised the 'pool system', which they introduced during the first Gulf War (Kellner, 1992).[177] As a result there was extensive

[174] During the second Gulf War the amount of viewers of three cable news networks (Fox, CNN and MSNBC) increased threefold (Compton, 2004).
[175] The Word Spy – militainment. 2005. The Word Spy. Available: http://www.wordspy.com/words/militainment.asp. February 25, 2005.
[176] Hereby acknowledging the (active) reading practices of any audience. The example of the Vietnam themed movie *Full Metal Jacket* (Kubrick, 1987), meant as an anti-war movie "was received by the majority of filmgoers as an exciting war film which inspired many to enlist in the marines" (Hall, 2003: 39).
[177] Journalists were "organized by the military into pools that were taken to sites selected by the military itself, and then reporters were allowed only to interview troops with their military 'minders' present" (Kellner, 1992).

coverage on the logistical nature of the military build-up in the months leading to the (first Gulf) war. The question whether the war was justified and what the results could be, were successfully substituted by the spectacle of "the largest U.S. military intervention since Vietnam" (ibid). The first Gulf War became the perfect representation of a clinical technowar, an image of what Vietnam War should have been.[178]

The 24-hour cable television network CNN emerged as the real victor of the first Gulf War and twelve years later, all major U.S. networks were well prepared for the ongoing coverage of Operation Iraqi Freedom. As a result, the second Gulf War in Iraq became a brand, with its own logo and slogan – 'Shock and Awe'! With continuing reports live from the battlefield, war has become an intertextual commodity, cross-promoted by the Pentagon and media conglomerates on television, the Internet, in movies and in games (c.f. Marshall, 2002). A branding synergy, argues Compton (2004), between broadcasting media and the military had as its main goal to promote patriotism, by showing "dramatic and sympathetic stories about the troops" (c.f. Hall, 2003). And one of the means to this goal was to embed journalists with U.S. Army troops. The embedded program, where reporters joined active military units during operational activities, was the outcome of a defense-entertainment collaboration with, among others, *Black Hawk Down* producer Jerry Bruckheimer (Compton, 2004). The Department of Defense also developed their own footage to be shown on the news "influenced by Hollywood producers of reality TV and action movies, notably Black Hawk Down" (Kampfner 2003 in Compton, 2004).

The *Black Hawk Down*-theme - i.e. the book, movie, games and mods – is a vivid example of war as an intertextual commodity. In 1992, the U.S. headed the United Nations Operation "Restore Hope" which led to the Battle of Mogadishu. During the fight between U.S. Army Special Forces and Somalian militias, two UH-60 "Black Hawk" helicopters were shot down. In the book *Black Hawk Down: A Story of Modern War*, Mark Bowden (2002) gives an in-depth look at what happened during operation "Gothic Serpent". The book led to the movie *Black Hawk Down* (Scott, 2001) and loosely based on the movie is the commercial FPS game *Delta Force: Black Hawk Down* (Novalogic, 2003), which depictures the battle between U.S. Special Forces and Somalia militia from a first-person perspective. Besides a book, a movie, and a commercial game there are numerous FPS mods focusing on the *Black Hawk Down*-theme, such as the *Conflict in Somalia: Black Hawk Down* Mod, a total-conversion modification for *Battlefield 1942* (CIS|BHD staff, 2005).[179] The introduction of Special Forces roles and missions in *America's Army* gave way to the map SF CSAR (Combat Search and Rescue). The mission description clearly shows the linkage with the events in Somalia:

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[178] "TV reports centred on desert manoeuvres and the depiction of shiny and powerful new high-tech weapons" (Kellner, 1992). C.f. Gibson, James W. The Perfect War. Technowar in Vietnam. New York: Atlantic Monthly Press. 1986.

[179] A quick look in the database of Mod Database (see http://moddb.com), shows a *Black Hawk Down*-themed mod (or at least the formation of a mod team) for almost every popular FPS game.

> "As a Special Forces soldier, you are tasked to do many types of operations. One such mission is Combat Search and Rescue, or CSAR. An American UH-60 Blackhawk helicopter has crashed, therefore friendly forces must conduct a combat search and rescue mission. This is another MOUT/CQB style map, but without any civilians in the area. Special Forces will be reinforced by indigenous soldiers. It must be noted that both OPFOR and IF are armed with the RPG-7, therefore appropriate precautions must be taken. Additionally, as with all maps with IF, proper target identification is important" (Tran, 2005: 132).

The 'heroic' battle of an outnumbered group of Special Forces soldiers, who fought in a humanitarian conflict, makes the ideal war story. It is a concise and simple story, highly trained U.S. soldiers try to capture a terrorist and then things go awry. It encompasses all of the myths of war (Hedges, 2003), focusing on patriotism, heroism and subsequently portraying the enemy as 'evil' terrorists. The single player part of the game *Delta Force: Black Hawk Down*, similar to the future *Overmatch* release of *America's Army*, breaks with the balanced multi-player online gameplay in order to simulate the uneven battle between U.S. Special Forces and Somalian local militias.

The most pervasive war theme in computer games still is World War Two. A short analysis of World War Two Hollywood movies and its interaction with the FPS genre, show a fascinating intertextual bond, far more ubiquitous than the *Black Hawk Down*-theme. Ever since the first war-themed FPS game the direct focus was on the World War Two era. The myths of war in general are present in the discourse of this war as well – i.e. honour, sacrifice, heroism, and good-versus-evil. The perfect theme to base the first simplistic FPS games upon. *Wolfenstein 3-D* (id Software, 1992), as the first mass played FPS game, had a fictional approach to the representation and simulation of World War Two by blending non-fiction concepts with science-fictional and horror-based themes. The fictional approach towards the war was left behind with a new range of FPS games drawing on both textbook history as well as Hollywood movies.

The cinematography and mise-and-scène of Hollywood movies as *Saving Private Ryan* (Spielberg, 1998), *Enemy at the Gates* (Annaud, 2001), and the mini-series *Band of Brothers* (To et al., 2001) had an undeniable influence on the level-design, themes and visualisation of World War Two (c.f. Kingsepp, 2003a; 2003b). The beach landing of Saving Private Ryan is remediated in the single player version of *Medal of Honour: Allied Assault* (2015 Inc, 2002) and the multiplayer only FPS Return to *Castle Wolfenstein: Enemy Territory* (Splash Damage, 2003) has a beach landing map as well.[180] The Omaha Beach map of *Battlefield 1942* (Digital Illusions CE, 2002) may as well been inspired by *Saving Private Ryan* but has a different mise-en-scène than the *Medal of Honour* instalments which are almost exact copies of the movies in terms of

[180] As well in the Playstation 2 version, *Medal of Honour: Frontline* (DreamWorks Interactive, 2002) where the game opens with the beach landing, similar to order of events in *Saving Private Ryan*.

sights and sounds.[181] The FPS *Call of Duty* (Infinity Ward, 2003) and its expansion pack *Call of Duty: United Offensive* (Gray Matter Studios, 2004) show in both the single player campaign as well as in the deduced multiplayer maps, many comparisons with episodes of the mini-series Band of Brother. The Belgian town of Foy, the French town of Carentan and mission during the Battle of the Bulge are striking replicas of the episodes of *Band of Brothers* and the storming of Stalingrad-sequence in the Russian single player campaign, simulates exact the same locale as shown in the overwhelming opening sequence of the movie *Enemy at the Gates* (Annaud, 2001). With the lack of 'familiar sight and sounds', there are no daily news-casts showing World War Two footage as with the second Gulf War, game developers turn to Hollywood for inspiration and explanation. As FPS games lack a comprehensive back-story, it seems that game developers point to Hollywood war-movies to 'explain' the wider narrative of World War Two. As such, Hollywood movies and FPS games become one big intertextual narrative where each medium emphasizes its own 'strength' – the cinematic narrative offers an interpretive frame to interact in the virtual battlefields of Normandy, Stalingrad and Berlin.

The movie *Black Hawk Down* is, for now, the last big Hollywood movie which can inspire game developers. With the absence of blockbuster Hollywood movies or mini-series about the Gulf War or the War on Terror, the developers and players of FPS games with a contemporary realistic combat theme, turn to another signifier; (televised) war itself.[182] Whereas World War Two FPS games are inspired by the mise-en-scène and cinematography of Hollywood movies (c.g. Kingsepp, 2003a), FPS games with a contemporary military theme are part of the overall military-themed discourse of the overall "Infowar".[183] Both war-themes are thus (re)mediated, the first conflict by movies, the second by movies and television. Since both the vast majority of gamers, modders and (commercial) game developers have no first-hand knowledge of war; they rely on a mix of military advisors, war movies, and television news bulletins.

In the media-saturated marketplace of the post-Fordist society, even soldiers engaged in an armed conflict bring their popular culture-infused concepts and ideas of war with them. Real war becomes a mix of real-world and mediated forms of experience, which on their turn become mediated experiences in documentaries and live-newscasts. Washington Post reporter Rick Atkinson (2004), who spent two months alongside the U.S. Army during the U.S. invasion, paints a picture of soldiers who watch and fight a war at the same time. In a similar way the makers of the documentary *Gunner Palace* (Epperlein and Tucker, 2004) followed a group of soldiers deployed in Iraq and in their production diary they report about the concepts and prior (mediatized) experiences of war, soldiers draw upon:

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[181] This loose reference to the actual events of D-Day show again the condensed and minimalist approach to history, as the analysis of the representation and simulation of history in the *Battlefield*-series in paragraph 3.5.2 tries to proof.

[182] One can argue that the images of the War on Terror and the first and Second Gulf War are mostly mediated through news media, mainly TV newscasts.

[183] "More a weapon of mass persuasion and distraction than destruction, infowar nonetheless shares some common characteristics with nuclear war: it targets civilian as well as military populations and its exchange-value as a deterrent outweighs its use-value as an actual weapon" (Der Derian, 2003: 47). Paragraph 4.4.4 will discuss this concept.

> "For the older officers and NCOs it's (being deployed in Iraq, DBN) M*A*S*H. They brought aloha shirts for poolside BBQs. For others, it's Platoon and Full Metal Jacket. You can see it in the way they ride in their Humvees: one foot hanging out the door—helicopters with wheels. For the teenagers, it's Jackass Goes to War."[184]

Within a culture of promotion, a small military operation in Somalia gave way to numerous entertainment texts. It did not stop with Somalia; the second Gulf War became the next (reality) show that gave way to a complete new intertextual commodity, only this time live. Acknowledging the pure war tendency, the second Gulf War was promoted and just as eagerly anticipated as the next patch for *America's Army*. In the sequel to Gulf War One, the same paradoxes surfaced as in any other mediatized war, i.e. bringing both pleasure and pain. This time the embedded perspective made it even easier to simulate the war in FPS games, which gave the concept of the 'first person paradox' a whole new twist. While war in FPS games is bloody and up-close and personal, the embedded reports as shown in news reports, were up-close and personal, but highly sanitised. I will discuss this contradictionary characteristic more in detail hereafter and reflect on the way games function in the news discourse of war.

3.6.1 Games and the Gulf War

The paragraph on the representation and simulation of modern war in computer games makes it clear: there is an interaction between the discourse and representation of the War on Terror and computer games. "[…] as the viewer became player: war and game melded in real-time on primetime" (Der Derian, 2003: 1), games and the news on television share a common discourse and aesthetic. In which way computer games were framed within the journalistic discourse during the second Gulf War is telling about the way games as a medium function in news media. Mia Consalvo (2003) her research is revealing in this respect. She analysed television transcripts of cable news networks and U.S. newspapers containing the words 'video game/videogame', 'computer game' and 'war'.[185] Three major themes surfaced when comparing war with games.

The first one focuses on the spoils of war; war is not a game because in 'real' war people suffer, bleed and die. This finding contrasts with the first person paradox of the simulation of war in FPS games, focusing on just that – death, destruction and blood. Ironically, the "most authentic military experience" offered by *America's Army*, with its highly sanitized representation of human suffering, does acknowledge the 'videogames do not accurately depict the spoils of war'-theme. The second theme is closely related to the first and describes the negative attitude towards games as being "fake/non-serious/pretend and trivial" in opposition

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[184] Gunner Palace Some war stories will never make the nightly news. 2004. Http://www.gunnerpalace.com. Available: http://www.gunnerpalace.com/content/index.php. February 25, 2005.

[185] The stations include ABC, NBC, CNN (and its smaller nets) and MSNBC, CBC, and CBS from March 23 to the end of April 2003. The newspapers all came from April 2003.

to television (news casts) showing real war. As we will see in the next paragraph, the ironic proposition that television shows real war has resulted in significant academic criticism. A third theme Consalvo found, was the concept that game-technology and military technology show an overlap - war is just like a videogame because both focus on and display high-tech equipment. This theme corresponds with the logic of war in the age of digital reproduction and the process of army transformation.

The second Gulf War as an intertextual commodity is firmly grounded in the military-entertainment complex and news casts and games share a similar aesthetic. Matthew Southern (2004) describes how leading electronic entertainment developers and publishers lend their creativity to NBC to simulate the 'Desert Fox' assault on Baghdad. Using computer-generated graphics, live-satellite imagery, military mapping technologies, and animations of weapons and tactics, the interface of televised war is akin to that of a videogame. Visiting the website of a cable news network and browsing through webpages with interactive 3D imagery about enemy weapons, a "War Tracker" showing (real-time) statistics, maps, and video clips, does not differ much from a FPS as *Kuma\War* (see Appendix E for the game study of *Kuma\War*).[186] With the act of embedding reporters with active U.S. Army units, the perceptional logic of the news and games merged:

> "While the 3D rendering engines at the heart of the First Person Shooter, such as the influential "Quake III Arena" software, were commercial innovations, they owe a profound debt to the military-driven development in flight and vehicle simulation of an interface based on an "embedded" perspective—a term which has acquired new resonance in the wake of the embedding" of media coverage of the "Gulf War 2" to provide quasi-first person perspectives of military action" (Crogan, 2003a).

The 'Nintendo War' (i.e. Gulf War One), got its sequel with the 'First Person Shooter War' of Gulf War Two. Besides various aesthetic similarities, news media and games show overlap in their discourses as well.

In the war film, spectacle surfaces in combat scenes interrupting the movies narrative (Hall, 2003) and most notably are Hollywood World War Two movies: "The depiction of war as spectacular 'special effect' is another longstanding function of warfilms, something which arguably is held in common with the audio-visual representation of war in computer games" (Crogan, 2003c). Multiplayer online FPS games are purely based on (combat) spectacle as the narrative of games as *America's Army* and *Counter-Strike* is one-dimensional and has to be deducted through engaging with the text. The rules of the game direct the player towards the objective of the game – creating a string of spectacular unscripted events – i.e. war. Where the games with a World War Two theme are based on the spectacle of Hollywood movies, videogames with a contemporary war theme draw on the spectacle of the nightly news. However, besides being based on spectacle, U.S. news networks also function as propaganda

[186] C.f.: CNN com Specials. 2003. Cnn.com. Available: http://edition.cnn.com/SPECIALS/2003/iraq/. February 25, 2005.

(Der Derian, 2003; Hedges, 2002; Hiebert, 2003; Kellner 2003a; 2003b, and Compton 2004).[187] The second Gulf War presented a highly sanitised view on the war and thus the relation between news media and games produce a distorted view on the representation and simulation of war in games:

> "The verisimilitude of the games is flawed by the fact that its source is propaganda, not realism, and so the game itself helps to convince the player that the images one sees of war are objective, legitimising consent for continued aggression. It becomes an extension, a reinforcement of whatever the propagandist message might be" (Southern, 2004).

During the reporting of the second Gulf War: "The dead and dying were always kept at PG-13 distances" (Bart 2003 in Compton 2004: 24). The deaths in *America's Army* are rated as well: 'T (for Teen)'. Baudrillard (1991) already reflected after the first Gulf War on the combination of the promotion of war and the use of the spectacle resulting in a hyperrealistic, virtual and clean war. With the growing cultural significance of games, one can question the role of propaganda and the spectacle of war in games and news media, as both seem to constitute the hegemonic concept of 'real war', news casts with their aura of objectivity (of the embedded perspective) and *America's Army* as "the official U.S. Army game". As Compton (2004: 10) notes, "the experience of war is, for a majority of Western citizens, limited to spectacle", a sanitized, distorted, single-sided view on post-industrial warfare. Steven Poole comes with a welcome warning in the concluding chapter of his book *Trigger Happy*:

> "And it is in this way that I do think videogames must have a type of moral responsibility. Of course, 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. I think the duty of videogames, therefore is an imaginative one – an *aesthetic* one".

3.7 Concluding Remarks

This chapter discussed the birth of the military-entertainment complex from the SIMNET to *Desert Combat*, the synergy between entertainment and defense industries is an ongoing and successful project. A great deal of modern warfare nowadays is electronically mediated through radar screens, night vision goggles and infrared monitors. The same (computer)screens, keyboards and custom made 'joysticks' used for mutual destruction, control and display the games played by today's youth and the interfaces of (electronic) warfare grow more and more similar with the interfaces and skills of the Nintendo Generation. Military simulations become evermore technologically advanced, enabling developers to

[187] Whether or not an audience acknowledges newscasts as propaganda is a question worth exploring. Television newscasts represent reality by carefully selecting images; gamers on the other hand are free, within the rule-bound model of a game, to create their own perspective on a war. As studies of television show (e.g. Ang, 1982; Fiske, 1987), the reading of a television text is open to various readings, but interacting with a text is impossible. Whether the act of participation interacts with reading a gametext in any way, is open for debate, but it would be unwise to discard the concept of an active audience altogether.

simulate scenarios previously unthinkable. The exponential growth of computing power, according to Moore's Law doubling every eighteen months, lets developers within the Modelling & Simulation branch of the U.S. military create high-fidelity scenarios almost overnight. The analysis of the come about of the military-entertainment complex and the use of games/simulations within the U.S. military show that military communities all over the world have an agenda very similar to the electronic entertainment industry. The rise in processing power, the search for greater bandwidth and the ever-increasing demand for games that offer a high grade of verisimilitude are pursued by both military and entertainment communities. The anticipation of (virtual) war is thus the result of various cultural, socio-economic and technological developments in both civilian and defense communities and the constant simulation of war in online games and the constant need for technological renewal not only acknowledge the pure tendency as defined by Virilio (1998), but invigorate this tendency as well.

The process of army transformation constantly channels different military research and development tracks with the ultimate goal of removing the human agent from the battlefield. The U.S. military actively transforms itself and as the U.S. is considered to be 'at war', this process will only intensify, allocating more funds to the military-entertainment complex. As the logic of war fully enters the age of digital reproduction, the yearning for post-human war is just one of the aspects causing a further (re)mediating and derealization of modern combat. Another aspect is the nature of the 'games generation', those who grew up within a media saturated society may be strangely familiar with operating military technologies - as entertainment technologies in the post-Fordist society merge with the former. One weapon system where the boundaries between simulation, training and reality fade, is the new era of combat aviation – i.e. unmanned flights. UAVs like the RQ-1 Predator, are operated by the same interfaces as computer games, using a keyboard and mouse. Also during training the same equipment is used as when during actual battle or reconnaissance flights. In the Uninhabited Air Vehicle Synthetic Task Environment, pilots use a Microsoft Windows Operated PC, akin to the 'rig' of almost every PC gamer (c.f. Ball & Gluck, 2003). The computer skills of the game generation are directly benefiting the Air Force in this particular case.

Transformation of the armed forces seems like a highly technological matter, but the use of games within the U.S. Army and the U.S. Marine Corps proves that the military not only appropriates game technology, but also its culture and economic attachments. The training hybrid *Full Spectrum Warrior* changes the relation of a military interacting with a global popular culture. War is a familiar commoditised intertext and gamers inspire the invasion of popular culture, as war is the familiar theme in television, movies, toys and marketing. World War Two, the U.S. military operations in Somalia and the second Gulf War all demonstrate what war has become the theme for a new game with its own marketing apparatus, myths, slogan and logo's.

With the (second) U.S.-invasion of Iraq, virtuous war took centre stage, explains Der Derian: "Virtuous war projects a technological and ethical superiority in which computer simulation, media dissimulation, global surveillance, and networked warfare combine to deter, discipline, and if need be, destroy the enemy" (2003: 39). The logic of virtuous war resembles the discourse of computer game culture; both focus on "high production values, mythic narratives, easy victories, and few bodies" (ibid: 41).[188] Gamers can experience both Gulf Wars in countless action games directly or indirectly marketed as offering 'real' combat experiences of these conflicts and being products of the military-entertainment complex only legitimises this stance. Embedded journalism during the second Gulf War was seen as objective and free from bias (Hiebert, 2003) and FPS games offer a comparable perspective at a hyperrealistic conflict offering clinical representations of human suffering, emphasising mediated death.[189]

A global gaming culture, with its military origins of interactive play, is entertained by games primarily based on conflict, eagerly developed by young males for young males (Kline et al., 2004). Why is it that *America's Army* has been embraced by gamers all over the world and why, after becoming such a popular online game, is it possible for the U.S. Army to repurpose the game, turning it into a platform, serving different roles – i.e. strategic communication, training, testing and propaganda? *America's Army* is able to tap directly into a spectacle-based popular culture, into existing game design conventions and game communities and into the complex logic of virtuous war.

America's Army can directly appropriate a global youth culture, already familiar with war (c.f. Hall, 2003) as an intertextual commodity, manufacturing a rich intertextual framework of spectacle-based and sanitised views of war. Within a branded world (c.f. Klein, 1999) where the Army is 'cool', where games are developed by the military games and used as training tools, gamers demand the same new weapons as the U.S. Army does. An *America's Army* player might know better what the XM8 (a possible new rifle for the U.S. Army) is, than the name of the capital of the Netherlands. The mise-en-scène, the stories, the narrative of 'real war' on the news and in war films correspond with a simulated 'official' war. The U.S. Army developed their own take on war and can directly associate itself with FPS game design conventions, bend them in their direction, appropriate an already existing (military) discourse and issue a free game. A game that is seen as 'just a game'. How exactly the game placed itself within these various developments and why *America's Army* is labelled as a platform and much more than just a game are the main questions introducing the following chapter.

[188] Games can even be seen as weapon systems themselves: "War is fought not just with bullets and rifles and tanks, but with influence tactics and words and a communication environment" (Pratkanis in Hiebert, 2003).
[189] "But the general impression left with the public was that there was no government censorship. The public was getting the straight scoop from the battlefield, even though most of the news was soft and feature stuff" (Hiebert, 2003: 249).

Chapter 4 –
The Four Dimensions of *America's Army*

For most players *America's Army* is first and foremost an online multiplayer tactical FPS PC-game. The first version of the game, *America's Army: Recon*, was envisioned to be just that, a game which also could be used as a "strategic communication tool" (c.f. Davis, 2004). Designing the game proved to be a constant struggle between FPS design conventions, (game) industry rules and regulations and the goals of the Army. By analysing the production, distribution, the game itself and its reception I will propose four different dimensions of the game, being a recruiting tool, an edugame, a test bed and tool, and a propagame. Drawing on previous work (Van der Graaf & Nieborg, 2003), I will argue that *America's Army* is more than 'just a game' or 'only a sophisticated advergame'. The four dimensions were first mentioned in Van der Graaf & Nieborg (2003) and then explored in depth in Nieborg (2004b). The relation of *America's Army* to the military-entertainment complex, as discussed in paragraph 3.1, is based on the analysis of Nieborg (2004c).

The four dimensions are interrelated and show overlap in various degrees. The first three dimensions (i.e. the advergame, edugame and test tool dimension) are acknowledged by the developers of the game in design documents, research papers, theses, interviews and surface directly in the design of the game. After 2002, *America's Army* grew from a game to a platform and at various moments of time it offered different dimensions in different settings. Take for example the introduction of a new weapon system in the game, e.g. the Stryker fighting vehicle.[190] Such a system directly uses *America's Army* as a test tool; and after successful ingame testing, the system enters the edugame dimension by allowing U.S. soldiers to train driving the Stryker virtually. Being able to advertise the game as a true-to-life combat simulation of the U.S. Army, featuring a new, high profile and up-to-date weapon system, directly increases the marketability of the game and thus indirectly benefits the U.S. brand. Subsequently including the Stryker in a public version of the game may expand the advergame dimension. Using the game's configurable technology, many *America's Army* spin offs are currently envisioned. Examples are *America's Army* as an augmented cognition test bed, a Homeland Security chemical attack training tool, an emergency responder tactical simulation training tool for the Secret Service, aptitude analysis from game play and Objective Force Future Weapons testing (Zyda, 2003b). These spin-offs will only be introduced in the public version when they fit in the overall multi-dimensional framework of *America's Army* and do not conflict with *America's Army* as a tactical multi-player online FPS game.

Albeit the integration of the four dimensions within one triple-A game is fairly unique, there are many games/simulations featuring at least one (or more) of the before mentioned

[190] The Stryker is a new eight wheeled, armoured combat vehicle, currently deployed in Iraq.

dimensions. *America's Army* is not the only advergame issued by the U.S. military to promote its services. The free downloadable real-time-strategy game within a realistic military setting, *Guard Force* (Rival Interactive / Semi Logic Entertainment, 2002) "will be distributed as a recruitment tool and for increasing the awareness of the Army National Guard."[191] *Guard Force* will be turned into a commercial game by adding additional content by game developer Semi Logic Entertainment.[192] To complement *Guard Force*, The National Guard has ordered the development of a second recruiting game in 2004 - the FPS *PRISM: Black Shield*, a game based on the portrayal of homeland defense.[193] The game differs from *America's Army* as it features singe player or co-operative gameplay enabling gamers to combat terrorists using futuristic U.S. military material. While future releases of *America's Army* will possibly offer single player campaigns and small scale produced weaponry, current versions lack these characteristics. Rival Interactive will extend *PRISM: Black Shield* and turn it into the commercial *PRISM: Threat Level Red*. A long list of both custom and commercial FPS games and FPS mods are used within several branches of the U.S. military for training purposes. Paragraph 3.3 lists several of these Commercial off the Shelf (COTS), custom (i.e. specially made for the military) and hybrid games. *America's Army* is not the first FPS training tool based on a commercial game engine. The mod *Marine Doom* (Marine Corps Modelling and Simulation Management Office, 1996) used the engine of *DOOM II* (id Software, 1994) to turn the fast paced and twitched gameplay of *DOOM II* into a team based simulator enhancing "repetitive decision making" (Riddel, 1997). All these examples show some dimensions of *America's Army*, but what makes *America's Army* unique, is the presence of all four dimension within one single game.

Authors from different military communities have similar views of potential military usage of games/simulations. They all acknowledge the multi-dimensional nature of games with a military component - ranging from a commercial game with a military theme to a military simulation used for training. Frank and Lundblad (2002), in service of the Swedish Defence Materiel Administration & Swedish Research Institute for Information Technology, see games moving outside of entertainment because of technological advancements in the development of game graphics, AI and online architectures. By using the gaming method – i.e. playing a game instead of using a training simulation -, games can be used for other purposes than just mere entertainment - i.e. product development, command and control, analysis and marketing. Aspects of the test bed and tool and edugame dimension of the game encompass the product development, analysis and command and control areas and the area of marketing is fully covered by the ubiquitous advergame dimension of *America's Army*. Frank and Lundblad (2002:

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[191] *Guard Force* can be downloaded at the National Guard official website. "Guard Force is a real-time strategy game utilizing today's modern military units including M1A1 tanks and M2 Bradley's. Guard Force contains six unique missions that take place in graphically rich surroundings including snow covered mountains and lush jungles. Guard Force puts you in command. Take control of your forces and engage in covert assaults, counter-insurgency, and rescue missions." See: 1-800-Go-Guard_com. 2004. Available: http://www.1800goguard.com/game/game_intro.html. August 17, 2004.

[192] See: Semi Logic Entertainments, Inc. 2004. Available: http://www.slegames.com/index2.html. August 17, 2004.

[193] The website of game developer Rival Interactive announced the development of *PRISM: Black Shield* on February 19, 2004. Source: Rival Interactive – Games. 2004. Available: http://www.rivalinteractive.com/. August 17, 2004.

5) remark: "Full attention and concentration of a gamer seems like a dream opportunity for advertising" and it seems that this dream has come true. *America's Army* has become the first high-profile example of a game that shows the convergence of a military simulation with commercial technology and is a prime example of the emergence of dual-purpose (hybrid) games, benefiting most of all military communities (c.f. Fong 2004).

The aim of this chapter is to elaborate upon the four dimensions of *America's Army*. Exploring the tension between FPS game design conventions and the multi-dimensional character of the game, gives way to a deeper understanding about the interaction between FPS game communities, technology and marketing and the functioning of today's U.S. military. The four dimensions of *America's Army* acknowledge the logic of the three circuits of interactivity (i.e. culture, technology and marketing) in the mediatized global marketplace and as a part of contemporary (game) culture, *America's Army* is, as any other text, part of "the dialectical interplay of technologies, culture and economics" (Kline et al., 2004: 23). However, the way the game functions as a text calls for careful study of the social meaning and significance given by gamers to *America's Army*. For different recipients of the game certain dimensions can have a different significance. Whether gamers, as just one group of people who encounter *America's Army*, will value the game as 'just a game' or as a 'dangerous propagandistic military training tool' is an interesting question, but lies outside the scope of this paper and has to be dealt with in further research. Paragraph 5.2.3 will discuss the various forms of critique towards the game by academics and journalists.

By mapping out the institutional context in which the game is developed and the role of commercial game technology, as well as its form and some of its effects, at the end of this chapter there should be a firm basis for further research on the role of *America's Army* within popular culture. Drawing on chapter three where the historical developments in the military-entertainment industry, the logic of war (and peace) in the age of digital reproduction, and the comparative framework of the representation and simulation of modern war in computer games is discussed, the next paragraph zooms in on the Official U.S. Army Game and the first of its four dimensions: *America's Army* as an advergame.

4.1 The Advergame Dimension

Although Army recruiting did not seem to be a problem after the terrorist attacks of 9/11, the ongoing War on Terror calls for more soldiers and thus more recruits. The second Gulf War in particular has put heavy strains on the available manpower of the Army. National Guard units have been mobilised on a massive scale and even so called Individual Ready Reserve troops have been called into battle. These approximately 110.000 former soldiers spent a considerable amount of time on active duty, but are allowed to fulfil their commitments to the Army in the Individual Ready Reserve (IRR). Many of these members have not hold a gun for years, nor is

their training up to date. This resulted in a large group of IRR soldiers "seeking exemptions, filing court cases or simply failing to report for duty" (Davey, 2004).

Some commentators argue that the war in Iraq seems to be a quagmire or even a "second-Vietnam". The U.S. war machine is tied down in the cities of Iraq, requiring more and more manpower and material. Critics warn against an overextended military, reduced readiness "and limiting America's ability to send substantial ground forces elsewhere to back up its diplomacy or respond to emerging threats" (The New York Times, January 2 2005, Late ed., sec. 4: 8). In order to fill the gaps "[the] current Army recruitment ceiling of just above 500,000 ought to go up to nearly 600,000, still substantially below the levels of the late 1980's. The Marines' ceiling should go up from the current 178,000 to around 200,000. Attracting those recruits will require offering financial and other inducements on top of the added payroll costs" (ibid.). During the 2004 presidential elections between President George W. Bush and Senator John F. Kerry, the war in Iraq was a much-debated subject and the re-elected President Bush made clear that there was not going to be a draft during his second term.[194] Early 2005, for the first time in five years, the U.S. Army failed to meet its recruiting goals. In a *New York Times*-article Army officials blamed the improving economy and the impact of the war in Iraq: "Top Pentagon officials acknowledged that the graphic images of casualties from Iraq and the obvious danger of serving there had caused many parents to advise their children to avoid joining the military now" (Schmitt, 2005).

Les Brownlee, former Acting Secretary of the Army and General Peter J. Schoomaker, Chief of Staff of the U.S. Army, emphasized the long term character of the War on Terror: "This is not simply a fight against terror - terror is a tactic. This is not simply a fight against al Qaeda, its affiliates, and adherents - they are foot soldiers. This is not simply a fight to bring democracy to the Middle East - that is a strategic objective. This is a fight for the very ideas at the foundation of our society, the ways of life those ideas enable, and the freedoms we enjoy" (Brownlee and Schoomaker, 2004). Woodward (2002; 2004) in his reports from the Bush administration during the War on Terror, shows an administration that is prepared for a decade long war on ideas. With fewer recruits signing on, an overstretched military, the ruling out of a draft and with soldiers refusing to report for duty, the U.S. military has to rely on its recruiting efforts now more than ever.[195]

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[194] "I hear there's rumours on the Internets (sic) that we're going to have a draft. We're not going to have a draft, period. The all-volunteer army works. (…) Now, forget all this talk about a draft. We're not going to have a draft so long as I am the president." The Second Bush-Kerry Presidential Debate. 2004. Commission on Presidential Debates. Available: http://www.debates.org/pages/trans2004c.html. 19 November 2004. Brownlee and Schoomaker (2004) acknowledge the intensive use of Army divisions, but did not explicitly mention the idea over overextension.

[195] The overstretched Army argument surfaced again during the third and last debate when Senator Kerry argued: "Our military is overextended. Nine out of ten active-duty Army divisions are either in Iraq, going to Iraq or have come back from Iraq. One way or the other, they're wrapped up in it." The Third Bush-Kerry Presidential Debate. 2004. Commission on Presidential Debates. Available: http://www.debates.org/pages/trans2004d.html. 16 November 2004.

The amount of confidence in the military as an institution is vast, of all the institutions in the U.S. society, the military distinguished itself for its trustworthiness.[196] In *Brandweek's America's Top 2001 Brands*, the Army entered the top-100 at place 92 after a 54 percent rise compared to the year 2000.[197] The U.S. Army brand is far more popular in the 2004 report than the other branches: the U.S. Air Force at place 274, the U.S. Navy at 740, the U.S. Army Reserves at 1411 and the U.S. Marines at 1436. These examples illustrate that the different branches within the U.S. military have become distinctive brands, all with accompanying slogans, logos and a vast marketing apparatus. The U.S. Army is constantly on the look-out for new ways to reach their target group; qualified men and women between the ages 17 and 24, seeking a path in life, having a High School diploma and no prior military service (USAREC G5 Public Affairs Division).

The Army Research Institute distinguishes three categories influencing the decision of today's youth to enlist (Morath et al, 2004). The first category is advantages from joining the Army (e.g. economic benefits as well as learning new skills). The second category is people influencing a possible recruit (e.g. parents or friends) and the third category is media (i.e. advertisement). The role of advertisement is then: to motivate prospects to join the Army and Army Reserve, to generate leads for recruiters, to motivate prospects and influencers to be more receptive and to seek more information, to provide information about the benefits of Army Service, to maintain top-of-mind awareness levels, to overcome sales resistance and to promote a positive attitude about Army Service (USAREC G5 Public Affairs Division, 2004).[198] As we shall see in the following paragraphs, all of these three categories are to some extent present in *America's Army* and the answer to the Frequently Asked Question "is *America's Army* a recruiting tool?" acknowledges both the rationale outlined by Morath et al., as the logic of advertisement within the overall U.S. Army recruiting campaign: "The game is designed to provide young adults and their influencers with virtual insights into entry level Soldier training, training in units and Army operations so as to provide insights into what the Army is like."[199]

Unlike some other forms of (Internet) advertising, the U.S. Army does not gather explicit demographic information about gamers without their knowledge. A player may disclose his information (e.g. player statistics or an email address) to a recruiter, but only on his/her

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[196] In May 2004, 1002 adults were asked in a nationwide Gallup Poll to express their confidence on a five point scale ranging from "a great deal" (36%) to none (zero percent). C.f. towards big business only 7% expressed a great deal of confidence and 33% little to none. Source: Institutions. 2004. The Polling Report. Available: http://www.pollingreport.com/institut.htm. August 22, 2004.

[197] After that, the ratings tumbled to place 155 in 2004. A note on Brandweek's method: "A sample of 24,046 consumers age 15-and-over were surveyed on 1,031 brands using the Harris Poll (HPOL), an online multimillion member panel of respondents who have opted to take part in online surveys. Interviewing was conducted from April 23 to May 24, 2004. The survey took an average of 28 minutes to complete. Each respondent was asked to rate a total of 80 brands, including 20 core brands (rated by the total sample) and 60 randomly selected ones. Each brand received approximately 1,200 ratings" (Brandweek, 2004: 10).

[198] This data comes from a PowerPoint presentation dubbed "Marketing America's Army", developed by the United States Army Recruiting Command G-5 in cooperation with the Marketing, Partnerships & Outreach Directorate and the Public Affairs Office. The presentation is clearly meant for Army recruiters and was available at the United States Army Recruiting Command G5. Source: U_S_ Army Recruiting Command G5 Directorate. 2004. usarec.army.mil. Available: http://www.usarec.army.mil/hq/apa/index.htm. August 22, 2004.

[199] Source: America's Army - Support - Windows FAQ. 2003. Americasarmy.com. Available: http://www.americasarmy.com/support/faq_win.php#faq2. February 5, 2005.

own initiative. The idea that "If a player chooses the tracking option and demonstrates a high level of skill during simulated training and combat exercises, he may be contacted by a recruiter to discuss career opportunities available in the real U.S. Army" (Book, 2004: 23), is (still) false.[200] Since the first release of the game, many rumours spread on various Internet fora, about the U.S. Army approaching skilful gamers. To my knowledge, there has never been any sign of direct recruiting efforts via the game (e.g. the use of an email address to communicate with certain skilled U.S. players). The game is a much more the equivalent of a television commercial than a U.S. Army recruiter. It is very likely that many gamers would be put off by an Army actively recruiting them and such events would be contrary to the logic of the project.

To avoid further misconceptions about *America's Army* as an advergame, the role of *America's Army* within the overall recruiting efforts of the U.S. Army will be explored by analysing data and results from U.S. government research reports. In the end, *America's Army* is 'just' a new form of advertisement, along with other advertising initiatives, recruiting stations and enlistment bonuses (c.f. Morath et al, 2004). The role of using explicit educational components in the game as a means of reacting to new advertisement opportunities will be explored in paragraph 4.2.4. The come-about and the expansion of the U.S. Army as a branded entity and its interaction with *America's Army* will give way to an analysis of *America's Army* as an advergame. By unpacking the role and current use of advergames, *America's Army* can be put in the context of the use of advertisement through games. Why the game is regarded as such a success within the advergame dimension and the implications of this success, constitutes the end of this dimension.

4.1.1 The U.S. Army Always Wanted You!

With the end in 1973 of the mandatory military service, better known as the draft, the U.S. military had to rely on its recruiting efforts to enlist personnel for its new All-Volunteer-Force (AVF).[201] Recruiting in itself is a costly endeavour, the costs of attracting 472.000 volunteers rose to 511.3 million dollars in 1975 (General Accounting Office, 1976a). By ending the draft, advertisement was deemed necessary to meet the recruiting demands of all four services.[202] The military initially used Public Service Announcements on television and radio, print ads in magazines and newspapers, direct mail and billboards to "(1) create awareness, (2) inform

[200] "Player privacy is protected in a number of ways to ensure that the Army will not know the names and addresses of players unless these players deliberately request information. Recruiters will not have any information about the players unless players purposefully identify themselves and request information". Source: America's Army - Support - Windows FAQ. 2003. Americasarmy.com. Available: http://www.americasarmy.com/support/faq_win.php#faq20. February 5, 2005.

[201] One of the biggest fears of adolescents in the U.S. seems to be the reinstitution of the draft. Although the U.S. military regards itself as an All Volunteer Force, critics argue that the military is more of an All Recruited Force. Looking at the enormous amount of money spent on recruiting the Army and offering bonuses, some young adolescents may feel the need to join in order to escape their low spot on the social ladder.

[202] The four services are the U.S. Army (and Army Reserve & Army National Guard), the U.S. Navy (and Navy Reserve), the U.S. Air Force (and Air Force Reserve & Air National Guard) and the U.S. Marine Corps (and Marine Corps Reserve).

potential recruits and influencers of opportunities, and (3) generate leads through response advertising techniques" (GAO, 1976b: 5). The budget for advertisement for military recruitment topped 96 million dollars in 1974, but the services seemed to compete against each other for new potential personnel in campaigns labelled as "uncontrolled, duplicative or inconsistent practices" (GAO, 1976b: i). It was hard to determine by the General Accounting Office whether the different advertisement campaigns were indeed effective because of a lack of measurement tools. Research showed that American youngsters were attracted by "pay, educational benefits, training opportunities and travel" (GAO, 1976b: i), benefits offered by all four services. Over two decades later, the U.S. military has to persuade more than 200.000 recruits annually to fill its ranks but one of the biggest problems facing contemporary recruiting efforts still is its effectiveness. There is no useful data which method works best to attract recruits despite the agreement on at least two main goals of using advertisement for recruitment; raising the awareness of the U.S. military and the willingness to consider a career in the military (GOA, 2003: 19).[203]

Today, the U.S. armed forces rely on three pillars for their recruiting efforts. First, there is a 15.000 strong force of recruiters. Second, various (financial) incentives are available upon joining and in order to raise awareness and third, to help recruiters reach their target groups, the military invests heavily in advertisement. From 1998 to 2003, the total advertising budget for military recruiting almost doubled from 299 to 592 million dollars while the total recruiting budget approached four billion dollars (GAO, 2003).[204] To channel the increasing expenditures in promotion, new advertising agencies were contracted.[205] These agencies came up with "new advertising strategies and campaigns, complete with new slogans and revised television, print, and radio advertisements, along with new brand images defined by distinct logos, colors, and music" (GAO, 2003: 6). In an era in which the first words of an infant can be "McDonalds", the U.S. military could not stay behind and had to (re)sell it services by branding their organisations. The different services had to stand out in a contested market place and get across their simple message: "Uncle Sam wants you to join!" In the "new branded world", advertisement is used as a vehicle to convey the core meaning of a corporation (Klein, 1999: 5), or in the case of the military, the U.S. Army as an institution.

The 'old' media used in the 1970's are still used today and a quarter of the today's military advertising budget is spent on TV commercials. Advertisement money, in line with the building, expanding and maintaining of a brand, is also spent on sponsoring events, sports teams and other promotional activities. In a report by the U.S. Army Research Institute the media habits of America's youth were examined (Morath et al., 2001) and two important media

[203] See for a comprehensive overview of research findings pertaining to military recruitment practices the annotated bibliography of recruiting research conducted in the U.S. Armed Services and in Foreign Services by Penny et al. (2001), listing an enormous amount of reports on recruiting.
[204] The total advertisement investment per enlisted recruit rose from 640 to 1900 dollars between 1990 and 2003 and the total recruiting costs from 8100 to13.300 dollars per enlistee (GAO, 2003: 11).
[205] The USMC did not revamp its successful longstanding campaign.

for individuals, who might possibly join, are television and the Internet.[206] To improve Army recruiting via the Internet, the enhancement of the Army recruiting website *GoArmy.com* was opted as well as the founding of an Army interactive game site. As we shall see here but also later in this chapter, all suggestions outlined the report are incorporated in current recruiting advertisement efforts. The advent of the Internet offered a completely new range of possibilities for advertising and providing information about all military branches. Every component in the military has an expansive website offering a wealth of information for possible recruits on almost every aspect of joining a component.[207] There is also an all service website informing parents about the benefits of joining the armed forces, containing information on every Military Occupational Specialty (MOS) available.[208] The multimedia character of the Net enables to put up videos, posters, quizzes, blogs, audio tracks, (live) interviews, live-chat sessions with recruiters and many other treats. Mobile recruiting platforms, such as a Cinema Van or the Special Forces Adventure Van, have become accepted recruiting tools (c.f. Tyler, 2004). By using various new media technologies, the U.S. Army is able to directly reach their target group in an active and engaging manner that corresponds with the media use of today's youth. The arrival of *America's Army* marked the beginning of renewed interest for interactive recruiting and allowed further integration of the different branding efforts. Since the game is intercalated within the U.S. Army brand, the emergence and evolution of the U.S. Army brand deserves some attention.

4.1.2. Operation Enduring Brand: Branding the U.S. Army

The U.S. Army joined the redesigning of the distinctive military advertising campaigns and issued an investigation by consultancy firm McKinsey and Company in 1999. A Marketing Strategy Office within the Army was erected and a new contract with advertising agency Leo Burnett, whose clients range from McDonalds to Heinz, was signed soon after. In a press conference in 2001, the deal was made public: "You will see that we have branded the Army -- that there is a logo that now stands for the Army brand. And it will be the same across -- whether it's ROTC program, active duty, Army Reserve, National Guard, so that we amplify the message of what this opportunity is to serve in the Army" (Department of Defense, 2001).[209] To uphold their distinctive features, the U.S. Army, U.S. Navy and U.S. Air Force were branded

[206] The Music channel MTV was identified as an outlet to reach the core audience. Another suggestion made by an interviewed recruiter was to "develop travelling demonstrations of 'cool' and/or technology laden military experiences (e.g., helicopter simulators)" (Morath et al., 2001).
[207] E.g. www.marines.com (USMC), www.navy.com (USN), www.airforce.com (USAF).
[208] See: Welcome to Today's Military. 2005. Available: http://www.todaysmilitary.com/. March 12, 2005.
[209] "The Reserve Officer Training Corps (ROTC) is a training program of the United States armed forces present on college campuses in order to recruit and educate commissioned officers. It is designed as a college elective, and studies focus on leadership development, problem solving, strategic planning, and professional ethics. ROTC produces 60 percent of all officers in the U.S. armed forces, and 75 percent of U.S. Army officers." Source: Reserve Officer Training Corps - Wikipedia, the free encyclopedia. 2005. Wikipedia. Available: http://en.wikipedia.org/wiki/ROTC. March 18, 2005.

separately.[210] As of 2001 it was possible to "Accelerate Your Life" in the U.S. Navy or to "Cross into the Blue" by joining the U.S. Air Force. The old U.S. Army slogan "Be all you can be" - originated in 1981 - was replaced by "Army of One" (or sometimes uses as "Together We Stand: An Army of One") complemented with a new logo (see figure 2 where the star-logo is shown in the upper-left of the pop-up advergame).[211] The U.S. Army brand definition is stated as:

> "The U.S. Army is the most powerful, most respected and most feared ground force in the world. At its core, the success of the Army lives and dies on every Soldier's ability to think and take decisive action—to lead themselves and others. Fundamentally, the Army protects all that the U.S. Constitution stands for. Each Soldier will defend this to his or her last breath with Loyalty, Duty, Respect, Selfless Service, Honor, Integrity and Personal Courage.
>
> To accomplish this mission, the Army invests in each individual, developing Soldiers who are strong in mind, body and soul; and who understand the power of teamwork. The Army equips them to make a significant difference, on foreign soil and within their communities, as Soldiers and citizens" (Army Game Project, 2003: 3).[212]

The new advertisement campaign kicked off on January 11, 2001 by a 60-second TV commercial during a commercial break on the sitcom Friends. The initial U.S. Army ad campaign, which cost 150 million dollars for 2001 alone, consisted of several print ads and commercials on TV.[213] The pivotal point of the whole campaign is to generate traffic for the *GoArmy.com* recruiting website.[214]

The *GoArmy.com* website is a world in itself. Primarily a recruiting site, it uses Macromedia Flash technology to offer a virtual insight in today's Army. The website is divided into compartments as "About the Army", "Career & Jobs", "Soldier Life" and of course "Benefits", while the inevitable link "How to join" is also placed direct on the homepage. The website provides information about various Army elements, such as the Rangers, Special Forces but also Judge Advocate General's (JAG) or Army fire fighters. In the first quarter of 2003, thirty percent of the *GoArmy.com* visitors were prompted to visit the site by television advertising and seventeen percent by recruiters. According to a PowerPoint presentation from the United States Army Recruiting Command G-5, the *GoArmy.com* website had eleven million

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[210] A brand is the public's "perception of an integrated bundle of information and experiences that distinguishes a company and/or its product offerings from the competition" (Duncan, 2002), as cited in Van der Graaf & Nieborg (2003).

[211] Other slogans were "Today's Army Wants to Join You" (pre-1973), "Join the People who've joined the Army" (1973), "This is the Army" (1979 – 1981).

[212] The U.S. Army Recruiting Command (2004) has a slightly different definition: "[…] a message of empowerment. It's about Soldiers, the individuals who define the Army. It's about the mental, physical and emotional power that is inside every Soldier. It's about the transformation that young men and women go through as they become Soldiers, and as those Soldiers become leaders. Each Soldier is an undeniable force. America's Soldiers are trained to lead, to succeed and to protect our great Nation. An Army of One is about the power of the individual, but it's also about the collective strength of the Army — the more than one million Soldiers united around one mission"

[213] The Army differentiates between national and local advertising. Where national advertisement aims at promoting awareness and understanding of the Army, local campaigns try to drive people to local recruiting station with customized (i.e. local) advertisement and sponsoring.

[214] "We talked about the web site, and obviously that is critical to our overall plan. With 93 percent of young adults on the Internet at least once a week, that is a key place for us to be able to communicate our message to them. It also allows us to give more information and allows the people who go to the web site to really understand better what the personal stories are of the soldiers who are being profiled there." (Department of Defense, 2001). The Army website is located at http://www.goarmy.com.

visits to the website in fiscal year 2004, resulting in 4529 direct enlistments. It is noteworthy that the most successful element of the website is the chat box, which led to a (relative) high number of new recruits (i.e. 1224 in fiscal year 2004). The recruitment data shows an interesting shift from telephone inquiries to more visitors to the website and chat room (USAREC G5 Public Affairs Division, 2004).

In a society where even sand can be branded, the competition for attention is enormous (Klein, 1999). Advertisement in our post-modern media-saturated world is omni-present but at the same time extremely fragmentary. The eyeball time of young people has become a commodity in itself, with every medium fighting for attention trying to sell audiences to a growing pool of companies and brand owners. "Finally, media inflation, which has increased faster than general inflation even in the sluggish economy, has lessened buying power" (GAO, 2003: 20). This also means that the 'Army of One' brand needs to be expanded and extended, continuously renewed and has to be spread to as many places as possible - a process taking up enormous amounts of financial recourses. To expand the Army brand, the U.S. Army owns a NASCAR (National Association for Stock Car Auto Racing) racing team, a NHRA (National Hot Rod Association) Top Fuel team and a NHRA Pro Stock Bike team. And in line with the ubiquitous transgressive character of brands (Pennington, 2001), there are three (official) web stores offering licensed material with the "U.S. Army of One" logo and slogan on it, ranging from clothing to mugs, playing cards to key rings, and other knickknacks.[215] In a perfectly branded world, all elements in the web of a brand have to fulfil their part. In FY 2004 all recruiting stations were therefore refurbished in order to: "Create an emotional link with the viewer" (USAREC G5 Public Affairs Division, 2004).

With half of the military advertising funding going to the Army and the constant need to re-invent and explore new advertisement platforms, there is room to experiment and try new initiatives to reach the core group of 18- to 24-year-old. One example is the distribution of disc marketing enhanced CD's (PR Newswire, 2003). But probably the most high-profile advertising experiment of all, could well be *America's Army*. The digital game, the ideal commodity in the Post-Fordist era (Kline et al., 2004), is used to expand the U.S. Army brand across the globe. Before looking at the inner workings of *America's Army* as an advergame, the current status of advergames will be explored in the next paragraph.

4.1.3. Advergames to the Rescue

The adaptive character of advertisement spilled over to games. The use of games for the promotion of goods and services is becoming more popular with the maturing and penetration of the medium. The number as well as the sophistication and implementation of game based

[215] See http://www.armyproducts.com/default.aspx, http://shop.ipledge.com and http://armyofone.usptgear.com. Last visited: August, 22 2004.

advertisement (or advergames) is on the rise according to industry experts (e.g. Wegert 2003; Bulik, 2004).[216] It is the usage of marketing through games that differs considerably. Chen and Ringel (in Buckner, Fang & Qiao, 2002) distinguish three ways in which messages can be incorporated in games. The first is associative advergaming, i.e. "supporting brand awareness through lifestyle association", the second "illustrative advergaming" and a third way is "demonstrative advergaming enabling the participant to experience the product in the game itself". The advergame dimension of *America's Army* has been thoroughly explored by Van der Graaf & Nieborg (2003), arguing that the game is developed to "build relationships between consumers and products by transferring the emotion of the game to the U.S. Army brand that is powering it and creating an engaging, rather than passive, experience." *America's Army* is marketed as a simulation of the U.S. Army, a virtual copy of the life of an infantryman. The U.S. Army brand has become the provider of aesthetic game experiences through the marketing of sensory experiences to consumers. The game constantly supports brand awareness, for the brand and its simulation are interchangeable. By doing so, the game encompasses all three ways of incorporating marketing messages mentioned by Chen and Ringel. The distinction made by Buckner et al. offers an opportunity to expand the framing of advergames. I will offer two main categories of advergames based on the goal of the game, i.e. brand placement in games versus 'pure advergames'.

The first category is brand placement in commercial games (c.f. Molesworth, 2003). Commercial games can be published on various platforms and are primarily meant for making profit for a game developer and publisher; the notion of making additional profit can match with the use of ingame advertisement. Similar to movies, advertisers can insert their goods in a commercial game in various ways, serving as another form of product placement. Developers can choose to insert the advertisement in the background, e.g. a billboard in the virtual world of e.g. *Grand Theft Auto III* (Rockstar Games, 2002) or blend a brand into the gameplay. The latter form of advertisement is relatively new and is currently used in only a small number of high profile games. There are indications that video game marketing efforts "will become more pervasive" (Moseley, 2004). Advertising agencies have 'discovered' games as yet another medium to brand into submission.[217]

Initial research points to the direction that gamers do not object the use of ingame advertisement, arguing that (fake) advertisement makes the game space more 'real'

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[216] An advergame could be defined as the integration of advertising messages in an online game and is increasingly used as an integral part of Internet marketing and advertising strategies to promote goods and services to potential consumers (Buckner, Fang & Qiao, 2002). Advergames can also serve as online tracking tools. By both active and passive data gathering, advertisers can learn from customers and collect all sorts of demographic data, email-addresses and data on online behaviour. *America's Army* explicitly refrains from such practices.

[217] The Dutch advertising agency Down Under Ingame Advertising (DUIA) is one of the first European marketing firms to team up with a major publisher (i.e. Ubisoft) to use upcoming games for advertisement (Visser, 2004). A process referred to by DUIA as "ingame advertising", i.e. using commercial developed games for advertisement. Their mission statement is self-explanatory: "Down Under Ingame Advertising (DUIA) is the premier European ad-agency that specializes in advertising opportunities in games. We believe that games are the new, global mass medium, offering huge and exciting advertising opportunities." See: Down Under Ingame Advertising. 2004. Available: http://www.ingame-ads.com/Mission_Statement.3.0.html. August, 22 2004.

(Molesworth, 2003). An expressive example of the need for brand and realism is a mod redecorating the virtual landscape of *Grand Theft Auto III* (Rockstar, 2002). Ironically dubbed *RealGTA3* (or RGTA), this mod, assembled and partly developed by a Czech modder, is a collection of many *Grand Theft Auto 3* (GTA3) modifications "trying to make GTA3 more realistic by adding real cars, buildings or advertisements all over Liberty City."[218] The mod could as well be named 'the best of international brands' mod with ingame advertisement for McDonalds, Pepsi, Coca-Cola, IKEA, Media Market, Pizza Hut and the inevitable Pilsner Urquell. The long list of mod developers from all over the world who contributed to *RGTA* suggests the willingness of amateur software developers to take part in voluntarily branding of virtual worlds.[219]

The willingness to advertise or experience advertisement is also shown in today's persistent Massive Multiplayer Online Games (MMOGs), such as *There* (Forterra Systems, 2003) and *Second Life* (Linden Lab, 2003).[220] These worlds show a mixture of both gameplay integrated and product placement ingame advertising. In some of these worlds (e.g. There) users are enabled to produce their own (non-corporate) brands and use the same branding techniques as clothing companies to brand their goods. With the use of time, money and technical skill, users are able to rival with corporate branded goods in regards of reputation within the virtual world (Book, 2004). Advertisement in MMOGs shows the active appropriation of brands where they are used in the social and economic interests of gamers.

Players actively choose to incorporate brands into their game experience to construct their online personae. Brands in this game setting become indexes of consumers rather than products, signifying consumers as cultural entities (Pennington, 2001). By a carefully constructed web of brands, consumers can market themselves within chaotic online worlds deprived of the necessary signifiers to construct ones identity. That a personality can be defined by naming a number of brands shows the website branddating.nl. Here visitors associate themselves with several brands to distinguish themselves from other daters (Nieborg, 2002).[221] Research into MMOGs suggests that younger age groups have a more positive attitude towards advertisement and branding in virtual worlds than adolescents and adults (Book, 2004). This fits with the results from the Branddating research where a majority of the daters were also fairly young.

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[218] From the RGTA website General Info section located RealGTA net. 2004. Available: http://www.doupal.cz/realgta/info.htm. August 23, 2004.

[219] The inclusion of a brand without prior consent can lead to difficulties as shown in the Playstation 2 game The Getaway (Studio Soho, 2003). This game contains 50 square kilometres of virtual London where gamers have to fulfil all sorts of driving missions. The game pictures a scene where a criminal is dressed up as a British Telecom technician, after which British Telecom protested and in future versions the "advertisement" was removed (Leyden, 2002).

[220] Developer Forterra Systems uses the MMOG There also for training purposes in a military setting: "to create a training system for the U.S. Army's Research, Development and Engineering Command. TPIO-Virtual (TRADOC) has sponsored it for transition." Source: Forterra Systems Inc. 2004. Available: http://www.forterrainc.com/company.html. August 23, 2004.

[221] In addition with their gender, age and place of residence.

A more favourable form of advergaming is gameplay-integrated advertisement (Bulik, 2004; Moseley, 2004).[222] Here a product or service is part of the rules of a game and thus part of its simulation model. Soft drink company Red Bull has integrated its product in *Worms 3D* (Team17 Software, 2004) where it serves as a power-up. A clever integration, oddly shaped power-ups with ever weirder results are part of all the games in the *Worms*-series. Here a can of Red Bull serves as a powerful simulation of the Red Bull slogan "Red Bull gives you wings". It is likely that this mode of advergaming will become ubiquitous, many gamers seem to prefer this form of advertisement much better than non gameplay integrated forms.

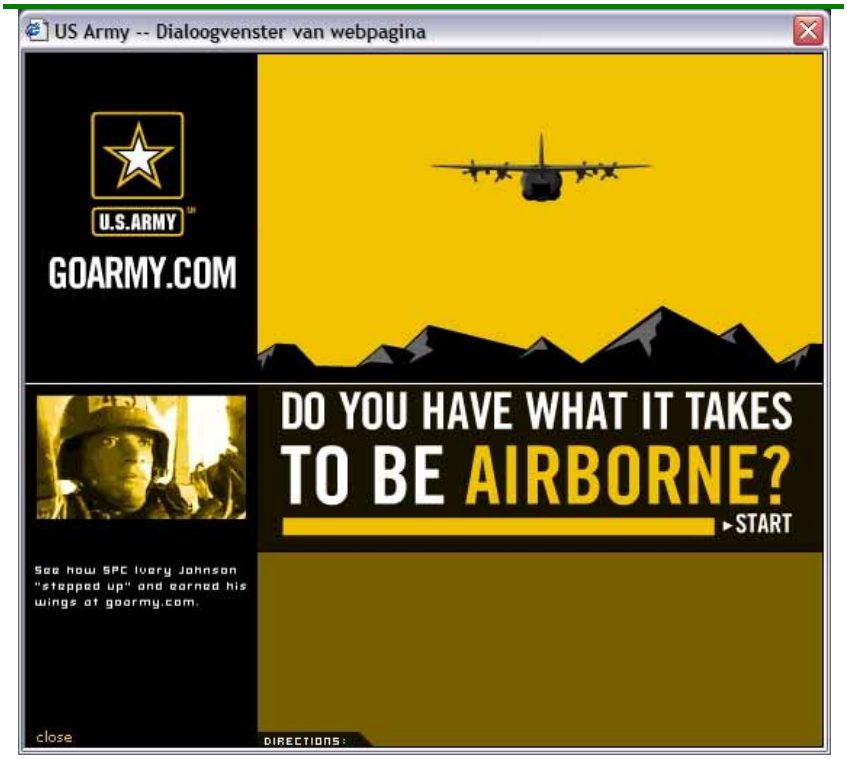

Figure 2. U.S. Army Flash game in a pop-up.

The second category consists of 'pure adver-games', games made with the sole intention to advertise. The games in this category differ in complexity and sophisti-cation and are developed for one purpose only, advertisement. The pure advergame category inhabits a wide array of games, ranging from simple Internet advergames, mostly using Macromedia Flash technology, to sophisticated persistent online worlds. Simple non-persistent advergames are probably the widest employed subcategory of pure advergames, for its low costs and simple development cycle. The International Game Developers Association (2003: 35) in their *Online Games Whitepaper* promote advergames as "a powerful and effective tool for delivering branding and advertising messages" as these games tend to be 'sticky', non-intrusive and able to generate various demographic data of consumers. Small PC web-based advergames can tap into a large group of 50 million U.S. gamers, whereas PC CD-based games such as *America's Army*, have a potential market of less than five million consumers.[223]

[222] Big corporations, such as McDonalds, already invest in branding online worlds. In The Sims Online users can purchase a McDonald's food kiosk, an element deliberately integrated into the gameplay. Book (2004) remonstrates that the McDonald's food kiosks "function more as billboards than anything, they do not live up to their interactive potential." Again pointing out that gameplay integrated advertisement is not necessarily more successful than simple product placement.

[223] There is not (yet) a category of online distributed games in the IGDA Whitepaper. *America's Army* fits best in the PC CD-based category, with all other FPS PC-games. The PC Web-based category has a different demographic of which "a sizable percentage of these consumers are over the age of 30, and at least 50% are female" (2003: 16).

An example of a web-based PC advergame is an U.S. Army game based on Macromedia Flash technology featured on the *GameSpy.com* website (see figure 2).[224] In a pop-up window the player can try to guide a parachuted airborne soldier to the designated landing zone. The ad shows the U.S. Army logo and the URL of the *GoArmy.com* recruiting site, asking visitors: "Do you have what it takes to be Airborne?" luring players into the game. This extremely simple advergame arguably lacks the gameplay to engender immersive play and is primarily used to raise brand awareness and direct visitors to the *GoArmy.com* website. The game pops up when visiting a website and cannot be saved to ones computer, thus the game becomes a random encounter and the non-persistent achievements (i.e. points) do not encourage gamers to play the game again. The subcategory of simple advergames relies on associative and illustrative advergaming.

A more sophisticated form of pure advergaming are games offering a transferring experience, or what Buckner et al. (2002) would call associative advergaming.[225] Here brand awareness is raised through lifestyle association. The sole intent of these kinds of advergames is to get users into contact with its brand and harness a positive game experience within a controlled and branded persistent online world. The games in this subcategory may or may not contain any links to external (web)sites of the advertised service or good and does not enable gamers to actually experience the use of a product or service. A successful example, in terms of the amount of visitors and time spent on the website (an average of 20 minutes) is *Coke Music* (van der Graaf, 2004).[226] *Coke Music* has all the elements of a MMOG and contains all kinds of simple social activities, which can be very time-consuming, ranging from chat to the production of music compositions. The Coca-Cola brand is omni present and many ad campaigns in other media slip into *Coke Music* - and vice versa. Coca Cola's virtual world is more than a game; it is "a social structure based on the constant negotiation of cliques, inner circles, in-crowds and social drama that is enacted throughout a variety of settings. The corporate sponsor is just as likely to be completely ignored in the pursuit of these activities, especially when more powerful metaphors can be found" (Book, 2004: 21).

Where TV commercials, print ads and the World Wide Web rely on representation for the conveying of their message, pure advergames add the extra dimension of simulation. In the case of simple Flash advergames, this extra mode may not directly benefit the overall goal of such a game, e.g. raising brand awareness or creating higher click-through rates. The example of the branded world of *Coke Music* shows how existing game genres can be repurposed to fit

[224] The pop-up ad was shown on August 25, 2004. See http://www.gamespy.com. Gamespy.com is one of the biggest game websites on the web with a high number of visitors.
[225] The subcategory of transferring experiential advergames may also feature the product and thus can be seen as an illustrative advergame.
[226] See: Coke Music. 2002. Available: http://www.cokemusic.com. Established in 2002 this website "over a million views a day, the number of new visitors increases monthly with 200,000, and people spend about 25 minutes on the site" (Van der Graaf, 2004). Additional gain is added through putting out surveys.

the advertisers need. Built upon the template of the commercial game/chat environment of *Habbo Hotel*, Coca-Cola successfully appropriated the game mechanics of a proven game concept and offers a free branded alternative.[227] *America's Army* goes beyond transferring experience as a game that relies mainly on the simulation of combat. The ever-increasing amount of bandwidth and processing power available to consumers, facilitates rich and immersive virtual experiences, showing consumers virtual insights in interactive world previously not accessible to the general public. "By creating leads and traffic through *America's Army*'s design and characteristics, the Army's brand is not about 'just a logo'. It is much more, namely, it is the experience that occurs when a gamer comes into contact with the Army's game." (Van der Graaf & Nieborg, 2003: 329). To market *America's Army* as a combat experience and by simulating army values through a true-to-life infantry combat experience, the Army educates gamers about soldiering. How *America's Army* works as a pure advergame and an experiential marketing tool, will be explored more in depth in the following analysis.

4.1.4 America's Army as an Advergame

The 2001 "Army of One" ad-campaign rings through in the overall design of *America's Army* and is at the basis of *America's Army* as an advergame. The Army's 'core' message is to let possible recruits know that serving in the U.S. Army leads to civilian success:

> "To young men and women who are seeking more, becoming a Soldier is the opportunity that empowers them to succeed. Only the Army strengthens them mentally, physically, and emotionally from day one, to meet and ultimately master any challenge – equipping them to do things they never thought they could do."[228]

America's Army spreads this message and serves the recruiting goals of the Army in two ways. First, it serves as a vehicle for the U.S. Army brand and message. The overall aim of the campaign is that possible recruits have to have the U.S. Army in their 'consideration set' and have to recognise the U.S. Army as a brand identity. The second function of *America's Army* as an advergame interacts with the edugame dimension, i.e. letting gamers know which possible career paths are available upon joining and what a career in the U.S. Army encompasses (i.e. leading to civilian success). The two functions are able to work in conjunction as *America's Army* associate producer David Kozlowski makes clear:

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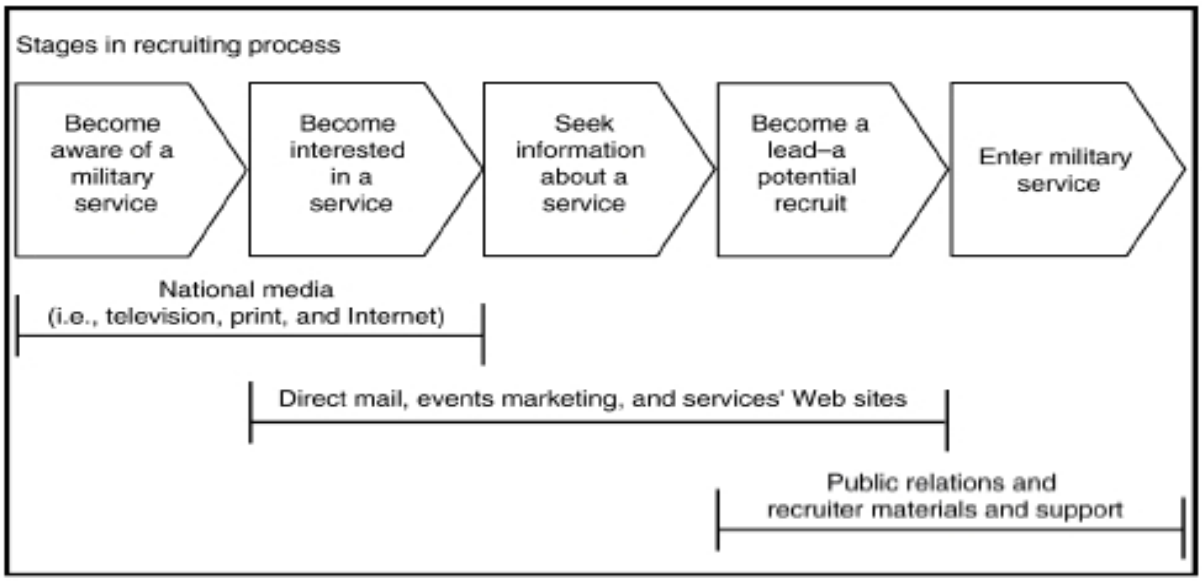
[227] *Habbo Hotel*, developed by the Finnish company Sulake Labs, is a moderated web based chat environment with many franchises all over the world. *Habbo Hotel* is a success with young children (10-14 years of age) and has three million unique users visiting virtual hotels within sixteen countries on four continents. The Dutch version of *Habbo Hotel* had over 2600 visitors on a regular Friday morning in February 2005.

[228] The Army of One campaign is outlined in 'An Army of One Speaker's Kit' developed by the U.S. Army Recruiting Command G5 and by the Army Game Project (2003). See http://www.usarec.army.mil/hq/apa/Index.htm. The 'Army of One Speaker's Kit', consisting of a PowerPoint presentation and a Word document with notes, was downloaded from http://www.usarec.army.mil/hq/apa/speakers.htm. The kit was last modified at August 4, 2004 and the website was last visited at February 5, 2005.

> "Awareness of the Army's missions, opportunities and values are our primary goals. The game serves as a great communication tool to get young people talking about the Army and looking into opportunities within the Army. Recruiters have told us the game has opened many doors for them and is a great icebreaker for them when talking with possible recruits" (GameDaily Staff, 2004).

The potential to encounter *America's Army* and thus the U.S. Army brand via a gaming community, friends, television, the gaming press or even a Masters thesis and the subsequent plunge into a branded military virtual reality marketed as "The Most Authentic Army Game Ever!", makes *America's Army* a valuable tool in the recruiting process. The use of advertisement and the stages in the recruiting process covered by different media, is laid out in figure 3.

Figure 4: The Use of Advertising throughout the Recruiting Process



Sources: U.S. Army (data); GAO (presentation).

Figure 3. The Use of Advertisement in the Recruiting Process (GAO, 2003: 18).

In contrast to representational media - i.e. TV, folders and magazines - a game is able to cover more than one stage in the recruiting process. The interactive potential of the Internet can be used to cover more stages as well. The advantage of *America's Army* as it is distributed today, is that gamers get acquainted with a high-quality free First Person Shooter game much more easily than via a recruiting website (which is used to provide information).[229] Going through the different stages in the recruiting process as laid out in figure 3, and comparing those stages with the different modalities of *America's Army* as an advergame, will

[229] The three primary reasons for visiting the GoArmy.com recruiting website are, helping with the decision to join, viewing job placement opportunities and checking what is new on the site (USAREC G5 Public Affairs Division, 2004). The website thus fulfils its designated role as pivotal point in the 'Army of One' campaign.

shed light upon the advergame dimension of *America's Army* and its role within contemporary popular culture.

The first stage is the most likely one to be entered by gamers. *America's Army* players may become aware of the U.S. Army through logo's and slogans omnipresent in the design of the game and its community, and thus creating the possibility of setting the recruiting process in motion. Both the game and the community feature the U.S. Army logo in a low-profile and non-obtrusive way. The official game website is designed in a way that does not over-emphasize the role of the U.S. Army in the project. The website looks like any other website of a First Person Shooter game – i.e. the game is the centre-point of attention within the overall design. Websites from military themed FPS games such as *Söldner*, *Medal of Honour*, *Call of Duty* or *Delta Force: Black Hawk Down*, all focus on the militaristic theme of the game, contributing to and drawing on the intertextual and commoditised nature of war.[230] The U.S. Army logo is placed within the bottom left corner of the website and those not familiar with the U.S. Army could easily mistake the U.S. Army logo it with the logo of a commercial game developer. The official *America's Army* website has a direct link to the *GoArmy.com* website on the navigation bar of its homepage. The discourse on the official websites of many FPS games feature military vernacular. The *Call of Duty* website uses words as 'Field HQ', 'Intel' and 'Drop zone' to link to the different segments of its website. Both the official *America's Army* website and the design of the ingame menu fit well within existing design conventions and discourses. The only overt branding in the game is the presence of the U.S. Army logo in the bottom left of the ingame menu. The community of *America's Army* is as important as the game, offering a site for fruitful interaction between Army enthusiasts and representatives and the general public of gamers.

The second stage in the recruiting process – i.e. becoming interested in serving in the U.S. Army - logically follows the first stage. The Military Occupational Specialty of infantryman is the main occupation simulated in the game. After going through basic training a gamer can serve in such units as the 10th mountain division, the 172nd Infantry brigade or the 75th Ranger regiment. Through additional training, a gamer can take the role of combat lifesaver or in most maps the role of sniper.[231] The more fanatic or enthusiastic gamers can join the virtual Special Forces by having a certain amount of honor points, and completing two time consuming training sessions, see paragraph 4.2 for an overview of the role of training in *America's Army*. Knowledge about the U.S. Army's core message, i.e. the Active Army is a "door opening opportunity" and a career which can be pursued through (additional) training and dedication, is

[230] See http://soldner.jowood.com/, http://www.eagames.com/official/moh/alliedassault/us/home.jsp, http://www.callofduty.com/ and http://www.novalogic.com/games/DFBHD/, all visited February 5, 2005.

[231] The word 'sniper' is later replaced by 'marksman', Zyda et al. (2004: 25) explain: "On December 23, 2002, the development team released version 1.5. Around this time, the game had come under fire by a Miami attorney on a crusade against violence in video games. Because America's Army was funded by the U.S. government, it proved an irresistible target. The development team was required to make several modifications to counter the negative press generated by this man, including the elimination of the word 'sniper' from the game (which involved major changes to several levels and weapon systems), as well as new voiceovers for the marksmanship schools."

thus imbedded in the composition of the game (USAREC, 2004). The third stage in the recruiting process, seeking information about a service, is partially bypassed by the game's simulation of both combat and training. By playing the game, gamers come across all sorts of information about being a soldier. A great deal of this information is essential to progress in the game. Knowledge about the Army values, such as the Rules of Engagement (ROE) - e.g. the prohibition to shoot at fellow soldiers or civilians - and Army roles, are central to the gameplay of *America's Army*. Another core message is the role of training in the U.S. Army, emphasized in the game by making virtual training mandatory to progress or play certain roles.

America's Army, as any other recruiting tool, increases the chance of becoming a possible lead, and thus entering the fourth stage.[232] Every gamer, whether they are interested in joining the military or not, is a virtual recruit the moment they download, install and start to play *America's Army*. The games' community is by nature very enthusiastic about the U.S. military and discussions of joining the U.S. Army are met with mild enthusiasm on the official forum.[233] Some reactions on the official forum:

> - "Can't say this game increased my likelyhood of going, but it has made me consider the combat arms branch more."
> - "as for me, I was considering joining the Army before the game, and even before BHD (Black Hawk Down, DBN) movie. but the movie made me want to join even more, and the game makes me want to join more everyday"[234]

As for proceeding through one or more stages, there is always the possibility that a possible recruit or interested/curious gamer does not enter a stage because of the lack of knowledge or interest. Although the AGP rationale shows that *America's Army* is more a strategic communication tool than a direct recruiting effort, the portrayal of basic training can, for any reason, put off possible recruits who would drop out eventually, saving money as a result. The Army loses 400 million dollars a year on recruits dropping out during basic training, "with the excuse that the army was not what they expected and combat training was not for them. In addition, the army has spent $75.000 each (recruit, DBN) for training; thus, the army's loss per annum from this drop-out group is $2.2 billion" (Zyda, 2002: 9). By focusing on the role of training in both the 'Army of One' campaign and by the various training missions in the game, potential recruits unfit for military service can be potentially put off. The result: "If the game encourages only 120 potential waverers to stick with it, it's broken even, counting recruiting and training costs. And of course, if it attracts those who would not otherwise have considered an army career, it's worth $92.000 apiece" (Zyda, 2002: 9).[235]

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[232] In the U.S. Army recruiting process, a "lead" is someone who indicated to be interested in joining the Army.
[233] C.f. the research of Li (2004), who interviewed various U.S. clan members, many of whom have some ties to the U.S. Army.
[234] Both postings: "Effectiveness of this game..", topic-url: http://forum.americasarmy.com/viewtopic.php?t=11112, created on Mon Dec 15, 2003.
[235] On the other hand with the current recruiting difficulties the Army spends a significant amount of money on enlistment bonuses. "Qualified applicants who enlist for four or more years in the active Army may receive combined bonuses up to

The way the game and its community are designed increases the likelihood that players will have some contact with the Army through several links with the *GoArmy.com* website, accessible from both within the game, the official website as well as numerous fan and clan websites. There are very few known instances of gamers actually joining the Army after playing *America's Army*, and again, this is not the main goal of the project's rationale. On the other hand, the reactions from the official forum give an insight into how *America's Army* functions as an advergame. The game may, in some cases for some individuals, contribute to the overall knowledge of the U.S. Army and therefore influence a possible chance to become a lead. The fifth stage of actually entering the military (e.g. by signing a virtual contract of some sort) is not (yet) possible; one still has to go to *GoArmy.com* for registering as a recruit and to a physical recruiting station to sign a contract. But then again, taking the door-opening opportunity of becoming a soldier in the Army of One and being bright, honest, dedicated and totally committed to a mission and sharing common values, a creed and a Warrior Ethos, should not be taken lightly.

4.1.5 It's a Branded World After All

Multiplayer FPS games are part of complex social worlds; enabling gamers from all over the world to engage in creative player (inter)actions, creating a subculture with their own rules for communication. FPS games offer "a context in which to exercise safe ritual license with behaviours that would not be tolerated in the 'real' world of every day life (for example, 'trash' talking)" (Wright et al., 2002).[236] Gamers may have various roles, a moderate player can be an enthusiastic and participating member of the official forum (and vice-versa). Apart from the game, gamers, fans, clan members, beta-testers, developers, cheaters and many others use various communication channels and it is in this setting that the U.S. Army is able to construct a global U.S. Army brand.

Where TV commercials and paper ads rely on representation for the conveying of their message, *America's Army* as a game relies mainly on the representational mode of simulation (of combat). Through a carefully branded simulation, *America's Army* enables consumers to "transfer meaning to themselves, defining themselves as cultural entities" (Pennington, 2001), i.e. being a soldier in the Army of One. The creation of engaging aesthetic experiences is a relatively new marketing paradigm and refers to the overall trend in advertisement content towards lifestyle and value systems, consumers base their choices on "whether or not a product or service fits into his or her lifestyle or whether it represents an exciting new concept – a desirable experience" (Schmitt and Simonson, 1997:16). It is about the marketing of sensory

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$20,000." Source: GoArmy com Benefits Money. 2005. GoArmy.com. Available: http://goarmy.com/benefits/money.jsp. April 1, 2005. Other 'bonuses' include 'Imminent Danger Pay' (225 dollars per month) for soldiers fighting in Iraq.

[236] As Bouckaert (2004) noted in his exploratory Bachelor's thesis, the main reason for gamers to play *America's Army* is the social factor of online play.

experiences in strategic communication from the U.S. military to consumers (i.e. gamers) that contribute to the Army's (brand) identity (Van der Graaf & Nieborg, 2003).

The branding of virtual worlds offers a completely new range of opportunities for advertisers to create a web of brands. Brands get their meaning partly through opposition (Pennington, 2001) and the previous example of *RealGTA* shows the low technical, social and virtual barriers of the branding of virtual worlds. Major global brands as Microsoft, IBM, General Electric and Intel do not have the advantage of being able to create experiential branded simulations. Computer software and hardware and consumer appliances seem to miss a central point to create meaningful play. Coca Cola has bypassed this problem by facilitating social interaction in a branded virtual world where teenagers can chat and come together within a branded community. Car manufacturers are arguably one of the other few major brands holders being able to tap into existing game genres and simulate engaging simulations, i.e. a racing game, rather than a branded simulation, e.g. a racing games sponsored by a cigarette brand.[237]

"The brand builders conquered and a new consensus was born: the products that will flourish in the future will be the ones presented not as "commodities" but as concepts: the brand as experience, as lifestyle" (Klein, 1999: 21), a shift is in line with the notion of "the experience economy" (Pine II and Gilmore, 1999).[238] Although Pine and Gilmore talk about the marketing of goods and services of commercial enterprises instead of institutions, their logic can be applied to the U.S. Army as well, as they brand their product (a job in the Army) via the means of experiential marketing. "Cyberspace is a great place for escapist experiences (ibid: 34)" and *America's Army* can stage such memorable experiences, situating itself within existing community structures and design conventions in order to offer a "show", by creating a spectacle based simulation of war.

The intangible and arbitrary associations evoked by brands as symbols (Pennington, 2001), here become tangible, allowing gamers to experience what it is like being a soldier by immersing them into a carefully constructed virtual simulation. The former offerings of the commodity economy are replaced by an economy relying on staging memorable and personal experiences (Pine II and Gilmore, 1999). *America's Army* shows that games can be used for rising brand awareness, by associating the Army brand with a positive game experience. Through the simulation of infantry combat, the U.S. Army is able to get their message across and end up higher in the 'consideration set' of many young Americans (c.f. Davis, 2004). Being able to simulate conflict by using existing conventions, the Army both redefines elements within the

[237] This argument is acknowledged by Frasca (2003: 224-25), who also argues that "simulated environments provide experiences that traditional advertisers cannot deliver".
[238] They assert that there is a continuing shift from an industrial economy via a service economy to an experience economy. This experience economy relies on staging memorable experiences rather than making (tangible) goods or delivering (intangible) services. By providing experiences that are more memorable and by enhancing positive cues and erasing the negative ones, value can be added to brand, leaving a positive memory of a brand.

FPS genre and taps into popular culture. The mixing in of memorabilia (c.f. the persistent Honor statistic in *America's Army*) only adds to this process. The ultimate step of *America's Army* as an experiential marketing tool would be the last phase of economic distinctions, the transformation economy where the very being of consumers is affected and the consumers becomes the product, a gamer becomes a soldier in the U.S. Army (of One).

4.1.6 Saving 'Billions' in Military Marketing

> "The overall marketing strategy of the U.S. Army is a multi-channeled one with the advergame as main fix; it had all the right ingredients to become a fruitful viral campaign" (Van der Graaf, 2004).

Encapsulated in the FPS genre are several key features ready to be appropriated for (successful) digital marketing. The U.S. Army as a brand transformed into the *America's Army* brand and appears able to tap seamlessly into existing game community frameworks. Kierzkowski (in Buckner et al., 2002) provides five distinct recommendations, all of which are present in the production, distribution and consumption of *America's Army*. First, there is the advertisement on and alliances with gaming websites such as *GameSpy.com* and *Gigex.com*. Second, providing participants with a stimulating and motivating game, evident in *America's Army's* much acclaimed realism. Third, rewarding participants with the prospect of beating top scores. This is constructed by the extensive and persistent Honor system which gives a gamer certain credits and acknowledgement among peers as well as goals to aim at (e.g. getting more Honor than a peer). Fourth is the identification of user preferences by providing choices within the game. In *America's Army* players can play in theatres of operation all over the (virtual) world, playing different rolls and familiarizing themselves with a plethora of weapons. And the fifth and final aspect is 'retaining interaction', which is partly taken care of by the community, which consists of the official homepage with its message boards, several (semi-professional) affiliates and fan sites and several IRC channels.[239] Game communities are known for their collaborative and peer-supporting character (Herz, 2002; Jenkins, 2002; Newman, 2004, King & Borland, 2003) and *America's Army* is no exception to the rule (Van der Graaf & Nieborg, 2003).

One aspect directly benefiting the U.S. Army within the advergame dimension is the viral distribution of game related content. The viral marketing aspects of exchanging files and the peer-distribution of *America's Army* bears resemblance to the exchange of computer games on floppy disks in the 1980's (c.f. Kline et al., 2004). The distribution of *America's Army* via the Internet results in various viral effects, ranging from free distribution to free advertisement and the expansion of the Army brand. In the first year of its existence, *America's Army* issued several patches, varying in sizes from 10MB to 300MB. Because of the

[239] "Internet Relay Chat (IRC) is a form of instant communication over the Internet. It is mainly designed for group (many-to-many) communication in discussion forums called channels, but also allows one-to-one communication." Source: Internet Relay Chat - Wikipedia, the free encyclopedia. 2005. Wikipedia. Available: http://en.wikipedia.org/wiki/Irc. March 18, 2005.

huge success of *America's Army*, websites hosting the patches and full versions of the game (version of *America's Army* version 2.3 weighed 762 Megabytes) could not handle the traffic in the weeks after the first release. As a result, gamers flocked to peer-to-peer networks like *KaZaA* and *Bit Torrent* to get the game distributed - initiatives out of the control of the official distributor of *America's Army*, the U.S. Army (c.f. van der Graaf, 2004). Although advergames are meant to be played as much as possible and therefore should be easily accessible, it seems odd that the U.S. Army does not take advantage of peer-to-peer technologies to distribute their rather large files. Buckner et al. (2002) acknowledge the obvious advantages of peer-to-peer distribution and advergames: "Consumer to consumer communication is of value when popular advergames are passed from person to person by email or word of mouth. The marketer may build competitive elements into the online games to encourage this peer to peer transfer (…)." The integration of peer-to-peer technology and advergaming is the ideal combination for the rapid and cost-effective expansion of ones brand.[240]

The loss of control over the distribution may well be one of the fears of the Army together with the problem of file corruption. As a product of the Department of Defense, *America's Army* has to adhere to strict rules and the End User License Agreement (EULA) of the game is clear about exporting the game. The bottom-up and anarchistic nature of file distribution networks make it impossible to prevent distribution to 'certain' countries. By distributing the game via the client-server model, the distribution of the game is more under the control of the Army.[241] The preference for server-client file distribution over peer-to-peer file distribution may also lie in the negative connotation of piracy and copyright infringement associated with peer-to-peer technology. A growing number of game communities legally distribute game content, e.g. demo's, patches and videos, via peer-to-peer technology such as *Bit Torrent*.[242] But from an economic perspective it seems that directly tapping into the social fabric of (game) communities and peer-to-peer networks, outweighs its disadvantages. An enormous amount of third-party websites, not officially affiliated with the U.S. Army, now host *America's Army* for free, but an officially endorsed peer-to-peer program is still absent.

Another reason for the preferred release of the game via client-server based distribution may be the strategic alliances the U.S. Army has forged, directly aiding the dissemination of the U.S. Army and *America's Army* brands. Frequently visited websites such as *Gigex.com*, *GameDaily.com*, *GameSpy.com* and a dedicated webpage on the video card

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[240] C.f. "The need for people to maintain and develop relationships (Henry, 2001) can be exploited to increase the effectiveness of a successful game. The phenomenon known as 'viral transmission' utilizes peer-to-peer networking and social interaction to cause a game and its associated marketing message to cascade through the population" (Buckner et al., 2002).

[241] See point five "Export Controls" of the EULA of *America's Army* version 2.3: "You may not download, use or otherwise export or re-export the Software or any underlying information or technology except in full compliance with all United States and other applicable laws and regulations. In particular, but without limitation, neither the Software nor any underlying information or technology may be downloaded, used or otherwise exported or re-exported (i) into (or to a national or resident of) Cuba, Haiti, Iraq, Libya, Yugoslavia, North Korea, Iran, Syria and any other country to which the United States has embargoed goods or (ii) to anyone on the U.S. Treasury Department's list of specially Designated Nationals or the U.S. Commerce Department's Table of Deny Orders. By downloading or using the Software, you represent and warrant that you are not located in, under the control of or a national or resident of any such country or on any such list."

[242] See for instance: http://www.filerush.com/.

manufacturer NVIDIA, all host the game free of charge. Patches and full versions are added to game magazines all over the world and every recruiting station in the U.S. has some hard copies. Whether distributed by gamers or by gaming websites, the U.S. Army saves millions of dollars a year not having to distribute the game by itself. The inclusion of America's Army in game magazines has saved the U.S. Army already 2.24 million dollars and web distribution saved the Army seven million dollars in producing CDs (Zyda, 2003a). The gaming distribution website *Fileplanet.com*, part of GameSpy Industries, hosted *America's Army*: Special Forces since August 29, 2002 and the game has been downloaded over 1.5 million times until February 2005.[243] The Fileplanet webpage where *America's Army* can be downloaded prominently showed a banner, leading to… *GoArmy.com*.

Besides spreading game content to the far corners of the world, gaming news, gossip and rumours have become an important ingredient of the discourse of online games. Because the Army is constantly updating its game, there is a constant 'buzz' surrounding the game. The developers are facilitating an ongoing discussion about improvements and iterations to the game, leading to the viral effect of spreading news items. Game sites are eager to write about the next patch and new additions to the game. On a similar note, the constant expansion allows word to spread about the games' technology and rational. All members of the AGP constantly give interviews about the role of the game for recruiting, testing and education. Or as the *U.S. Army Recruiting Command Pocket Guide for Conducting Successful Media Interviews* exclaims: "A properly conducted media interview is a terrific way of letting your community know about the opportunities available by becoming a Soldier in An Army of One" (USAREC G5 Public Affairs Division).

One of the questions asked by every journalist and academic unfamiliar with *America's Army* is: 'is the game effective and do you have figures showing how many people joined?' Such figures are non-existent and only when the "current group of thirteen and fourteen-year olds are old to join" (Zyda, 2002), will there be some insight if the game directly aided recruiting. In the coming years, there may be some indications of the role *America's Army* played in the overall Army of One campaign. One if its initial goals has been met: traffic for the *GoArmy.com* website is reported to have risen 28 percent because of *America's Army* (Zyda et al., 2003). A direct link between playing *America's Army* and joining the U.S. Army will always be hard to prove. The design of both the game and the community are not set up in a way that such data can easily be obtained.[244] One thing about *America's Army* as an advergame is clear; the game is extremely cost-effective. The game cost four million dollars a year from 2000 to 2003. With a breakdown of two million in wages, 300.000 dollars game engine costs and 1.5 million for in

[243] Source: America's Army Special Forces (Vanguard) v2_2_0. 2004. GameSpy.com. Available: http://www.fileplanet.com/89806/80000/fileinfo/America's-Army:-Special-Forces-(Vanguard)-v2.2.0. February 5, 2005. This example is just one of many websites hosting *America's Army*. *America's Army* related game files have been the most downloaded file at download.com for some time in 2003.

[244] C.f. "Although no studies have been done to survey incoming soldiers about the effectiveness of the game, Zyda and others believe the game has been effective" (Scutro 2004).

operational costs (Zyda, 2005). In the upcoming years, staffing costs and licensing fees are likely to grow. The twenty million dollars spent on the game pales into insignificance considering the following remark: "The Army estimates *America's Army* has the potential to save some $700M-$4B per year" (Zyda 2002: 9).

Meanwhile, TV commercials still are the single largest advertising cost and a regular component in the Army of One campaign. Television commercials are expensive, but also necessary to reach possible recruits.[245] The most expensive commercial break in the world, during the annual Super Bowl, was considered at the beginning of the Army of One campaign. This idea was soon dropped because it would not reach the target group of 18 to 24-year olds, the group primarily reached by *America's Army*. Interestingly enough, it costs as much to broadcast a thirty second Army of One commercial during Super Bowl as to develop, distribute and maintain *America's Army*, with 4.5 million registered accounts, for one and a half years.[246] The most important goal within the advergame dimension is met, drastically raising the brand-awareness of the U.S. Army. The marketing firm I to I Research ltd. completed a survey of American young people, asking them to cite the source for their favourable impression of the U.S. military. The media coverage of the role of the U.S. Military in the War on Terror ensured that 40 percent of the surveyed college students cited recent combat operations in Afghanistan and Iraq as the answer to why they admired the military, 30 percent named *America's Army* (Au, 2004). It will come as no surprise that the Army now regards 'their game', at an expenditure of about one-third of one percent of the Army's total marketing budget as "the Army's most effective medium for reaching young Americans" (Davis, 2004: 9).

4.1.7 Damaging the Brand: Cheaters

A group of gamers that seems to have become a central part of the *America's Army* player base are 'the cheaters'. Although *America's Army* has built-in cheat commands for use in private un-official servers, the use of these commands in official online servers is not possible, or at least it is not supposed to be. Cheating has always been an integral part of games and every game genre has its own set of cheats (Kücklich, 2004); Aarseth (2003) even sees cheaters as a fifth category of players, an addition to the four player types described by Bartle (1996). As a "game of emergence", the exploratory nature of many gamers leads to behaviour never intended by a game's designers (Juul, 2002; Salen & Zimmerman, 2004). Exploiting bugs and learning tricks by creatively repurposing the rules of the game is a relatively innocent act and almost intertwined with modern day online gameplay. However, there is, as Aarseth remarks "a fine

[245] Of the 13,300 dollars spend on every enlisted recruit, most is spend on 'recruiter pay and operational support' - 8000 dollars - and 'bonuses and incentives' - 3000 dollars (General Accounting Office, 2003).
[246] Late 2003 gamers spend 24 million hours playing the game at the cost of ten million dollars, which would have taken the U.S. Army 120 million dollars without the game (Conte, 2003). In February 2005, 72.000 hours per day on average were played, according to the *America's Army* official website.

line between a funny but harmless bug and a game that is ruined by bug-exploiting players, especially in multiplayer games" (2003: 4). This unsportsmanlike behaviour can be battled by the game designers themselves. A month after the October 2004 release of *America's Army: Special Forces (Vanguard)* version 2.2, version 2.2.1 was released. This patch returned the assault spawn points - i.e. the point where players start a new round - to their original positions on the SF Oasis map. Every new patch shows constant tweaking to spawn points and the weapon layouts of various maps. Some maps became unplayable after investigative players found ways to throw grenades or shoot rockets in order to kill players who just began a new round - a practice called "spawn killing".[247]

While this form of cheating can be combated with (small) adjustments to a map or creative ingame counter-actions of affected gamers (many gamers see spawn nading as mastering the gamespace and a valid play style), the large number of cheats that circumvent the rules of the game are considered a much bigger problem. For multiplayer online FPS games, such as *Counter-Strike* and *America's Army,* the use of software cheats, pre-programmed hacks designed to gain some sort of unfair advantage over fellow gamers, is becoming a plague of epidemic proportions. Only four months after the July 2002 launch of the game, the first cheats surfaced. Alex '[DEV]Abraxas' Mayberry, Executive Producer at the time, comforted the community in what today seems to be an unrealistic promise:

> "Many of you have noticed that a few cheats have appeared for the game recently. I'm sure that you are wondering what is being done about them. I'd just like to assure everyone that our programmers have been working diligently on security measures designed to counter these cheaters. (...) With a little community policing and a quick response from the Dev Team, we should be able to keep AA:O relatively cheat free."[248]

Early 2003, one of the most notorious cheats for *America's Army* was developed: "EvilHack, a Direct3D8 wrapper for use with Americas Army game. It analyses the objects which are drawn by the game engine and provides extended information like player locations and status to the user."[249] By downloading and installing the hack, players could see where all enemies were, as well the weapons they carry and their distance. The Opposing Forces got a red overlay and with a predefined keyboard stroke, the automatic aim-function of the cheat enabled the cheater to kill an opponent with a simple click of the mouse. On March 12 2003, the EvilHack project made it to Source Forge and became an open source project. This made the cheat immediately available for the public and it allowed skilled programmers to develop their private custom made cheats, which are even harder to detect. Li (2004) interviewed the two developers of EvilHack and found that these individuals showed an attitude and agenda

[247] As game technology evolves, this problem is said to vanish as future maps will include random spawn points and civilians (hurting a civilian leads to ROE points).
[248] "Regarding Cheaters", topic-url: http://americasarmy.com/forum/viewtopic.php?topic=34395&forum=15, created on November 24, 2002.
[249] Source: SourceForge net Project Info – EvilHack. 2003. Sourceforge.net. Available: http://sourceforge.net/projects/evilhack. January 13, 2004. Currently offline.

"very typical of the strong techno-libertarian politics attributed to hackers and open source programmers in general." The motivation of the particular hackers had more to do skilful programming and with "the ethos of new media" (c.f. Thomas), than an ideological struggle against the U.S. Army. Reading the numerous posts on the message boards of the EvilHack – SourceForge project, I would add peer-acknowledgement as another motivation to develop the EvilHack cheat. The development and massive ingame deployment of cheats again underscore the gaminess of *America's Army* as a game-based simulation.

From the early start of the game, bugs have always been a part of the game. The developers were "unprepared for the sheer volume of players that flocked to the game" and the massive success caught the development team by surprise (Zyda et al., 2004: 18). It seems that the team never really came to terms with its tight schedule and demanding community. The *America's Army: Operations* version 1.7 release of April 2003 was: "A sub-par release that inflicted several critical bugs upon the community", a release that was played for over three months (ibid: 28). The August 2003 release of *America's Army: Operations* version 1.9 finally added a much-requested counter measure against cheaters: the addition of the third party software of PunkBuster.[250] But by then it was far too late to counter the enormous amount of easily obtainable cheats.

During the years, many cheats surfaced. I tried the EvilHack cheat in July 2003 and much to my surprise it worked (pretty well).[251] I must say that I stopped playing for a month after discovering that cheating was so easy and the distrust never left. An example of a well-visited cheat site is *X*.[252] For over six years, this website offered software cheats for all major FPS games. Up until today, the site offers the latest *America's Army* cheats and hacks to bypass PunkBuster. There are cheats for everything – e.g. no fog, auto-aim, speed hacks, unlimited ammo, the answers to the multiple-choice tests of Medic training and many others. More damaging cheats allow users to enter 'dev mode' and kick everybody in a server and the most recent cheat concern was a result of an altered server that allowed accumulating multiple honor points within several minutes. The effect of cheats on the community has been devastating, as the daily rants on the official forum show:

> "I used to play all the time when version 2.0 First arrived....i stopped playing due to work and now that I've changed Jobs I have returned to the AA battlefield only to notice that hackers are destroying the game that we old school guys loved in the past.....HQ, please do something about this growing problem."[253]

[250] Even Balance, Inc. is the developer of the PunkBuster Anti-Cheat software integrated into *America's Army*. See: PunkBuster Online Countermeasures. 2000. Evenbalance.com. Available: http://www.evenbalance.com/index.php?page=support-aa.php. January 13, 2004.
[251] Using a cheat, even for the 'higher goal' of research, seems highly unethical. I used the cheat on a public server for a couple of hours to test whether the cheat would work and if so, how and if my account would be banned after using it. I did not get caught and the cheat worked. To the gamers I virtually slaughtered that day I would say: my sincere apologies. My account is still active.
[252] An acronym, the URL can be found by those who want it to be found.
[253] Topic title "Hackers!!!!!", topic-url: http://forum.americasarmy.com/viewtopic.php?t=148471, created on February 9, 2005.

There is a steady stream of complaints, threats, farewell messages and appeals to the community and the developers.[254] These posts are immediately locked and subsequently deleted by the forum moderators the moment they surface. Talking about cheating on the official forum is near to impossible. There came another reaction to the nature and scope of cheating in the game. The new executive producer in charge of the public version, Phil "[DEV]Skippy" DeLuca, contributed to the ongoing discussion about cheaters on January 12, 2005.[255] After explaining that the development team somewhat underestimated the scope of cheating and acknowledging that keeping any game cheat-free is near to impossible, he made the following statement:

> "Tampering with software and servers owned or used by the Army is cyber crime. In the early 1940's, Japan learned an important lesson – "let the sleeping giant lie." We may not react swiftly, but when we do it's with unstoppable force. The Army has partners that deal with cyber crime as a matter of course. These include not just various Army IT departments, but also the Department of Justice, the Secret Service, and the Federal Bureau of Investigation. (...) The Army is angry, and we're coming for you."

When referring to cheaters, DeLuca uses the term 'bad guys' throughout his warning, thereby directly using the 'with us or against us'-logic of the Bush-administration. The global online gaming press got wind of the forum post within a couple of hours and they were almost unanimously 'against'. The online news site *Slashdot.org* posted a story from the "i-am-now-officially-scared dept" and the "Slashdot effect" did its work.[256] The post was removed by an America's Army Community Manager (an intermediary between the AGP and the America's Army community), because of 'bandwidth problems'. This explanation led to various postings of community members wondering what had happened in their absence and various conspiracy theories began to circulate. The post by DeLuca opened a Pandora's Box as both gamers and game journalists took the opportunity to make fun of U.S. foreign policy (i.e. the war in Iraq) and the U.S. Army. Some reactions from *Slashdot* readers included:

> - "Has anybody made the mod yet which lets you do naked pyramids :D"
> - "I guess the Army has to find a war to win somewhere. You'd think that they'd be spending their time and resources getting vehicles and personnel in Iraq armored, but I guess you've got to have priorities."
> - "This might be a good thing... Cause we all know that only terrorists cheat at online games..."
> - "Speaking of proof ... We have incontrovertible proof..."

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[254] E.g. this small sample of post all made within 24 hours: "DO WE REALLY NEED PB?", topic-url: http://forum.americasarmy.com/viewtopic.php?t=148323, created on February 8, 2005 & "Cheating becoming more frequent", topic-url: http://forum.americasarmy.com/viewtopic.php?t=148364, created on February 8, 2005 & "where can i report a hacker i have screen shots?", topic-url: http://forum.americasarmy.com/viewtopic.php?t=148464, created on February 9, 2005.

[255] See Appendix B – Original anti-cheater post by Phil '[DEV]Skippy' DeLuca for the full post.

[256] The Slashdot effect is the result of thousands of readers visiting a particular page after reading as story on e.g. Slashdot.org. See also: http://en.wikipedia.org/wiki/Slashdot_effect. The Slashdot article on the *America's Army* post by DeLuca is located at: Zonk. U.S. Army to D00dz - We're Coming for You. 2005. Slashdot.org. Available: http://games.slashdot.org/article.pl?sid=05/01/12/2121206&tid=103. February 12, 2005.

It seemed that only within the *America's Army* community there was some support for the war rhetoric of the developer.

The war against cheater resembles in a way the War on Terror. Both are un-winnable and long lasting, fought by the U.S. Army against an invisible Army of 'evil-doers'. Already in May 2003 there were signs of the battle to come:

> "By releasing America's Army, they may have been drawn into a battle they have no chance of winning, since there is one thing the cheaters and the anti-cheaters agree on. "Games will be cheat-free the same day society is crime-free," says Punkbuster's Tony Ray. "As long as bad people think they can get away with doing bad things, they will try and some will succeed" (McCandless, 2003).

What the loss of the battle against cheaters in *America's Army* shows, is that the U.S. Army tapped into the very fabric of online games, benefiting from all sorts of positive effects (e.g. peer-distribution of the Army brand) but also very negative ones (e.g. cheating and subsequent brand damage). The U.S. Army brand is, through *America's Army*, under constant attack. More and more people are counting online gaming as their favourite pastime and the U.S. Army is more than happy to fulfil this need by offering a free state of the art digital simulation. In an age where the decision to join the military is influenced by advertisement through various media, the importance of *America's Army* as a marketing and recruiting tool increases. But where a broadcast message, such as a television ad, may result in a reading of the commercial text opposite to its intended meaning, the interactive character of games and the fluid character of gaming communities open up a window of opportunity for culture jammers, anti-war/corporative activists, pacifists, artists, academics and bored fourteen year olds. The U.S. Army as a way of life and *America's Army* as a branded experience are high profile targets for those who oppose the Army message, and the collective power of a group of disgruntled gamers may be more damaging to Army recruiting efforts than the Abu Graib scandal.

4.1.8 Concluding Remarks

The question posed in *Together We Brand: America's Army* (Van der Graaf & Nieborg, 2003), still stands: "Indeed, Michael Zyda (MOVES) poses an intriguing question when addressing America's Army's success: "What if the game rebranded the U.S. Army into '*America's Army*'?" The Army brand is likely to expand to various youth popular culture domains such as: "Comic books, extreme sports, music, and college life" (OEMA 2003c, cited in Li, 2004). Various advertising material is handed out during LAN-parties and tournaments and *America's Army* posters and T-shirts and other material are already distributed among gamers.[257] In January, 2005 the homepage of the official website urged gamers to complete a survey about an

[257] For recruiters there is a special Event Support Kit loaded with support materials such as posters, T-Shirts, America's Army CDs, various promotion material and the necessary ingredients to set up a tournament.

America's Army web store featuring custom logo *America's Army* products.[258] The following products are considered: "T-Shirts, sweatshirts, LAN bags, FLEXFIT caps, beanies, stainless beverage mugs, sport bags, skateboard decks, USB watches, MP3 watches, posters, mouse pads and stickers/decals." The Los Angeles-based marketing firm Ignited Minds is responsible for much of *America's Army*'s marketing. The firm created a television ad for the game in 2003 (note the irony of making a commercial for a commercial), the E3 expo booth, game packaging and various promotion material, such as an *America's Army* skateboard.

America's Army has become a brand unto itself, purposely set apart from the U.S. Army brand to be able expand the *America's Army* brand into popular culture. The official *America's Army* brand is defined as:

> "America's Army is the only official Army game designed, created and developed by the U.S. Army. As such, it is the most authentic Army game ever made, as it strives to provide an accurate, comprehensive and dynamic portrayal of the Army experience. Based on the seven fundamental values embodying the U.S. Army—Loyalty, Duty, Respect, Selfless Service, Honor, Integrity and Personal Courage—the game teaches players about personal growth and teamwork, while immersing them in real-life training and combat missions" (Army Game Project, 2003: 3).

Besides advertising the supposed authenticity of the games' experience, this definition signals another important dimension of *America's Army* - education. The game teaches about being a soldier in the U.S. Army, directly in a classroom setting where U.S. Army instructors lecture about being a medic, and indirectly through the games' experiential marketing mechanism. In the next paragraph, in constant interaction with the other dimensions and most notably with the advergame dimension, the dimension of education in the game will be explored.

[258] See: *America's Army* Web Store Survey. 2005. *America's Army*. Available: http://www.americasarmy.com/community/survey_store.php.

Chapter 4.2 The Edugame Dimension

In an interview during the Electronic Entertainment Exposition (E3) in May 22-24, 2002 in Los Angeles, Staff Sergeant Marisol Torres introduced *America's Army* to the public:

> "The game is an educational tool, it lets the community know and understand what the Army is like. You get to build the soldier from the ground up, instilling the Army values that are important: leadership, duty, respect, selfless service, honor, integrity, and personal courage. You get to go through simulated basic training. You get to go to Airborne School. You follow your career path as you see fit within the game. It gives a more realistic view than all the other games that are out there as far as what the Army has to offer" (Merideth, 2002).

Here he aptly summarizes the goals of the edugame dimension, which at that time only had a public version to be released in the following month. Although *America's Army* was initially not designed to be a training system for soldiers, but rather a tool introducing people to the goals and values of the U.S. Army (Shilling, 2003), the public version was from its early conception designed to serve as an edugame. Here the neologism edugame (a contraption of education and game) is used to designate the role of the public version of *America's Army* as a game with educational components meant to give gamers a virtual insight in today's Army.

The goals of the public version of *America's Army* as an edugame are twofold. First, to educate the public about key aspects of soldiering, one of which are the U.S. Army values. Many aspects of both the game and its community are modelled in a way to gain knowledge and information about the U.S. Army. The most visible elements of the edugame dimension are several training sessions, obligatory if one is to unlock certain roles within the game. Gamers are able to gain both explicit and tacit knowledge within an educational setting such as a virtual classroom. One can learn how to recognize shock in the case of the medic training, or the fact that Special Forces have to learn a second language, in the case of the Special Forces training. The second objective is to turn knowledge into action, i.e. to move gamers to become recruits or to generate leads for the *GoArmy.com* website where there is more information about (joining) the Army.[259] The edugame dimension is in this way closely related to the advergame dimension of *America's Army*.

As made clear by Van der Graaf & Nieborg (2003: 325): "The emergent corporate tendency to create engaging advertisements in the form of entertainment, offers customers memorable sensory experiences that tie in with the positioning of the company, product or service and should therefore be studied." As with education, the successful promotion of a service or good relies on the (successful) transfer of (favourable) knowledge and information.

[259] The question to what extent the edugame dimension has any effect seems a logic next step. However, whether gamers do learn something or whether the game is 'read' in a way, intended by its developers, is a (valid and intriguing) question, which unfortunately lies outside the scope of this thesis. As with many questions regarding the effects of the game on its audience, the answers to such questions require deliberate and thoughtful reception analysis to give a hint of what certain gamers in certain situations may learn from playing the game. To suggest that there is a causal connection (for all gamers) between playing the game and learning about the Army, seems stepping in the pitfalls of any effect-based research designs.

As the advergame dimension of *America's Army* shows, the concept of marketing aesthetics, i.e. emphasising lifestyle and value systems through experiential marketing, form the foundation of the strategic communication efforts of the U.S. Army. In the "experience economy", the combination of entertainment and education elicits the integration of educational experiences within a branded virtual gamespace (Pine and Gilmore, 1999). The edugame dimension is thus a continuum, where certain elements of the game serve both the advergame dimension and the edugame dimension. Both dimensions strengthen each other and are interlocked at the most basis level. The advergame dimension of *America's Army* is most bereft from the edugame dimension, when the goal of providing aesthetic game experiences is complemented by explicitly offering information and knowledge that is neither part of the U.S. Army's brand identity, nor central to the gameplay (i.e. needed to successfully play the game).[260] Providing this information does not directly contribute to the Army's brand identity, but it may add up to an Army experience that is more seamless, emphasizing that the game gives a 'realistic' virtual insight into the life of a U.S. soldier. It is clear that almost every component of the edugame relates to the advergame dimension.[261]

The world's largest spender on digital training tools still is the U.S. military, having to prepare hundreds of thousand of soldiers for an occupation where one mistake can mean death. With the rapid technological transformation of all branches within the U.S. forces, nobody escapes some sort of digital training. Today, both the public versions as well as custom-made components of *America's Army* are used to educate U.S. soldiers about soldiering. The use of *America's Army* as an edugame for (future) soldier is an element within the edugame dimension becoming increasingly important for the U.S. Army. In this paragraph, I will first frame the game as a computer game as any other, i.e. a game based simulation which may improve certain (cognitive) skills. The literature focusing on games and education provides a framework to question the relation between gamers and the role of interactive media as education. The analysis in this paragraph of *America's Army* as an edugame is primarily based on publicly available documents about the role of *America's Army* in the AGP. Research reports from military research institutes are used to explain the concept of Army transformation and the role of *America's Army* within this ongoing process. Through the textual and ludological analyses of *America's Army* as a game designed to teach certain aspects of the U.S. Army and by a closer look at the role of Army training within the game, there is reflection on how *America's Army* functions as an edugame for gamers. The observations presented in the last paragraph on the use of *America's Army* as an edugame for (future) soldiers, are drawn from wide range of interviews with AGP members and several military sources.

[260] Certain parts of the edugame dimension, most notably the first to encounter obligatory Basic Combat Training, teach gamers how to play the game as well.
[261] In the future, there could be a shift towards adding components to the game that only serve the edugame dimension. Think of modules directly benefiting U.S. homeland security. By teaching how to recognize an attack with biological weapons or what to do if such an attack occurs, the Army could use *America's Army* as a virtual public service announcement.

4.2.1 Games and Education

Games may well become the dominant way of acquiring knowledge outside educational institutions. The combination of education and entertainment is seen as a powerful combination. It is as Linderoth, Lindström and Alexanderson (2004: 158) say: "The great diversity of the arguments for developing and using games as educational tools makes it difficult to criticize the idea that games are suitable for educational purposes." Prensky (2001), a corporate trainer affiliated with the U.S. military, argues that the 'fun' aspect in what he dubs "digital game-based learning", is the most important motivator for trainees to use and thus learn from digital games.[262] Educational games have to be primarily entertaining and serve only secondly as an educational tool.

America's Army is one of the first widely used games showing the powerful combination of a (fun) game with overt educational components. Edugames in this case serve as the digital variation of the 'spoonful of sugar that helps the medicine go down'. Where simple educational games are limited by their sometimes crude and limited ruleset, *America's Army* offers an engaging and immersive 3D world where gamers can freely explore the U.S. Army in the familiar environment of a tactical FPS game. Elements such as competition, communication with peers and the voluntarily character of participation make it a game held dear by gamers. Many elements within the FPS genre can be duplicated. With the growing complexity of FPS games, the presence of tutorials, interactive instructions on how to operate a game, are common in many contemporary shooters. The ideology of *America's Army* is such that training is seen as natural –i.e. it is a game that simulates the U.S. Army, 'real' soldiers need training as well. Just as any dimension within the Army game, the edugame dimension constantly balances between entertainment and the goals for the Army (e.g. familiarizing gamers with the Army values), acknowledging the core FPS design principles.

Both within the U.S. military (e.g. Zyda, 2005; Macedonia, 2001, 2004), the corporate domain (Prensky, 2001; Herz, 2001) and the academia there are many examples of the use of games for training and education. How games/simulations are used as education within the U.S. military is laid out in detail in paragraph 3.3 and 4.2.5 and illustrates the increasing use and faith in games as educational tools. The use of digital game-based learning within the corporate world and the lessons learned are integrated by using Prensky's observations and topologies. An interesting community where academic, corporate and governmental interests meet, is the International Simulation and Gaming Association (ISAGA), an organization consisting of both scientists and practitioners developing and using games/simulations. For over 35 years, this community has been trying to implement games/simulations within educational settings, offering a rich knowledge base worth exploring.

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[262] Prensky focuses in his book on business, government and military training games/simulations, not on advergames or "pure" entertainment games.

Several academic communities are interested in the combination between games/simulations and education. The survey of Kirriemuir & McFarlane (2003) shows both an increasing use of computer and video games in British classrooms as well as a lack of games being used for relevant subject-based learning. Egenfeldt-Nielsen (2004) gives a useful overview of the current research evidence for and against the usage of game for educational purposes, thereby focusing on learning environments and personal learning factors. The latter is important to bear in mind when framing the use of *America's Army* as an edugame as the age, gender, nationality and academic ability of those who play the game, directly influence to what extent there is some sort of exchange of knowledge and information.

Every now and then articles surface in newspapers where there is attention for the enhancement of motor skills by using games/simulations. Nintendo surgeons, i.e. surgeons who play video games, are said to be more precise and to work faster. The game *Super Monkey Ball* (Amusement Vision, 2001) was used to validate this claim. The director of the Advanced Medical Technologies Institute at Beth Israel Medical Centre in New York used the game as a case study to find better ways to practice medicine. The results of his research were presented at the first Video Game/Entertainment Industry Technology and Medicine Conference, not so surprisingly facilitated by the U.S. Army's Telemedicine and Advanced Technology Research Centre (Berkowitz, 2004). In a similar study Egenfeldt-Nielsen (2003) examined the relationship between motor skills, i.e. hand-eye coordination, the U.S. military and education games. He as well used *Super Monkey Ball* as a case study and concluded that there seems to be no direct correlation between eye-hand coordination skills and computer games. Newman (2004: 64) does acknowledge the possible correlation between playing games and enhanced motor skills, showing improving hand-eye coordination and demonstrating decreasing reaction times by gamers.

However, it is an obvious observation that videogames teach much more than hand-eye coordination (Sullivan, 2004). Pillay et al (1999: cited in Linderoth et al., 2002) highlight a number of cognitive skills that can be obtained by playing games meant for entertainment in non-educational settings. Skills in practical reasoning, complex problem-solving, making inferences as well as engaging in inductive reasoning and using metaphorical maps to generate alternative solution paths can to some extent be improved by playing games. An effects-research by Green & Bavelier (2003) suggests that playing games affects visual processing which results in changes in visual attention. Naturally, there is debate about the role of games as educational media, certainly when the educational content of a game is the learning of specific curricular topics represented in the theme of a (children's) game (c.f. Linderoth et al., 2004). However, learning does seem to occur because gamers learn "the skill of handling games and developing local conceptual tools in game environment", i.e. gamers become computer-literate through gaming (ibid: 174). The idea of a generation of gamers developing digital skills

and becoming computer literate through games is more than real, as well as in the best interest of the U.S. military. The next sub-paragraph addresses this subject.

4.2.2 digital l33t skillz f0r the U$ @RmY

> "Anybody who's played games, they have learned how to learn," said James Korris, ICT's creative director. "They come to this with a body of knowledge that the Army can take advantage of to make their training more effective and more efficient" (Associated Press, 2004).

With an average age of twenty, U.S. infantry soldiers play as a normal pastime during military service, especially when serving abroad. U.S. Marines stationed in Camp Fallujah - Iraq - in late 2004, are reported to massively play all sorts of (console) games ranging from *SOCOM 2: U.S. Navy Seals* to *Madden NFL 2005* to *Halo 2* (Wadhams, 2005). All this plays directly into the hand of Army planners and generals who see individual distributed training as one of the many ways to prepare soldiers for the various threats they have to face in the deserts of Afghanistan and Iraq (Brownlee and Schoomaker, 2004). Playing a game is in essence an activity like every other, you learn by doing it. The soldier's knowledge gained by playing commercial games can be for a great deal directly applied to new wave of military training tools. On the same Xbox that runs *Halo 2*, U.S. soldiers can use their Army version of *Full Spectrum Warrior* to train during 'downtime', while U.S. Marines can use 'their' training game: *Close Combat: First to Fight*. As argued by Lenoir and Lowood (2003): "The entertainment industry is both a major source of innovative ideas and technology, and the training ground for what might be called post-human warfare".

The use of games by U.S. soldiers is an excellent example of the place of games within contemporary youth culture. Many, if not all, of those who actively fight in the Army are members of a generation that grew up with information and communications technologies and made these technologies an integral part of their social life (Rushkoff, 1997). Prensky (2001) cites ten main cognitive styles changes in which the "games generation" differs from their parents. The majority of these styles are directly beneficial to a transformed Army, relying on sophisticated technology to wage modern wars (c.f. paragraph 3.2). The games generation is said to process information much faster than their predecessors, parallel processing various streams of randomly accessible pieces of information. Gamers are connected through various information and communication technologies, which they actively approach, incorporating them in their daily routines of play. Today's youth prefers play to work and expects a payoff after investing considerable amounts of time in a fantasy setting (Prensky, 2001: 51-65). The results of the profound use of ICTs, shows four dimensional shifts with respect to learning. The students of the digital age are better able to deal with a screen-based language, moving from text to multimedia literacy. Second, digital learners are said to use a model of discovery based and experiential learning, which results (3) in the appropriation and transforming of acquired

knowledge and information (e.g. using U.S. Army material to create a fan website). The final dimensional shift (4) shows a bias to action, to do and to experiment instead of to listen and to read (Seely Brown, 2001: 70-72). Prensky goes as far to argue that the games generation has reorganised or even rewired their brains to cope with the new cognitive skills needed to understand and operate new media technologies.[263]

The current use of all sorts of information and communication technologies and the emerging use of military robotics are just two examples of the growing trend of the (re)mediation of warfare. Computer literacy in the U.S. Army is becoming as vital as the skill to wield a weapon. Operating unmanned vehicles, using various intelligence streams (e.g. satellite imagery), or using PCs to retrieve up-to-date battlefield information, contribute to the need for "information-age digital competencies". Schaab and Dressel (2003) of the U.S. Army Research Institute (ARI) offer an interesting insight into the current state of digital training in the U.S. Army and by doing so they offer an account of the information rich environment the U.S. Army has become. One of their findings is that "soldiers want to learn Army digital systems the same way that they have acquired much of their non-military digital expertise: by exploring the software and equipment to solve real problems" (ibid: 4). But also that they learn most by interacting with peers, just as gamers share and form collaborative social networks. Online gaming is in every way thinkable a social experience. Online games and their communities become sites of accumulated knowledge, where there is information and knowledge to be found on every aspect of the gaming experience. Online games "[…] illustrate the learning potential of a network and the social ecology that unlocks that potential" (Herz, 2001: 175). Whether it is making a website, a modification (c.f. Nieborg, 2004a; 2005), playing a MMO game (c.f. Humphreys, 2004) or solving puzzles and problems (c.f. McGonigal, 2003), gamers eagerly develop and maintain sophisticated collaborative social networks where the exchange of knowledge and information is endorsed by all.

A remarkable finding of Schaab and Dressel (2003) is that only twenty percent of the interviewed subjects said that they had a lot of experience with web-based gaming.[264] Soldier recruited through *America's Army* will lack this deficit, but they will also have above average experience with networks, installing hardware and instant messaging.[265] Reading the ARI report is almost similar to reading the official *America's Army* forum. Real soldiers and virtual soldiers (i.e. gamers) share the same demographics and have similar problems with hardware, third-party software, web servers and crashing operating systems, giving a cynical twist to the notion of the 'blue-screen-of-death'. Reading the woes of a soldier in the digitised U.S. Army is strangely familiar with personal computer use:

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[263] C.f. the title of Herz her influential book is *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, and Rewired Our Minds* (1997).
[264] They interviewed 58 soldiers who operated the Army Battle Command System (ABCS).
[265] Together with distant learning and the Internet, these categories are seen are technological aids for training (2003: 6).

> "I work the help desk so I know about the problems. Messaging with MCS-L and some of the other systems has been a major problem. Connectivity between routers and switches is another problem. During the last exercise, the major problem was that none of the upgrades seemed to work. The brigade's typical way to solve the problem was to call the help desk" (ibid: 9).[266]

The Army is actively looking into ways to incorporate "immersive", - i.e. gaming – technologies in actual weapon systems. With the increasing information load that accompanies future network-centric warfare applications, Army researchers use game technology to represent the "multi-dimensional information that might be applied to operational, real-time display of tactical data" (Zyda, 2002: 7). Successfully mastering a game such as *America's Army* demands that gamers become situationally aware fast.[267] A first-time *America's Army* user asserted in an interview: "I learned visual awareness and how quick my mind was, I want to do it again because I know I can do better" (Petermeyer, 2004). Part of playing *America's Army* is mastering its game mechanics, which entails all sorts of data streams, the need for proper data interpretation and anticipating future bottlenecks. Col. Casey Wardynski, the AGP's originator, is not afraid to implicitly link playing *America's Army* as an online tactical war game with the future practices of the U.S. Army:

> "Our military information tends to arrive in a flood … and it'll arrive in a flood under stressful conditions, and there'll be a hell of a lot of noise. How do you filter that? What are your tools? What is your facility in doing that? What is your level of comfort? How much load can you bear? Kids who are comfortable with that are going to be real comfortable … with the Army of the future" (Webb, 2004).

Gamers getting ready for information age warfare through a game based simulation may seem farfetched, but the various competencies needed to (successfully) play a round of *America's Army* are indistinguishable from the tasks constituting a wide range of military occupational specialties. In a transformed Army, retrieving software from the Net, installing software and communicating through various a-synchronous and synchronous communication channels, is becoming as important as firing a rifle. Gamers have to keep track of a variety of data streams within the game – e.g. where are the opposing forces, who is talking to me, where are my team-mates, where is my medic, how much time do I have left to complete the mission, how many bullets do I have left, what is the quickest way out of this hospital, what is that noise and why am I already dead? These questions are just a small sample of the data streams gamers have to answer every second they play the game.

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[266] MCS is short for Maneuver Control System, a communication application within the ABCS system.

[267] "Situational awareness entails (1) perceiving important information is available; (2) comprehension or interpreting information and it's relevance to the mission; and (3) projection or forecasting future events or decisions based on the information" (Ensley, 2000, quoted in Schaab and Dressel, 2003: 12).

Becoming computer literate or enhancing one's digital skills by playing games is a by-product, an unintended but very useful outcome of distributing a high fidelity training tool used by gamers and soldiers alike. Many of the previously mentioned skills can be learned by playing games, installing software, using trial and error tactics to solve problems and communicating with peers. The surplus value of *America's Army* from an Army viewpoint is that gamers become computer literate in a branded world made possible by the U.S. Army. Gamers familiar with the game will encounter it again after joining the U.S. Army, only this time it will be a training tool. In order to discern *America's Army* as a generic edugame and the explicit goals of the AGP to teach gamers about being a soldier in the Army of One, the following paragraph will show how various components in the game interact to get the Army message across.

4.2.3. America's Army as an Edugame for Gamers

Following Prensky's categorization of training games, *America's Army* could be labelled as an intrinsic learning game (i.e. the content of the game is an integral part of the game structure). The game has both tightly linked and loosely linked components. From the perspective of a gamer who strives to educate herself in order to master the game, *America's Army* is a tightly linked game. Having knowledge about every aspect of the inner-workings of *America's Army* (e.g. maps, weapons, tactics, roles) is vital to the succeeding in and winning the game. But from the perspective of the U.S. Army and its goal to educate gamers about soldiering, *America's Army* contains more loosely linked aspects. Medic Training is, for instance necessary to unlock the role of Combat Life Saver in the game, but after completion of the training, the actual knowledge (e.g. how to treat a soldier in shock) is not necessary to succeeding or winning an online session. Most notably, explicit knowledge about Army values is never needed to perform a task or to advance in the game.

The following statement from the official manual of the game aptly summarizes the main elements of *America's Army* as an edugame: "In order to educate the American public about the U.S. Army and its career opportunities, high-tech environment, values, and teamwork, the U.S. Army has released the *America's Army* game" (Tran, 2005: 6). The three primary concepts gamers may acquire by playing the game are, a basic understanding about being a U.S. soldier, insights in the different roles available when one enlists (and what it takes to fulfil such a role) and the fact that the U.S. Army is a value-laden organisation. These three elements can be divided into explicit educational components, offering overt and explicit knowledge about the U.S. Army, e.g. soldiers immediately get trained how to handle weapons during Basic Training. Other educational components are more implicit, here gamers have to deduct Army concepts that are more abstract, e.g. the U.S. Army values. Whereas the single player training sessions of *America's Army* have a more explicit educational appearance,

implicit educational elements will surface during online gameplay.[268] Since the game is in constant development and the rationale behind the project is transforming on a constant basis, certain elements within the edugame dimension can change depending on a wide range of factors. An example is the rapid change in army technology and doctrines. With the advent of the War on Terror, the Department of Defense saw the need for more Special Forces troops and thus more recruits. Here the advergame dimension directly interacts with the edugame dimension. In November 2003, *America's Army: Special Forces 2.0* was released, offering Special Forces roles, weapons, scenarios (maps) and three training segments.

Within the edugame dimension, as much as in the other three dimensions, there is a constant negotiation between the conventions in the FPS genre and the goals of the U.S. Army. The edugame dimension is stressed by the developers in their 'post-mortem': "We took Counter Strike as our model, but with heavy emphasis on realism and Army values and training" (Zyda et al, 2004). The analysis of the games' different training parts, reveal that the goals of the Army can perfectly coincide with current design conventions for games with a military theme. Albeit the game's realistic approach to combat simulation, it should not be regarded as a tool to teach marksmanship – i.e. how to shoot a rifle, nor a tool to teach how to kill. Although knowledge and information about marksmanship can be obtained through the game, I will argue hereafter that the game is not designed to do so, nor capable to do so in its current (public) form. By examining this specific question – is it possible to learn to shoot a rifle by playing *America's Army*? -, there is a reflection upon *America's Army* as an edugame and the role of (virtual) training in the U.S. military.

The distinction between knowledge and information made by Seely Brown (2001) is useful to deepen the understanding of how and what gamers may be able to learn from playing *America's Army*. Information is something non-personal; it can be looked up and is more easily transferable than knowledge. *America's Army* is full of information about the U.S. Army. The name of the standard rifle in *America's Army*, the M16A2 Assault Rifle and the fact that its magazine contains 30 bullets with one bullet in the chamber, is easily obtainable through the game. In addition, this kind of information can be looked up by any individual in for example the official manual (Tran, 2004: 141). Knowledge on the other hand has a more personal attachment, is harder to transfer than information and is something "we digest rather than merely hold; it's usually deeply intertwined with the knower's understanding of the practices surrounding its use (Seely Brown, 2001: 65). Knowledge can be split up in two dimensions, explicit knowledge and tacit knowledge. Seely Brown (2001: 66) explains: "The explicit lives in books and in our brains as concepts and facts and deals with the 'know-what.' The tacit deals with the 'know-how' that is best manifested in work practices and skills. The tacit resides in action, most often in participation with others."

[268] Explicit and implicit educational elements are present in all parts of the game and serve different roles for different gamers.

There is much knowledge to be gained about soldiering while playing *America's Army*. Although the game can be looked at as 'just a game', *America's Army*, as a game based simulation of infantry training and combat, is able to provide far more knowledge about soldiering than other non-interactive media. The recruiting website *GoArmy.com* emphasises the importance of training by providing a range of information of the different elements of Basic Training. Potential recruits can watch clips showing some aspects of training but actual experiencing Basic Training and thus gaining both explicit and tacit knowledge, is only able by doing it in real life or through simulation.[269]

The knowledge gained by participating in Basic Training, such as the breathing cycle of a soldier, which affects a weapon's accuracy, is directly beneficial when gamers go online. Information about the position of a soldier while firing his rifle, also affecting accuracy, can be looked up in every Army Field Manual. The static notion that accuracy is influenced by a soldier's position is supplemented (by playing the game) by knowledge to what extent this posture actually influences weapon handling. A gamer may learn that he can stand and shoot with little regard of breathing when a target is close, but when a target is far away one has to lie down and shoot only when at the top or bottom of the breathing cycle. In this case, information is turned into knowledge the moment a gamer encounters this given situation, which is more than likely to happen during marksmanship qualification at the Rifle Range. The role of Basic Training is set up in a way that gamers not only are able to acquire a vast amount of information but also explicit and tacit knowledge about the U.S. Army. By going through a virtual simulation of Basic Training a gamer may gain explicit knowledge, such as experiencing the rate of fire of a M16 rifle, but also tacit knowledge, such as the complex interplay between various factors influencing combat effectiveness and the moment to fire a rifle. Countless other examples of gaining extensive knowledge about Army procedures, the effects of weapons, the need for proper communication and the like, can be gained by going through training as well as playing the game online.

Learning how to virtually fire a M16A2 is used as a simple example here to show how the game operates within the edugame dimension. This example gives *America's Army* an edge over other forms of advertising because individuals are able to experience what it may be like to go through Basic Training. To what extent gamers actually absorb any sort of knowledge or information is a question that needs more research. It is obviously not in the best interest of the U.S. Army, or any other institution in the world, to actually teach gamers how to shoot a real M16 rifle. However, the same way gamers learn about how to shoot a virtual rifle, gamers can be taught other vital elements about being a soldier in the U.S. Army, which benefits the strategic communication dimension of *America's Army*. The emphasis on training may teach

[269] Note that because of the interaction of the edugame dimension with the advergame dimension, information and knowledge about Basic Training may be influenced by both.

gamers that recruits can have a career in the Army as long as they are willing to do their best. The various forms of training in the Army can be hard, repetitive and boring and letting potential recruits gain knowledge about the nature of training, may put off recruits who eventually will drop out during Basic Training. On the other hand, knowledge about various 'positive' elements about the Army such as being a part of a team, being a member of the "Army of One" can now be experienced online.

4.2.4 A Closer Look at Army Training

The first thing one has to do after registering an *America's Army* account and username is to go through Basic Training, which is compulsory. Basic Training is an example of an intrinsic and tightly linked element in the edugame dimension. Obviously, the fact that *America's Army* is a multiplayer online tactical FPS restricts certain crucial key aspects of training games but on the other hand, it opens a window of opportunity for the developers who can directly make use of existing gameplay conventions within the FPS genre. Many FPS games start with some sort of ingame tutorial. While some tutorials are set apart from the game, the integration of learning to play the game and laying out a games theme can be seemingly integrated into the beginning of a game. Take for example the FPS *Halo: Combat Evolved* (Bungie Software and Gearbox Software, 2003), in this game a gamer slips into the suit of Master Chief, the ingame representation of the player. In a laboratory setting, the gamer gets directions from Non-Player Characters (NPCs) who command and 'test' the player by making him/her look up and down and move around in the laboratory, thereby introducing the games' narrative and educating the gamer about the controls. In the World War Two FPS *Call of Duty* (Infinity Ward, 2003) a player has to go through a training session similar to *America's Army*, although shorter and less complex. In *Call of Duty*, a gamer learns how to wield different weapons as well as movement skills.

Gameplay integrated tutorials are thus a normal element in many games and the design of Basic Training conveniently taps into existing game design conventions and at the same time emphasizing the important role of Basic Training in the real U.S. Army. This view is summarized by the developers as:

> "The triumph of America's Army is that it manages to grip an action-oriented audience while insisting on a formal, educative structure. As every general started with boot camp, so also in America's Army you earn access to online play by paying your dues in basic training (thus experiencing the Army's merit-based promotion) and qualify for good stuff like marksman, airborne, and medic through advanced classes." (Davis et al., 2004: 10)

In comparison with other FPS games, and compared to *Counter-Strike* which has no training components at all, the training parts in *America's Army* are quite extensive. By cleverly emphasising the role of 'real world Army training', the game expands existing genre

conventions and may even redefine future tactical FPS game-design. No matter how good you are in any other FPS game or whether you are a general in the real U.S. Army or a fourteen year girl from Okinawa, entering *America's Army* means going through Basic Training, a 'lesson learned' by 2.8 million gamers. On the other hand the two million registered accounts which did not finish 'Basic', may suggest otherwise.[270]

Basic Training consists of four parts. Part one starts at the Rifle Range in order to qualify with the M16A2 rifle. Then there is an Obstacle Course followed by Weapon Familiarization Course, where one is familiarised with standard U.S. Army weapons such as the M249 Squad Automatic Weapon (SAW) and its effects. Basic Training ends with Urban Tactical Training where the knowledge of the previous three training session are put to use. The developers explain the rationale behind Basic Training: "[it] teaches you to think Army-style (forget shooting your drill instructor) and provides a handy space for learning how to manoeuvre before joining online play" (Davis et al, 2004: 11). Important steps during training are, to always listen to the drill instructor and to follow his instructions (i.e. to fire when ordered to do so). When a gamer aims at the drill instructor and fires at him (yes, that was the first thing I did as well), Basic Training is immediately over and one has to start all over. The proficiency of gamers is tested as well, a score 23 out 40, or higher is needed to qualify as a marksman (i.e. to advance in Basic Training).[271] After the completion of Basic Training, one has to upload the results to ones 'personal jacket' - the online U.S. Army database where all passed training parts are stored. Background information (e.g. how long Basic Training takes and what it consists of) is available in the game's menu:

> "In red phase, weeks 1-2, recruits begin the process of becoming a Soldier. They learn the Army values, and work on their physical fitness. They learn about communications, basic first aid, map reading, and the military justice system. They also practice drill and ceremony and negotiate the Obstacle and Confidence courses. Before moving to the next phase, soldiers must successfully complete a knowledge and skills test" (U.S. Army, 2004).[272]

This information is obviously available at the *GoArmy.com* website and is now seemingly integrated in the game as well. Curious or exploratory gamers may read it when they do not pass Basic Training or just want to know more about the U.S. Army. The information offered by the ingame menus is non-obtrusive, inconspicuous and in line with the interface design of other FPS games. In this way, the U.S. Army cleverly offers little pieces of information to those who may otherwise never have been reached, slowly adding to the overall knowledge of the U.S. Army and expanding the edugame dimension.

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[270] There are 4.8 million registered accounts and 2.8 million with Basic Training completed, resulting in two million dummy accounts.

[271] The goal of Marksmanship Training is to shoot red man-shaped silhouettes popping up at irregular intervals. A recruit receives 40 bullets. For a full account of Basic Training see Tran (2005) or just install the game and play it.

[272] With the transformation of the Army and the asymmetric nature of contemporary warfare, changes to the nature of Basic Training are discussed, i.e. emphasising field training and heavy weapons training (Volkin, 2005).

In order to unlock certain roles and maps, players can choose to go through advanced training. Four categories are available, each divided in several sub-training parts. The four Advanced Training courses are Airborne School, Medic Training, Advanced Marksmanship School and Special Forces Training. At the Airborne School, one can become a paratrooper, by subsequently jumping of a 250ft Tower and by performing a night jump (and landing within the drop zone). At the Advanced Marksmanship School, players can unlock the role of sniper by qualifying with the M-24 and M82A1 sniper rifles.[273] Special Forces Training contains the most rigorous and difficult training courses, emulating the challenges of real-life Special Forces training. To qualify for Special Forces Training, one has to be Airborne qualified and have at least fifteen honor points. When eligible, two courses are available. The first course is the 'Aircraft, Vehicle and Weapon Identification' (AVWID) course, a classroom lecture followed by a multiple-choice test. The second course, Escape and Evasion (E & E), has been controversial the moment *America's Army: Special Forces* became available. The training starts when 'students' are brought in by helicopter to a forested environment. The goal is to reach a certain point while evading attentive guards. Only by (painstakingly slow) crouching and skilful manoeuvring, this course can be completed. Passing the course takes a minimum of 25 minutes of careful (or frustrating) navigation, but before figuring out which route to take, gamers may spend many hours in single player mode.[274] Many gamers are put off by this amount of dedication. Others praise the second training part for its emphasis on real Army Special Forces training as well as giving it those who pass the course a sense of status, which is very important factor in testosterone-heavy online FPS games.

4.2.4.1 The Birth of a Combat Life Saver

In august 2003, *America's Army* version 1.9 introduced the role of Combat Medic (or Combat Life Saver). The educational components of the Medic Training are very intriguing because they contain elements that are directly applicable in real life. The setting of the training course, three classroom lectures followed by a multiple-choice test, adds a new dimension to the FPS genre. No other FPS game ever included such an overt educational component, compulsory to unlock the ingame role of combat life saver. The ingame tutorial approach similar to Basic Training is absent in the Medic Training. The course starts within a military hospital where the player is urged to find his way to his first class: 'Airway Management'. When entering the classroom, the player finds himself surrounded by fellow soldiers, both male and female, who are waiting for you so class can begin. The Instructor welcomes you with a brisk "Welcome to class, soldier", after which you must take a seat behind a desk. Then, the instructor starts with a slideshow, lecturing about the importance of role of Basic First Aid in the U.S. Army, casualty

[273] One can only go through Advanced Marksmanship School if one scores 36 or higher (out of 40 silhouettes) at the Rifle Range.
[274] It took me more than four hours to complete the E & E training. It took me more than three days, as I quit after trying for an hour.

evaluation and airway management, see figure 4. The slideshow consists of twelve slides with pictures showing how to open the airway. The instructor lectures on:

> "The method to open the airway on a casualty with no suspected head or neck injury is the 'Head Tilt Chin Lift' method. Since the tongue is the single most common cause of airway obstruction, the airway in most cases can be cleared by simply extending the neck. This action pulls the tongue away from the air passage in the throat. This procedure again is called the "Head Tilt Chin Lift" method" (U.S. Army, 2004).[275]

Figure 4. Ingame screenshot of the Medic Training in *America's Army* version 2.2.1.

As this excerpt shows, the lesson is fairly detailed and if a player wants to learn anything, he really has to pay attention and even may have to write down some notes. The first time I entered Medic Training, I had a mixed attitude of not knowing what to expect coupled with the usual bravado of a FPS player. Writing down notes to pass a test in order to play a different role in the game seemed a bit weird. Then the multiple-choice test came along, consisting of eighteen questions. Question eight directly relates to the overhead excerpt:

[275] In Appendix A – *America's Army Medic Training Transcript*, the complete transcript of Medic Training 1: Airway Management can be read.

"The most common cause of airway obstruction is:
A: Inadequately chewed food
B: The tongue
C: Foreign objects
D: None of the above"

I failed at my first try. Overconfident and with no direct reason to really pay attention during the course, I was too much distracted by the design of the course. After completion, the test has to be taken to the instructor who gives the score, 70 percent of the answers have to be correct in order to go on to the second course (i.e. Control Bleeding) and after three lecture sessions, the course ends with a short and simple field training exercise.

The four missions are developed in cooperation with the Brooke Army Medical Center. The training was first envisioned to contain a mission that would incorporate training to recognize the symptoms of nerve agents as well as immediate self- and buddy-aid for nerve-agent casualties, funded by the U.S. Army Forces Command (Zyda, 2002: 9). This mission is not (yet) implemented in the public version of *America's Army*, but the overall goal "to convey lifesaving information applicable to the general population for homeland defense", seems to be met. It has yet to be seen whether the information gained through this training will be of any use to someone, somewhere. The AGP director is optimistic about the role of the medic training in *America's Army*: "Col. Wardynski hopes that cadets and soldiers will use the simulation and learn lifesaving skills they can use in actual combat. 'By the time a kid has worked through this he'll know as much as a medic about battlefield trauma,' he said" (Roth, 2003).

4.2.4.2 Teaching Army Values

A more implicit educational component in *America's Army* is the propagation of the Army values. The U.S. Army values and the attention they get in both the game and the community may seems strange to outsiders, but the use of the seven values within the Army are just as common as learning how to properly throw a grenade. Soldiers are expected to live up to the values around the clock, even when they are off duty. The seven values are Loyalty, Duty, Respect, Selfless Service, Honor, Integrity and Personal Courage (forming the abbreviation LDRSHIP).[276] The developers explain how they tried to simulate the Army values in the game:

> "[America's Army] rewards soldierly behaviour and penalizes rotten eggs. This works out in practical ways. In basic training, for example, you can opt to become a combat lifesaver. Doing so reflects duty and selfless service, so you get points and expanded opportunities for going through training. Out on mission, your buddy collapses in front

[276] As noted by Prensky (2001), the commercial game developers of Will Interactive created Saving Sergeant Pabletti to educate recruits about the prevention of sexual harassment, equal opportunity, diversity and discrimination, cross-cultural communication and the Army values. The game was used to train soldiers serving in the Abu Ghraib prison after the abuse scandal surfaced last summer (Zeller, 2005).

> of you. You can attend him, which earns points for loyalty and honor, or keep running, which scrubs points. If you do stop, you become a target yourself, which takes courage, and if you're hit, your health will suffer, so you need the integrity to inform your actions with sound judgment. Doing your duty and saving both your lives wins the most points. Just like in combat" (Davis et al., 2004: 11).

It seems that pointing out the seven values and giving them constant attention within as many elements in the game as possible, is the only way to make the Army values a part of the game. The quote above describes actions, consciously taken by 'a gamer'. The primary reason for a majority of gamers to become a medic (which would reflect selfless service) or helping a wounded teammate in the heat of battle (which would reflect integrity) has more to do with peer-pressure and game conventions than Army values. These actions are to be seen in many other online games. Most notably Massive Multiplayer Online Role Playing Games, such as *Neverwinter Nights* (Bioware, 2002) and *Habbo Hotel* (Sulake Corporation, 2000) are rich social spaces where actions such as 'sacrificing' (which a gamer would dub helping, nurturing or role-playing), are the driving forces in such virtual worlds (c.f. Salovaara, Johnson, Toiskallio, Tiitta and Turpeinen, 2005). For many gamers the sheer joy of playing tactical FPS games comes from playing as a team and the appropriation by the U.S. Army of common ingame actions and labelling them as value-driven expressions, is quite bold to say the least. By offering a true-to-life combat simulation the Army may provide a gamespace where Army values may become more explicit. Nevertheless, any other game with similar gameplay mechanics (e.g. helping another player while facing danger) could enable behaviour in accordance with the U.S. Army values.[277]

4.2.4.3 Reflections on Army Training

Looking at the large number of gamers voluntarily passing Basic and Advanced Training, it seems that the dream of successfully combining entertainment and education through a game-based simulation has come true. The sniper training is completed by 13.4% of the players, and 340.000 players, 7,4% of the total amount of registered players, completed Special Forces training.[278] Despite this 'success', there are at least three factors seriously hampering any form of transfer of knowledge and information about the U.S. Army. The first factor is that FPS games by default lack any form of reflection. The other factor is the nature of digital gameplay, which has more to do with mastering (the rules of) a game than with any reflection upon ingame actions and the third factor is the abstract nature of any simulation. There is no

[277] An example of the emphasis given to the Army values is during the first Medic Training lecture: "In many cases, you will be risking your own life in a selfless way to provide first-aid. You are doing what's right, and showing personal courage, both physically and morally. By performing first aid, we are living up to the Army value of honor, because saving a human life brings honor to yourselves and to the United States Army" (U.S. Army, 2005). See also appendix A.

[278] On February 1, 2005 *America's Army* counted 4.6 million registered accounts, but 'only' 2.6 million completed Basic Training. Advanced Training seems to be something for the more dedicated gamers, who want to take their gaming experience to a new level.

way that *America's Army* can come close to the simulation of a profession that takes years and years to master. I will discuss the three factors hereafter.

Because of the action-oriented gameplay, a result of directly tapping into the FPS genre, reflection is not hardwired in the game. This absence can seriously hamper knowledge transfer and may reinforce negative training. First Person Shooter games do not have any form of off-game reflection such as an After Action Review (AAR) - the common debriefing process after military training. Debriefing has always been an important element in any learning environment. Without a trainer or instructor, there is no supervision to validate the proper learning outcome (Egenfeldt-Nielsen, 2004). Reflection during online play is possible in between rounds when a gamer dies and has to wait until the next round begins. Gamers can use the ingame text chat interface and communicate with other (dead) players about the cause of their dead, but as the analysis of Wright, Boria and Breidenbach (2002) shows, only a small percentage of gamers actually reflect on performance their actions (in a productive manner).[279] During a game, in my experience, there is neither time nor the need for any form of serious reflection upon ingame actions. Serious reflection upon Army values by gamers during online play is a utopia.[280]

It would not be hard to implement some sort of After Action Review where gamers can look back at their actions and can discuss knowledge acquitted through training or discuss the merits of the U.S. Army values. Adding such a component would be in total conflict with the FPS genre where fast-paced action is the norm. The only serious reflection takes place offline, e.g. on the official forum where gamers tend to talk about every little detail of the game, such as the Rules of Engagement and proper tactics (and thus indirectly about Army values). A comprehensive After Action Review System is said to be included in the government version of *America's Army* in the near future (OEF_XR, 2004).

Playing war in *America's Army* is as with all FPS games, a process of demystification. Not so much a process of not learning how to be a soldier within the U.S. Army, but learning how to think like a computer (Friedman, 1995). Newman (2004) poses that: "By learning to 'drive' any given vehicle in the driving simulation *Gran Turismo* (Sony Computer Entertainment, 1998) the player is engaging with, exploring and perhaps ultimately mastering, the game's simulation model." The same goes for *America's Army*. Players get a sense of mastering the simulation model of an infantry battle. This argument is exemplified if one looks at the differences in playing styles between *Full Spectrum Warrior* and *America's Army*. Where gamers in *America's Army* are reluctant to group too close together, one well placed 'nade' (grenade) could kill two or more players altogether, a fireteam (of four) in *Full Spectrum Warrior* is always in a very tight formation. Another example of the use and practicing

[279] Two categories of talk that could serve as some sort of debriefing upon ones actions are what Wright et al. (2002) call "perform talk" and "game conflict talk". Reflection upon Army values could be placed in one of these two categories.
[280] Although gamers who are more serious (e.g. members of a clan) may analyse their play after a round or a match, this is not common practice.

'mastering skills', is the problem of so called 'spawn nades'. By practicing the throwing of a grenade at the beginning of a round to the opposing forces, players are able to learn to kill a less experienced enemy with a single grenade. As said before, these kinds of 'tactics' are much criticised, for it relies not so much on combat skills but more on (off-line) practice. 'Spawn nading' is a result of the static nature of the gamespace and the use of this grenade-throwing tactic is counter-immersive and shows the attitude of many gamers - valuing the game as an interactive simulation model without an external reality. As Newman (2003: 139) notes: "To play a videogame may be seen as involving the scrutiny of the parameters of the simulation and the exacting of a performance within it that maximizes the benefit to the player." When a gamer has to choose between the Army values and winning, - i.e. killing opponents through tricks and exploiting ones knowledge of the simulation model - winning wins.

Sergeant Michael C. Volkin who wrote the book *The Ultimate Basic Training Guidebook* reflects, on the representation of Basic Training in the media, thereby emphasising the reductive character of the simulation of Basic Training in *America's Army*:

> "Many enter the service with an inaccurate concept of what it means to be a soldier. Hollywood has embellished the soldier's image by creating movies with gruesome battle scenes. These types of movies sell tickets. No one is going to watch a movie about three soldiers' experiences on kitchen duty. The truth is, during your nine weeks of basic training you will learn to kill enemy soldiers" (Volkin, 2004: 12).

The advergame dimension and the edugame dimension and of *America's Army* have an equally vital part in teaching the gamer about the role of Basic Training in the U.S. Army. As a result the virtual Basic Training in *America's Army* gives a distorted view on real-life Basic Training. Only a very small part of the real life course, which takes nine weeks, is simulated in the game. Only the 'fun' parts are present in the game - i.e. firing weapons and a short obstacle course. Real-life training consists of repetitive training, waiting, being yelled at on a constant basis and is meant to be physically and mentally challenging (ibid). It would be interesting to investigate what kind of image gamers unfamiliar with real-life Basic Training obtain by playing the game.

4.2.5 America's Army as a Training Tool for (Future) Soldiers

> "Are there plans for using the game in the U.S. Army?
> Yes, and those were unexpected...when we said we were aiming for realism, it was beyond the Army's expectations" (Sponauer, 2002).

In an interview with *SimHQ*, a website offering news and backgrounds on all sorts of military simulations, project director Wardynski again expressed the shifting rationale behind the project, i.e. the move from the advergame dimension to *America's Army* as a test bed and tool and an expansion of the edugame dimension. The game has become a platform and much more than 'just a game'. First Person Shooters are popular training aids within the U.S. military, as shown in chapter 3.3. The emphasis on infantry combat, continuing (user-driven) innovation and the technical versatile possibilities of 3D software engines make both commercial off the shelf (COTS) and custom games useful for different types of learning. With more and more commercial FPS games used by the military, it is likely that the military will replace different COTS games with its own modifiable training tool – i.e. *America's Army*.[281] A group of military contractors summarizes the current use of Army simulations:

> "If one were to classify these training games by type of learning (knowledge, skills, strategy, behaviour, judgment, procedures, communication, etc.), level of people using them (recruit, NCO, junior officer, senior officer), and type of structure, (off-the-shelf, template, custom), and construct a three dimensional matrix, one would find many, if not most, of the boxes filled in with examples" (Maguire et al., 2002).

Besides training (motor) skills, all types of learning mentioned here are present in *America's Army*, as well as the possibility to train all levels within the military. Tacit knowledge, the understanding of practices such as the reloading procedure of a M16A2 rifle, is gained by an ingame animation simulating a rifle reloading. According to the official FAQ, knowledge and information about basic rifle marksmanship does not teach young adults how to shoot a weapon, because "there is no way that manipulating a keyboard and mouse, as players do in the Army's game, can provide vital cues on key elements of marksmanship."[282] It is in the best interest of the U.S. military, especially with the expeditionary U.S. Marines, to develop digital simulations that are able to train marksmanship.[283] It seems hard to argue that the actual skill of reloading and properly firing a rifle can be learned from a digital simulation such as *America's Army*, but a wide range of other types of training can be found in *America's Army*, according to Jerry '[Dev]skyhuntr' Heneghan, the Executive Producer of the Government Applications *America's Army* development team: "The *America's Army* platform is ideal for

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[281] The replacement of the Delta Force game series with *America's Army* at the USMA (discussed hereafter), acknowledges this trend.
[282] See: America's Army - Support - Windows FAQ. 2004. Americasarmy.com. Available: http://www.americasarmy.com/support/faq_win.php#faq12.
[283] The U.S. military mainly refers to electronic learning (or e-learning) as 'distributed learning'. Information- and communication technologies are used to train soldier anywhere, anytime. The online character of *America's Army* perfectly fits the need for distributed learning.

training tasks in an advanced distributed learning environment that are procedural in nature. Research has shown that immersive, first-person perspective games enhance a person's ability to process information more quickly and can enhance learning and retention of procedural skills" (OEF_XR, 2004).

There is only substantial documentation about the use of *America's Army* as an edugame for soldiers, when there is some sort of research component attached to it.[284] Other information is obtained via a range of interviews with different developers from the AGP. The developers take pride in saying that: "Infantry soldiers at Fort Benning use *America's Army* before setting foot on the real range" (Zyda, 2002). A special development team, the America's Army Government Application (AAGA) team will modify the game to familiarize soldiers with Force Protection, procedural first aid and survival, critical thinking and leadership, maintenance training, intelligence skills training, mission rehearsal and shortage MOS training (Peck, 2004).[285] Real Special Forces operators currently use an advanced version of the game, which includes Unreal Voice Over IP (VOIP) technology, for training.[286] The modifiable character of the underlying technology of *America's Army*, allows developers to design specialised custom scenarios for specific Special Forces operations. The Secret Service is reported to use the game "to allow its agents to practice drills in a virtual White House" (Gaudiosi, 2004). Whether the game is in these examples, used as a replacement for or an addition to existing training is unclear.

In private communication, a U.S. Army instructor from the 18th Airborne Corps, 29th Infantry Division, emailed me a PowerPoint presentation. This presentation shows the use of *America's Army* within an existing Army training program. In his particular case, the topic of the course was "performing surveillance without the aid of electronic devices" and "range determination".[287] The conditions of the first training are 'given an enemy force equipped with wheel and track vehicles within range of sight or hearing during day and night.' The standard (needed to pass the test) are: "identify 50 percent of the enemy soldiers and vehicles within field of view using proper surveillance techniques." Because of the careful modelling of the game, ingame screenshots can be used to accompany old drawn pictures. In figure 5 (taken from the U.S. Army PowerPoint), there is the old picture of the Advanced Combat Optical Gunsight (ACOG) scope on the left, used on e.g. a M4-carbine, this scope is featured in the game as well. As the *America's Army* screenshot shows on the right, the enemy combatant in the reticule is just over six millimetres which corresponds with a reference card given to soldiers which states that the target must be at a distance of approximately 300 meters. This

[284] Other information is obtained via a range of newspaper and fan site interviews with different developers from the AGP.
[285] More information about the different *America's Army* development teams is available in paragraph 4.3 - *America's Army* as a test bed and tool.
[286] The VOIP technology is not available in the public version of the game (yet).
[287] Military training is very standardized and every course has its own number and specific set of information. The identification course is numbered 071-331-0804. Information about this course can be found in the Soldiers Manual of Common Tasks (SMCT). See http://smct.armystudyguide.com/Skill_Level_1-AUG2003/071-331-0804.htm for an overview of the course.

example clearly shows the potential of including *America's Army* in a great number of training sessions still using old graphic material.[288]

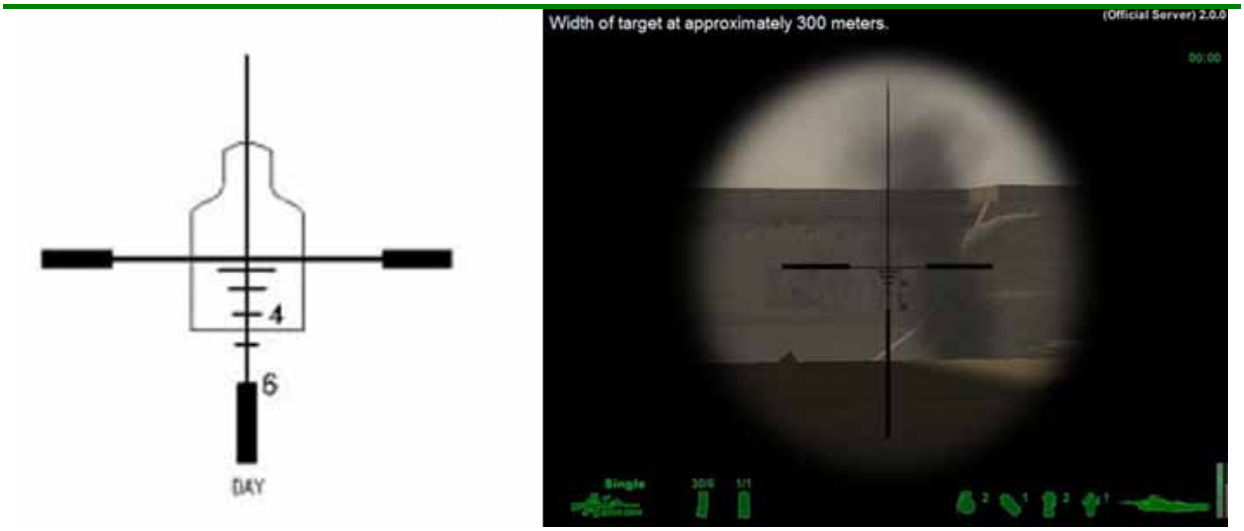

Figure 5. The education of U.S. Army soldiers with *America's Army.*

As reported by Roth (2003), every cadet at the U.S. military academy (USMA) West Point received a laptop and with the requirement to install *America's Army* on it. According to a member of the *America's Army* development team, the game is "an ideal platform for training tasks in an advanced distributed learning environment that are procedural in nature. Research has shown that immersive, first-person perspective games enhance a person's ability to process information more quickly and can enhance learning and retention of procedural skills" (OEF_XR, 2004).[289] The actual use of *America's Army* as an edugame at the U.S. Military Academy shows the ease and confidence military trainers have using games formerly used for pure entertainment. It also shows the interaction between realistic tactical FPS games and the military-entertainment-complex, resulting in an even more symbiotic relationship with the entertainment industries and the military. Military researchers thought of a new acronym to label the Army training tool with: GOTS (Government-off-the-shelf) games.

At the USMA, *America's Army* is incorporated in the military science 102 classes, also known as "Ground Maneuver Warfare I". During this 35-hour course, cadets get various forms of education such as map reading, land navigation, and doctrine at the infantry platoon level and below, elements of combat power, principles of war, and the exercise of command in operations against a hostile, thinking enemy. *America's Army* has different roles within the course. First to serve as an example, replacing maps, replica toys, photos and black boards. Secondly, the cadets use the game, instead of real-life training, to execute their plans and to put their newly acquired knowledge to use in a series of virtual engagements (Farrell, Klimack

[288] Many Army instructors use PowerPoint for their courses and use drawn pictures from Field Manuals. The high quality pictures as well as movies with ingame material may well replace the lower quality pictures.
[289] The research the interviewee (most likely) refers to is mentioned in paragraph 4.3, which deals with the use of *America's Army* as a test bed and tool (c.f. Greenwald, 2002; Morgan, 2003; Mosbruger, 2003;

and Jacquet, 2003).[290] One of the results of introducing *America's Army* into the USMA curriculum and using it for training is that cadets now start to learn land navigation six months earlier than before the introduction of the game and the class of 2004 will start land-navigation training a year earlier (Roth, 2003). The cadets do not use the public version of the game but a slightly modified one. Roth paints a vivid picture of the actual use of *America's Army* as a training tool for future U.S. Army officers at the USMA:

> "Cadets who play the game for the first time often make the same mistakes they make in field training, says Capt. Jacquet. For instance, many waste all their ammunition quickly before they realize that bullets are limited, unlike most videogames. Cadets also get a taste of just how chaotic a battle can be, how quickly a plan can unravel, and how important it is to be able to maintain focus. The military calls this type of thinking "situational awareness" -- something that comes only with experience."

The game is lauded by cadets because it enables them to toy around and see their military plans come to life. Because of environmental issues and the ever-rising costs of material and ammunition, it takes some time for cadets go on field training.

Before entering Basic Training future recruits can enter the so called 'delayed entry program'. In this program recruits are able to gain rank before getting into real Basic Training by learning about first aid, land navigation, drills and ceremonies and other basic Army tasks. Kelli R. Petermeyer (2004) of the Army News Service reported about the virtual copy of such a program entering *America's Army*: "The Future Soldiers System will use concepts from basic training and put them into the virtual experience so the recruits can learn about rules of engagement, laws of land warfare and first aid before ever stepping foot on the training installation." By putting a random group in this Future Soldiers System, the U.S. Army tests whether these familiarized recruits are indeed more prepared and confident by 'playing' the game.

As more weapon systems become available and with the expansion of the test bed and tool dimension of *America's Army*, there will be more training modules available for military training. The newly developed XM-25 Air Burst Assault Weapon is currently implemented and when this weapon system will be mass-manufactured, the game can instantly shift from training tool to the edugame dimension. Many other related training applications using *America's Army* are envisioned. An Air Force group is looking into the possibility of 'ordering' a GOTS module to train force protection (Zyda, 2002: 9) and training treaty verification pre-planning is considered as well.

[290] In their research, Farrell et al. (2003) show that using *America's Army* proofs to be significantly more effective for training purposes than 'older' forms of non-digital training.

4.2.6. Concluding Remarks

The confidence of the U.S. Army in *America's Army* as an edugame is unequivocally demonstrated if one takes the use of the game as a training tool for soldiers into account. From the lowest recruit to the most skilled U.S. Special Forces operator, they all use parts of the same game based simulation as played by millions of gamers all over the world. The fact that the public version of *America's Army* is a game outside any educational context and without any formal reflection makes one wonder if gamers do learn anything. Games seem slowly to becoming a valid medium for delivering educational content. To what extent gamers learn anything or even the intended information and knowledge about the U.S. Army needs far more attention and research. But a useful by-product of the game for the U.S. Army will always be a group of gamers becoming (more) computer literate, acquiring more computer operating skills every moment they play the game. The 'über-l33t-skillz' of modern day gamers may show a strange resemblance with the required digital skills of future warriors:

> "The Army is continuing its transition to weapons, equipment, and technologies that require soldiers and commanders who can use information-age, digital skills to fight directly, remotely, and through robotic systems. (...) To improve the soldier's ability to perform effectively in this information rich and changing environment, the Army needs to train soldiers at all levels to use digital skills to accomplish tasks and to do essential coordination with others across horizontal and vertical networks" (Schaab & Dressel, 2003: 1).

After finding its own spot in the crowded FPS market, *America's Army* expanded its edugame dimension even further. From the outset, the game was designed to teach a player about the various aspects of being a soldier. Drawing on the Army brand, logos and slogans and on practices within U.S. Army of today, additional training was added. *America's Army* versions 1.9 and 2.0 added the Medic Training and Special Forces Training and by doing so the role of training within the game is made much more explicit. The interaction between advertisement and education is clear: "For one thing, the goal was modest: not persuasion, but education; the game didn't have to part a fool and his money, it had merely to be played" (Davis et al. 2004: 9). The ongoing struggle between realism, education, advertisement and providing a fun game is most clearly visible by the training courses in the game. Apart from Basic Training, they are all optional. If you want to excel, if you want expand life skills through training, take additional courses and you will get there. By playing the game, players may learn some essential elements about the U.S. Army, its values and its organisation. Even possible recruits, who are put off by going through virtual Basic Training, are pure profit for the U.S. Army. *America's Army* is one of the first successful game based simulations to inform the public on such a massive scale - success is defined here as reaching three to four million gamers. The gap is slowly being bridged, through gaming and simulation, knowledge is successfully turned into action, lots of action.

4.3 *America's Army* as a Test Bed and Tool

The historical path of simulation technologies shows an overlap with other (information age) technologies originated within the military-industrial complex. After its birth in the complex, knowledge about simulation technologies was set free to grow up 'in the wild'. While military modelling and simulation just became an adolescent, commercial simulation technologies were raised as full-grown adults. The mass consumption and subsequent investments in the development of commercial games, led to a technological leap that was bound to be appropriated by the military rather than (re)invented. The Pentagon-sponsored inception of the interactive entertainment industries made this mentality feasible and later on profitable (Kline et al., 2004).

An analysis of the underlying technology of *America's Army*, a third party commercial software engine, is the start of a further exploration of the ties between military simulation communities and the entertainment industry in general and an analysis of *America's Army* as test bed within the Army Game Project and the U.S. Army in particular. Various interviews with AGP members, theses done within the military and Army research documents form the basis of the latter. The analysis of the use of commercial technology within the military entertainment complex is based on a body of academic research and the analysis of *America's Army*'s technology, is primarily based on previous research (Nieborg, 2004; 2005).

4.3.1 Linking Entertainment and Defense

Computer gamers are constantly being reminded that they engage in interactive experiences facilitated by state-of-the-art simulation techniques. The interchange between the (artificially created) need of gamers for new and better graphics and the need of the game-industry to innovate, is intensified by both technical-aware gamers and million dollar marketing campaigns (c.f. Newman, 2004: 29-48; Kline et al., 2004). In comparison with the console market, the PC-market is free for every developer to enter and it is constantly evolving technologically (Williams, 2002). "While consoles represent the mainstream of gaming, the smaller PC market represents the vanguard of imaginative programming, risk taking and fringe products" (ibid: 45). The First Person Shooter genre in particular is played by a blatant group of dedicated (i.e. hardcore) gamers, publicly expressing the need for continuous technological advancements and graphics that are even more superior. This user-driven need is pushing various technological boundaries with every high profile release.[291]

The advancements in videogame technology are historically grounded in the military-entertainment complex (Herz, 1997; Lenoir & Lowood, 2003). If commercial and military game/simulation designs have anything in common, it is the constant need for technological

[291] An example is the development and publishing of the much-anticipated FPS game *Half Life 2* (Valve Software, 2004). This game is seen by both the gaming press and gamers as a new standard in the design of virtual worlds.

renewal. To offer the most life-like and immersive simulations is until today, a shared goal of both development communities. Military funded research and development into modelling and simulation has always been a thriving force for innovative technologies, which are directly applicable in commercial games. From the very moment the irrepressible (technological) advancements of the commercial game industry began to overshadow the efforts of the defense industry, military thinkers urged the Department of Defense to tap into the commercial game industry and benefit from it rather than reinventing the wheel. The 1997 report of the National Research Council is both proof of this rationale and a continuation of the intimate relationship between military and commercial technology, communities and in the end even picking from the same pool of gamers for the final product to play.[292] The collaboration between both industries is seen as beneficial to both and judging the willingness of commercial developers to serve as military contractors, this is a shared view.

Where the current entertainment industry de facto serves as a huge research and development department for the U.S. military, commercial game developers have their own research and development teams they can easily benefit from. A significant amount of gamers produce game modifications (mods) and as a result, they constantly push technological boundaries of both gaming hardware and software. The mod community is especially active for FPS PC games and functions as a global un-paid research and development community to be harnessed by commercial game developers (c.f. Nieborg, 2004; Nieborg 2005). The relationship between modders and the gaming industry is seen as collaborative and mutually supportive as well. A consequence of the collaborative nature of FPS modding communities is that its innovative capabilities can be of direct use for the U.S. military as commercial technologies are increasingly used for military modelling and simulation. This outcome is somewhat under-exposed by academics but acknowledged by those who are in some way affiliated with the U.S. military (c.f. Herz & Macedonia, 2002; Prensky, 2003).

With the increasing possibilities of virtual simulations, all sorts of test scenarios can be computed. Besides using games/simulations to train soldiers, the U.S. military is eager to expand the use of simulations into the realms of testing. Military modelling and simulation is increasingly used for analysis and acquisition (Zyda & Sheehan, 1997). The effects of alternative force structures, new doctrines and new battle plans can be analysed in a virtual world. In these worlds, almost built overnight, new weapon systems can be tested before the actual acquisition process begins. For a long time, simulations have been used for military testing purposes. Paired with the increasing possibilities of commercial games and the ongoing process of Army transformation, it should come as no surprise that *America's Army* is used as a test bed and tool within the U.S. army. The test bed dimension overlaps and interacts with the

[292] C.f. Zyda and Sheehan (1997): "By sharing research results, coordinating research agendas, and working collaboratively when necessary, the entertainment industry and DOD may be able to more efficiently and effectively build a technology base for modelling and simulation that will improve the nation's security and economic performance."

edugame dimension as modules developed for testing are subsequently used to train soldiers with the approved technologies.

Before discussing the different uses of *America's Army* as a test bed within both the Army Game Project and military research communities, I will provide an insight into the technological aspects of the game. The underlying 3D game technology that is the basis for *America's Army* is licensed from a commercial game studio (Epic Games), well known for its close ties and supportive stance towards their modding community. By providing further analysis of the nature and capabilities of Epic's technology and the use of this technology within military communities, I hope to deepen the understanding of *America's Army* as a test bed and tool.

4.3.2 Using Game Technology to Simulate Infantry Combat

The heart of every FPS and an essential part of a games' program code is the game engine.[293] A game engine, an element somewhat similar to Konzack's layer 'Program Code' is an important element of every game: "Every computer game depends on code. Therefore program code is essential to the understanding of computer games" (Konzack, 2002). The game engine influences a FPS game on all elements within the domain of a game, ranging from the audiovisuals to the gameplay, and is determining for its use. Since the birth of FPS games, the emphasis on the development of different (game) engines has been enormous. Because of the huge costs of developing a unique game engine, many shooters are based on a third-party engine. It took two years from the moment *America's Army* was envisioned until the first version had its Internet debut. This was only possible using a third party engine, which in the case of *America's Army* is the Unreal Engine.[294] To build a game engine from scratch that could rival with the technological sophistication of contemporary FPS game engines, could have taken two years. Besides the capabilities of a third party software engine, there are two other essential elements accompanying such a software package. With a license for the use of the Unreal Engine comes a set of authoring-tools as well as access to the Unreal development network offering knowledge and support. Because the Unreal technology is widely used by different FPS game developers, there is a pool of programmers and level designers, who are all

[293] Wikipedia has the following description of a game engine: "In computing, a game engine is the core software component of a video game. It typically handles rendering and other necessary technology, but might also handle additional tasks such as game AI, collision detection between game objects, etc. The most common element that a game engine provides is graphics rendering facilities (2D or 3D)." Source: Game engine - Wikipedia, the free encyclopedia. 2005. Wikipedia.org Available: http://en.wikipedia.org/wiki/Game_engine. February 1, 2005. Also stated is: "Later games, such as Quake 3 and Epic's 1998 Unreal were designed with this approach in mind, with the engine and content developed separately."

[294] The Unreal Engine is also known as the Unreal II Engine, the UT2003 Engine, the Unreal Warfare Engine, the Unreal Championship Engine or the Unreal Tournament Engine or UE2. Note that the Unreal Engine is an ever-evolving piece of software and there is no such thing as *the* Unreal Engine. The build of an engine is annotated with a (build) number, e.g. the commercial game *Unreal Tournament 2004* has build 3345.

familiar with the Unreal technology.[295] Both the Unreal engine and *America's Army* are in constant development. This has proven to be an ongoing struggle for the *America's Army* development team. On the one hand the game remains technological comparable to other recent commercial FPS releases, but on the other hand implementing and testing new computer code can put strains on manpower and can result in releases that contain software faults (i.e. bugs).

The FPS game *Unreal* (Digital Extremes, 1998) started the Unreal brand and was the first in a series of more than ten multi-platform FPS games. The Unreal technology has proven itself over the years and has powered games that sold million of units.[296] The extraordinary customizability made its way to a community of amateur game-developers who have as much fun developing additional game content as playing games. The Unreal Engine was from the outset purposely designed to be as modifiable as possible, benefiting both the original developers, third-party licensees and modders. With its own scripting language (UnrealScript) and level editor developed on top of the game's engine, modding is open for all who have some basic digital skills.[297] The success of the Unreal franchise can be partly traced back to the mindset of the developers of the first Unreal game, regarding mods and the licensing of and usage of the Unreal Engine technology.

All Unreal powered games, e.g. *Tom Clancy's Splinter Cell* (Ubisoft Montreal, 2002) or *Unreal Tournament 2004* (Epic Games, 2004) have their respective communities, ranging from game-sites to fan-sites to websites where modders come together. An immense amount of resources and information is created by mod-makers in order to sustain their virtual communities and supply their fellow-mod-makers with the right tools, information and knowledge to make mods of their own.[298] Although the Unreal Engine may look like an open source engine to some, this is certainly not the case. The engine is free for personal, non-commercial and educational use only, which means that development of (commercial) games for distribution is not permitted.[299] The Unreal Engine is a proprietary technology, but the owners of the technology have mastered the skill of institutionalizing and commoditising a

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[295] Large parts of this paragraph were taken from the paper *Who put the mod in commodification? – A descriptive analysis of the First Person Shooter mod culture* (Nieborg, 2004).

[296] The FPS game *Unreal* (Digital Extremes, 1998) started the Unreal brand and was the first in a series of more than ten multi-platform FPS games. The work on this first title started in 1994 and resulted in 1998 in: "defining the leading edge of 3D technology, introducing to the first person shooter (FPS) genre such new features as fully dynamic lighting, volumetric and atmospheric lighting, what-you-see-is-what-you-get development tools, a next-generation scripting language, and extraordinary customizability." Source: UT History. 2004. Unrealtournament.com. Available: http://www.unrealtournament.com/general/history.php. April 4, 2004.

[297] As the ultimate proof of the ease of use of the Unreal modding tools I managed to create my own *Unreal Tournament 2004* map. The easy to use GUI (Graphic User Interface) of the UnrealEd (the Unreal level editor) allows creating a basic map within hours without writing a single line of code.

[298] An example of the collaborative efforts of Unreal modders is the Unreal Engine section on the open-source encyclopaedia Wikipedia. See for the Unreal Engine part of Wiki: http://wiki.beyondunreal.com/wiki/. The homepage is very clear about its ethos of contributing: "The Unreal Wiki is an open, collaborative site, aiming to gather reference, tutorials and ideas for the Unreal engine. It is written by a large number of mappers, coders and modellers. Everybody is invited to contribute; everybody is an editor – including you!"

[299] See the End Users License Agreement (EULA) at: http://udn.epicgames.com/Powered/UnrealEngine2RuntimeEULA. Last visited: April 4, 2004.

user-driven culture. The Unreal Universe shows a range of initiatives instigated by the game developers who turned developing mods into a collaborative process (Nieborg, 2005). The America's Army Government Application development team benefited directly from the 'mod-scene' by hiring two (experienced) modders from the *Red Orchestra*-mod team.[300]

One of the advantages the U.S. Army has as a result of using Unreal Technology, besides the technology's adaptability, has thus become access to several clusters of knowledge-based communities centred on the Unreal Engine itself. Unreal Technology is now widely used within various U.S. military research and development projects, such as interactive training applications (Gordon, 2004) and artificial intelligence test cases (e.g. Wray et al., 2002). The research of Manojlovich et al. (2003) is telling in this respect. Their goal was to couple existing military modelling and simulation technologies with the Unreal Engine. They managed to accomplish their task through the Unreal modification *Gamebots*, a mod developed to "turn the game Unreal Tournament into a domain for research in artificial intelligence".[301] A recent addition and expansion of Unreal's role as a military-entertainment technology, similar to the efforts of Manojlovich et al (2003), is the DIS/HLA Game-Link, developed by the military contractor MÄK Technologies.[302] Through this technology, developers within the U.S. military are able to make Unreal technology (e.g. *America's Army*) compliant with High Level Architecture (HLA), a standard architecture for defense simulations and the Distributed Interactive Simulation (DIS) protocol, used to let various military simulation components communicate with each other. This allows *America's Army* to be linked to such military simulation environments as OneSAF, resulting in an even bigger role of *America's Army* in military training and testing.[303]

America's Army is currently being ported to the UT2004 code base (UE2.5) for *America's Army* and government versions of the game are already up to par with the most recent Unreal Engine builds. In addition, the Army already has licensed the UnrealEngine3 (UE3), which is currently under development by Epic. The release based on this engine requires a completely new game.[304] The Unreal technology is a vivid example of the quick growth of commercial

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[300] *Red Orchestra* is an extensive World War Two-themed total conversion modification of *Unreal Tournament 2004*. Both of the newly hired team members are programmers. James [Dev]nXain Cowgill, Lead Game Designer of the AAGA team, talked about their new jobs on the official forum: "These guys have been invaluable, very hard working, and are very much in the process of making future releases of AA happen (especially Overmatch.) They have been very busy on projects ranging from the code merge with the UT2004 source to working on government trainers." The developer also reflected on the role of modders: "The AA-Gov team will continue to keep an eye on UT mods as a great place to find talent when we have positions to fill. I encourage everyone who is interested in game development to explore the modding route and to take it seriously as a career building pathway that can open a lot of doors." Source: "creators of RedOrchestra join the AA developers?", topic-url: http://americasarmy.com/forum/viewtopic.php?topic=70926, created on August 24, 2004.

[301] The mod *Gamebots* is an open-source modification project by University of Southern California's. See: http://gamebots.sourceforge.net/. Quote taken from http://www.planetunreal.com/gamebots/, last visited February 1, 2005.

[302] See: Mäk Technologies Releases DIS/HLA Game-Link. 2004. www.mak.com. Available: http://www.mak.com/pr_gamelink.pdf. February 1, 2005.

[303] OneSAF (one Semi-Automated Force) is the successor of Modular Semi- Automated Force (ModSAF) developed in 1993. OneSAF is still in development will be integrated in the Army's Future Combat System program, which costs 14.9 billion dollars.

[304] The developers have to start from scratch and can or do not want to 'port' existing content to the new engine.

simulation technology and the following paragraphs will outline how this state-of-the-art technology is used to test new technologies, weapon systems, scenarios and the like.

4.3.3 The Use of America's Army as a Test Bed within the AGP

The game has from its early conception been grounded in the academic setting of the MOVES Institute and the game has always been used as an "experimental test bed and tool" (Shilling, Zyda & Wardynski, 2002: 1). The main goal of the MOVES institute is to advance in such areas as 3D Simulation, Computer-Generated Autonomy, Human Performance Engineering and Combat Modelling & Analysis. There is an exchange of expert knowledge between modelling and simulation researchers and the experience gained by having *America's Army* developed within the MOVES Institute. Former MOVES Director Michael Zyda (Zyda et al., 2003) defined the role of *America's Army* as: "Having a successful online game inside the MOVES Institute is like having your own particle accelerator. Lots of proposed applications and interesting research are coming in the door." Master's-students and faculty staff wrote a number of theses, which benefited both the games' development and the institute. After discovering the potential of *America's Army*, the MOVES Institute increasingly used the game for several case studies, e.g., to examine the effect of vibro-tactile feedback on a user's degree of immersion in a synthetic environment (Mosbruger, 2003) or to determine the role audio plays in evoking emotion in videogames (Shilling et al., 2003).

America's Army now is able to serve as a test platform for many of the research areas within the MOVES Institute. To channel the different mindsets and desires of the academic team, the game development team and the U.S. Army, three game development sub-teams were founded in 2004. The first team primarily consists of commercial game developers and became the America's Army Public Applications (AAPA) team. This team is responsible for the public version of *America's Army* and is the most visible development team in the *America's Army* community. The second sub-team is the America's Army Government Applications (AAGA) team, whose main goal it is to "use the game's technology for effective and engaging virtual learning. As a learning platform America's Army provides a proven, easy-to-deploy and widely used technology base that is modular and scalable."[305] An explicit goal of the AAGA team is to pay for the expenses made by AAPA (i.e. development, marketing and distribution costs). Modified material from this team may find its way to the AAPA team to be included in the public version of the game, strengthening the link between the edugame dimension and *America's Army* as a test bed and tool. The third sub-team, the America's Army Future Applications (AAFA) team, develops spin-off applications for use within Army research and development communities.[306] The team is part of the U.S. Army Armament Research

[305] As stated on the official website. America's Army - Community - Rally Point – Bios. 2004. Americasarmy.com. Available: http://www.americasarmy.com/community/dev.php. January 30, 2005.
[306] The AAFA Team includes the 'Picatinny Platoon', a group of 100 volunteer military and civilian members serving as members of the *America's Army* test team.

Development Engineering Center (ARDEC), located at Picatinny, New Jersey. This Center provides research and development of current and future armament and munitions systems. The efforts of the AAFA team fit in the overall U.S. military strategy of transformation, i.e. providing U.S. soldiers with state-of-the-art high technology weaponry.

During the development of *America's Army*, new weaponry such as Pursuit Deterrent Munition (PDM), Bunker Defeat Munition (BDM) and the XM25 airburst grenade launcher, will be included into the public version of the game to test their use in the (virtual) field. From the outset ARDEC and TACOM, the U.S. Army's Tank-automotive and Armaments Command, funded the inclusion of these weapon systems, also known as the Objective Individual Combat Weapon (OICW) – the XM25- and the shoulder-launched multipurpose assault weapon/bunker-defeat munition (SMAW-D) – the BDM - (Zyda, 2002: 9). The AAFA Team also developed ingame models for next-generation weapon systems as the XM8, a Lightweight Assault Rifle, and the XM307, a portable lightweight grenade machine gun that utilizes airbursting ammunition. A number of new weapon systems are part of the Army transformation plans and acknowledging once again the logistics of perception and a further de-realisation of warfare.[307] Examples are the Javelin Missile, the XM25 grenade launcher and most of all the Talon Robot. The Javelin Missile is a portable, shoulder-fired missile. It is used as an anti-vehicle weapon and will eventually find its way to the public version of *America's Army*.[308] The XM25 shoots airbursting grenades and by looking at a small video display, soldiers can aim at their adversaries. A videogame interface seems perfect to remediate warfare that is already experienced by looking at (small) screens.

Figure 6. A Talon Robot shown at E3 in 2004.

The weapon system of the future post-human warfare *par excellence*, erasing the borderline between gaming, simulation and reality, are robotics and modelling the Talon robot seems like the *summum bonum* of training simulations (See figure 6). The AAFA team already completed a Talon trainer within *America's Army* and Talon operators are using the *America's Army: Talon* version to practice driving and operating the robot "without breaking anything" (Peck, 2004). The Talon robot itself has four cameras providing multiple perspectives on the battlefield, here again war is already mediated and learning to interpret and keep track of multiple streams of data is a skill that fits a gamer perfectly. The AAFA team is enthusiastic about the possibilities of the *America's Army:*

[307] See chapter 3.
[308] The inclusion of this new weapon is first mentioned in the SITREP (Situation Report), an official communication bulletin by a member of the AGP. SITREPs are located at: http://www.americasarmy.com/community/.

Talon version: "It cost $60,000 to develop the Talon variant of *America's Army*, not counting licensing fees. But that's far cheaper than practicing on real Talons, which are needed on mine-strewn Iraqi roads" (Peck, 2004).

The testing of new weapons within the setting of the game has several purposes. Soldiers and engineers can test a system before expensive live-fire training and the eventual mass production of the weapon. After the weapon system becomes operational, soldiers will be able use the game platform for training on several levels, serving one side of the edugame dimension – the education of real soldiers. Take the following remark about the XM25 weapon system from the SITREP: "Despite the obvious advantage of precision fire control, the air burst feature allows the user to attack opponents in hard to reach places. If the enemy is hiding behind a wall, the XM25 user lases the wall, increases the range a meter beyond, and fires". In upcoming versions, soldiers (and subsequently gamers) will be able to play with new weapons and by carefully simulating their behaviour, the Army can harness the enormous amount of time gamers toy around with new weapon and deduct strategies and unforeseen use, as argued by Peck (2004) who interviewed Bill Davis, the executive producer of the AAFA team:

> "Using a video game to simulate the laser sights enables troops to upgrade their tactics prior to the weapon's introduction. "The real key feature is the modelling of the fire control screen," Davis said. "It will give people a chance to try out tactics, techniques and procedures in small unit settings."

Designing custom maps can be relatively cheap and soldiers can get accustomed with the weapon by simply using a PC. Information about procedures and weapon features can all be done within a classroom setting with all the obvious (economic) advantages. The laser feature of the weapon can be explained using screenshots from the game, just as with the range finding example, and information about different sorts of ammunition can be simulated and thus experienced soldier and military contractors. The AAFA team admits that their work is just the beginning: "As far as using *America's Army* - having it accepted as an analytical tool - we are not there yet, [Bill Davis] says, but I'm working to make that happen" (Zeller, 2005). In the end, the work of the AAFA team will always serve the advergame dimension in one way or another - an army of eager gamers is more than willing to toy around with the latest Army gadgets.

4.3.4 America's Army: Aptitude

> "America's Army isn't merely a game, recruiting device or a public-relations tool, though it is certainly all of those things. It's also a military aptitude tester. And it was designed that way from the start" (Webb, 2004).

Besides testing weapons, *America's Army* could also be used to test the aptitude of recruits.[309] This under explored feature of *America's Army* has not reached its full potential and is not implemented in the game (yet). Webb bases this statement on a quote in a publication of MOVES director Zyda (2000). Various Army documents acknowledge the possible use of *America's Army* for aptitude testing (e.g. Zyda, 2003b). In cooperation with the Army Research Institute, the AGP looked into ways to compute the aptitude of a gamer through gameplay. The *Soldiers* version of *America's Army* was originally developed "to determine the aptitude, leadership abilities and psychological profile of the game player" (Zyda, 2000: 4). The aptitude should be computed through by proficiency of gamers in playing the game and according to both Zyda and Wardynski, the research results whether the game could pull it off were "positive".

The U.S. military already has its own test to determine if someone is fit to join. In the U.S. military community, the U.S. Army Recruiting Command (USAREC) has as its main role to obtain the quantity and quality of recruits to meet both Active Army and U.S. Army Reserve requirements. These requirements are limited by the need for specific jobs (Military Occupation Specialties or MOS) within the Army. Besides being an American citizen and having a good physical condition, adolescents must take the Armed Services Vocational Aptitude Battery (ASVAB). According to the *Kaplan ASVAB 2004 Edition* book (Kaplan, 2003), the ASVAB test should not be mistaken with an IQ test or any other test measuring intelligence. It solely measures the ability and preparedness to take the ASVAB test. The test has ten aptitude areas such as verbal, math, science and technical skills. An example of an aptitude question related to general science would be:

> "1. An eclipse of the sun throws the shadow of the
> A. moon on the sun.
> B. moon on the earth.
> C. earth on the sun.
> D. earth on the moon"[310]

The ASVAB is (freely) available at most high schools in the U.S. and takes about three hours to complete. The results of this test places individuals into test score categories and determine both basic enlistment and specific MOS eligibility (U.S. Army War College, 2003). All kinds of

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[309] "Aptitude can be defined as the capabilities you have developed that indicate your readiness to become proficient in a certain type of activity (given the opportunity.) This may refer to your capacity to learn a particular type of work or to your potential for general training. The ASVAB measures aptitudes that are related to success in different jobs." Source: 1-800-Go-Guard .com. 2004. Available: http://www.1800goguard.com/guides/guides_asvab.html#aptitude. February 11, 2005.

[310] See http://www.1800goguard.com/guides/guides_asvab_sample.html for more examples. Last visited February 11, 2005.

sub scores can be derived from the ASVAB, such as the Armed Forces Qualification Test (AFQT), focusing on word knowledge, paragraph comprehension, arithmetic reasoning, and mathematics knowledge. The higher a person scores, the more Military Occupational Specialities become available.

As digital skills and computer literacy become important aptitudes in a transformed Army, playing *America's Army* directly stimulates these proficiencies.[311] Prensky (2001) already mentioned the chance to use *America's Army* for testing the aptitude of players as well as team focus and leadership potential. He also mentions the possibility of integrating the AFQT and the ASVAB test into the game. As paragraph 4.2.4 shows, both the Medic course and the Special Forces 'Aircraft, Vehicle and Weapon Identification' course contain written tests in the same format as the ASVAB test and implementing elements of consisting Army test would fit the current design of the game. On a similar note, the test bed dimension of *America's Army* could directly interact with the edugame dimension by implementing aptitude-training courses where specific information can be obtained how to pass the test. It would make a full circle if the game could be used to introduce a possible recruit to the U.S. Army, test his/her aptitude, and educate him/her all at the same game. The adaptable nature of interactive entertainment would even make it possible to offer a customised MOS in the game for someone with a particular aptitude.

4.3.5 America's Army as a Test Bed within the MOVES Institute

The role of the MOVES institute does not stop with providing expert knowledge and support. Researchers and graduate students from the institute specialised in modelling and simulation used *America's Army* as a test bed for their research and theses. The hybrid role of game developer/researcher is shown by the research of Shilling et al (2003). Shilling is a Lieutenant Commander in the U.S. Navy, holds a degree in experimental psychology and studied neuroscience and auditory psychophysics. The paper of Shilling et al. summarizes a body of research done by students of the institute focusing on demonstrating the emotional impact of sound in virtual simulations as well as the positive correlation between being emotionally evoked and learning from the events that occur in a simulation. In the different theses, *America's Army* was used "as an experimental test bed and tool". What this shows is that there is a strong grounding of *America's Army* in the academic setting of the Naval Postgraduate School. It is worthwhile to look into the different theses, they provide a detailed perspective on the role of FPS games, as *America's Army*, for training. It is not unimaginable that the

[311] C.f. "In response to this question, about half the people interviewed mentioned the importance of the Internet. Two individuals commented that youth who frequent the Internet are likely to be of higher aptitude, and thus are more desirable to the Army" (Morath et al., 2001: xi).

results of this body of research will, in some way or another, find its way back into future government training simulations and eventually into the public version of *America's Army*.[312]

An interesting aspect of Shilling's research is that the overall question is akin to the question many first year (game study) students want to answer: 'How to immerse a gamer (even further)'? How do gamers get sucked into a game and which elements are responsible for this? Cultural studies lack the theoretical and methodological framework to answer such questions properly. The military on the other hand can draw on a great body of researchers with a background in psychology, sociology and modelling and simulation. The presence of specialised equipment, knowledge and laboratories as well as sufficient funding, result in the first valuable academic effects research on immersion.[313]

One question regarding immersion, called emotional arousal in military vernacular, is whether it has a positive of negative impact on learning. Ulate (2002) set up an experiment with two conditions. Subjects had to free Prisoners of War (POWs) in the map known in *America's Army* as HQ Raid. At the time of this research, the HQ Raid map was not publicly released. The first condition was the "low-arousal condition", here subjects had to memorize objects within the map without encountering any opposition. In the "high-arousal condition" subjects encountered an artificial enemy meant to cause a moderate emotional response (i.e. more immersion). The findings indicate that soldiers in the high-arousal condition "were significantly better at encoding and recalling objects presented in the virtual environment immediately after experiencing the videogame and 24 hours post exposure"(Ulate, 2002: V). Ulate had direct access to the development team and certain variables in the map, such as enemy artificial intelligence, weapon behaviour and health of the players, were manipulated.

The study of Greenwald (2002) focuses on the role of sounds (i.e. "auditory cues") in training soldiers in a MOUT (Military Operations in Urban Terrain) scenario. Subject Matter Experts (SMEs), i.e. soldiers and military trainers, were asked to evaluate the sound design of a map by using task analyses. The SMEs had to perform a virtual room clearing operation in an *America's Army* map, comparing what they heard in the virtual training scenario with real-life military operations. What Greenwald found was that the auditory cues lacked an emotional response, which positively influences learning (c.f. Ulate, 2002). Possible solutions to this deficit are to make sounds louder to have more physical impact on the trainee. MOUT specific solutions to enhance emotional response (and realism) are to enhance the sound of weapons firing and grenades detonating when used in a confined space, creating appropriate background

[312]The *America's Army* development team explains: "As the project progressed, the Army realized the game had the potential for a much larger scope than originally conceived, including use of helicopters. Unfortunately third-person perspective helicopter physics were not included in the game engine nor in AA's initial design. MOVES's thesis students employed Unrealscript to design a physics system that interfaces with the Unreal engine and interpolates smoothly among physics states within the Sunset at the oasis: a stormy AA atmosphere. Engineered as a dome over the midground, AA's evocative skies convey depth and immensity. On clear nights, the stars twinkle faintly, as with great distance. bounds of helicopter capabilities and the appearance of realism." (Davis, 2004: 16). C.f. Perkins (2002).

[313] Emphasizing that a student in the U.S. military has different goals in comparison with a student at a Dutch university. Military research focuses on FPS games, training and emotional response.

noise. Mosbruger (2003) took a different approach to immerse gamers (or soldiers), using "vibro-tactile feedback" in the form of a seat-shaker instead of audio design. To measure the effect of a Deployable, Immersive, VIbro-Tactile CHair (DIVITCH) on the physiological response (i.e. electrodermal activity, heart rate, and temperature), subjects had to play a scenario with 5.2 surround sound versus one with stereo headphones and the DIVITCH. A modified version of the map 'SF Combat Search and Rescue (CSAR)' was used for testing and the outcome was that the seat shaker did enhance immersion.

Yet another aspect of developing more life-like simulations is the use of Artificial Intelligence (AI). Single players mission are, besides training missions, still absent in *America's Army* and the U.S. Army is looking for ways to implement realistic AI for use in training. Morgan (2003) uses *America's Army* as a proof of concept for different ways to simulate an artificial human opponent. The upcoming release of *America's Army: Special Forces (Overmatch)*, to be released in the fall of 2005, will benefit directly from this research:

> "The Overmatch release will only have AI for co-op game play and possibly new training levels. The AI we're currently working on is very far from what comes with the Unreal SDK. It also focuses on AI as a coordinated military unit, rather than the individual bot level. We're been pretty ambitious with our end goals and are not creating just another set of elaborate scripts like the kind that have become so popular with FPS games lately."[314]

On a similar note, the secondary goal of the research of Perkins (2002) was to provide the developers of *America's Army* with realistic helicopter physics they could implement in the game. The Unreal Engine lacked the capability to produce such physics and as a result the Special Forces release of December 2003, featured a Blackhawk helicopter in the Escape & Evade training mission of the SF module.

The MOVES research is beneficial to the U.S. Army and the *America's Army* development team but also to those who are interested in hard to tackle topics such as immersion and flow. The results of the different research projects show that *America's Army* is becoming a credible instrument for different training tasks. Striving for emotional arousal should be a direct goal in training soldiers and one way to achieve this, is by using convincing virtual simulations. Additional elements such as seat shakers, but also ingame elements such as background noises, enhance the immersive character of the game. Many results can be directly implemented in military training programs, in *America's Army* and eventually in commercial games with a similar theme.

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[314] Quote from the official *America's Army* forum visited February 2 2005. "DataBank on the Future - 17-01-2005 *Updated*", http://forum.americasarmy.com/viewtopic.php?t=79389.

4.3.6 Concluding Remarks

The use of *America's Army* as a test bed and tool shows the successful appropriation of commercial game technologies. The Unreal technology has a significant role in the U.S. military and by using the engine for *America's Army*, the link between entertainment and defense is growing stronger and stronger. For relatively low costs, the Army can benefit directly from commercial game technology and thus indirectly from complementary modding communities. The military agenda of sharing research results with the entertainment industries is partially bypassed by the collective intelligence of modding communities.

After the somewhat unexpected initial success of the public version of the game, immediate steps were taken to expand the game by making it a multi-dimensional platform. By using proven commercial software, the Army is able to move the centre of gravity from the *America's Army* advergame dimension to the edugame and test tool dimensions.
Research conducted on the role of *America's Army* as an immersive edugame for soldiers, only adds weight to the use of entertainment technologies. Because the Unreal technology has already established a role within military modelling and simulation communities, existing and future (billion dollar) simulation training platforms can relatively easy be integrated into the *America's Army* platform. The modular and modifiable nature of current commercial game technology allows adding the development and integration of new weapon systems in *America's Army* for relatively low costs. For an Army that is constantly transforming while is prepares itself for the mediated post-human wars of the future, the possibilities of *America's Army* as a test tool seem almost unreal.

4.4 The Propagame Dimension

> "From a propaganda perspective, though, the Army has seemingly hit the jackpot. (And the Army readily admits the games are a propaganda device)" (Morris, 2002).

This statement from CNN/Money reporter is fairly unique, as the role of *America's Army* as a propaganda device is completely absent in all official communication from the Army Game Project. Being a propagame, is not an overt element of the project's rationale, as outlined in paragraph 2.5. While the advergame, edugame and test tool dimensions are clearly acknowledged by the developers of the game, the propagame dimension is not. As any text, *America's Army* is an ideological construct. The core of its ideology is not primarily based upon the cultural industries' profit notion, or on providing entertainment only. Where *America's Army* differs from, for instance the FPS game *Battlefield 1942* (Digital Illusions CE, 2002), is that the former is a game with a clear agenda – i.e. the dissemination of the U.S. Army brand through popular culture. The sole goal of *Battlefield* is to be as much fun as possible in order to sell as much games as possible. The primary goal of *America's Army* is not to be downloaded

by as much people as possible, but by those gamers who are willing to internalise the rules of the game (and thus the Army's ideology) and to spread the symbolic capital of the U.S. Army brand. Propaganda and advertising are synonymous and the edugame dimension interacts with the propagame dimension since the game is used to teach gamers about Army values, but also how the U.S. Army fights a war and why. Advertisement is, in this case as well, one of the clearest forms of propaganda.

The propagame dimension may be arbitrary to some and even insulting to others, as the concept of propaganda seems to have a different connotation in the U.S. than in other countries. The propagame dimension refers directly to the propagation of Army values and the U.S. Army brand, mostly derived from the advergame dimension, and indirectly to the political connotation of propaganda. For the definition and a deeper understanding of the concept of propaganda, the work of Jowett and O'Donnell (1986) is used. They focus on the communicative process and most specifically on the purpose of the process when they define propaganda as: "the deliberate and systematic attempt to shape perceptions, manipulate cognitions, and direct behavior to achieve a response that furthers the desired intent of the propagandist" (ibid: 16).[315] Propaganda is thus a message with a clear intention, known at forehand by its sender, meant to influence behavior.

Depending on the accuracy of the communicated information and the acknowledgement of the text's source, there is a distinction to be made between white, grey and black propaganda. In the case of white propaganda, the source is identified correctly and the information in the message tends to be accurate, while in the case of grey propaganda the source is partially unclear and the accuracy of the information uncertain. Black propaganda consists of lies communicated by an unknown or masked source (ibid: 17-8). *America's Army* is certainly not a case of black propaganda, as the source is the U.S. Army and the simulation of infantry combat is based on (aspects of) reality (see chapter 5 for a discussion of the game's much acclaimed realism). The question whether *America's Army* is white or grey propaganda or anything in between, is an interesting question and related to the reception of the game by its audience. The propaganda model offered by Jowett and O'Donnell is firmly grounded in the effects research tradition and as such contradicts with the theoretical trajectories outlined in chapter 1. The basic assumptions of cultural studies emphasise human agency, therefore one cannot predict in advance if the intended message, a crucial element in the propagandist's communication act, will serve its goal. The U.S. Army is clearly the source to be associated with *America's Army*, but whether the message, a simulation of contemporary combat, is seen as 'real' or authentic, is in the eye of the beholder. The game is intended to be authentic and as such it classifies as white propaganda. However, as I will argue in the next chapter, certain

[315] The official Department of Defense Dictionary of Military and Associated Terms (2004: 427) has a very similar definition of propaganda: "Any form of communication in support of national objectives designed to influence the opinions, emotions, attitudes, or behavior of any group in order to benefit the sponsor, either directly or indirectly." In this definition "a national objective" corresponds with the "deliberate and systematic attempt" of Jowett and O'Donnell.

aspects of reality are purposely not carefully modelled, while the game is claimed to be "the most authentic Army game ever." Following this line of reasoning, *America's Army* could then be seen as a form of grey propaganda.

As first mentioned in Nieborg (2004a), there is much discussion whether games are able to express ideas and thus can be ideological constructs. Weise (2003) discusses the case of the Interactive Digital Software Association (IDSA) versus St. Louis County which took place in April 2002. Here Chief Judge Stephen N. Limbaugh ruled "that videogames were not worthy of First-Amendment protection, claiming they exhibit 'no conveyance of ideas, expression, or anything else that could possibly amount to speech,' and concluded that anything which might seem to be such in a videogame is 'inconsequential'."[316] I concur with Weise that the medium of the videogames is an expressive one and can be so in ways which are varied, complex and unique. It is noteworthy that in 1915 the motion picture faced a similar fate as it was denied first amendment protection (Jowett and O'Donnell, 1986).

Although many FPS games, such as discussed in paragraph 3.5 may lack a significant narrative, they still should be seen as expressive texts for they are ruled-based systems that convey meaning through the explicit and implicit boundaries put upon players (c.f. Frasca, 2000). As any text is an ideological construct, so are games, how trivial or superficial its ideology might be. In Nieborg (2004a) I used the much criticised FPS game *Postal 2* (Running with Scissors, 2003) as an example of game with a more trivial ideology - i.e. 'fun'.[317] The producers and designers of this commercial game made it look like their main goal developing the game is not making profit but providing a fun experience. The notion of "providing a fun game", can arguably interact with the notion of the profit motive of the cultural industry, as well as other political or educational ideologies. *Postal 2* could be seen as a crude simulation of life in a small southern town somewhere in the U.S. The main goal of the game is to get through the day by doing some trivial errands. The manual of *Postal 2* poses that the game is only as violent a game as the player wants it to be, which seems like a valid argument framing *Postal 2* as a real world simulation of a small town. When actually playing the game, one will notice that the game is almost impossible to beat, playing it in a non-violent way. In the end the argument of the *Postal 2* developers touches upon the basic ideology of any FPS, to point, shoot and to (virtually) kill.

America's Army is a, what some would call, serious game. Michael Zyda has a combined military and academic background and his definition of serious games is useful to distinguish between commercial and serious games:

[316] The Interactive Digital Software Association versus St. Louis County, Missouri. Chief Judge Stephen N. Limbaugh, Case No. 4:00CV2030 SNL.
[317] "Postal 2 has been criticized for its dark "humour", it is possible to use a cat as a silencer for a pistol, to destroy a bar, filled with stereotypes of male gays, with Molotov cocktails and at every moment in the game it is possible to urinate" (Nieborg, 2004a).

> "Serious game – a mental contest, according to certain rules, played with a computer, that uses entertainment to further governmental and corporate training, education, health, public policy, and strategic communication (2005: 2)."[318]

In this definition all three dimensions resurface. The edugame dimension is the most obvious, and encompassed in the edugame dimension is the test tool dimension. The strategic communication dimension is relevant because on the one hand it refers to the advergame dimension on the other hand to another dimension of the game as well; propaganda. By playing the game, gamers are taught about U.S. Army values and get U.S. Army training and as Zyda's definition points out, one of the roles of serious games is to further public policy. *America's Army*, the virtual copy of the U.S. Army, goes beyond branding and marketing when it disseminates U.S. Army ideology into a global popular culture by spreading public policy. Public policy is a government product and a part of strategic communication efforts by the U.S. military, as will be discussed in the next paragraph. The U.S. Army is not a neutral tool of government, so as its virtual counterpart *America's Army* is neither. As the legendary Prussian military philosopher Carl von Clausewitz already noticed in the early nineteenth century: "war is the continuation of politics by other means."[319] The U.S. military is an essential institution within the American society, and is a tool of government politics. The tactical level of strategy simulated in *America's Army* - an infantry squad far removed from decisions made in Washington - does not directly interact with the level of grand strategy - i.e. politics. While real-time-strategy games may include this level, *America's Army* does not. However, as I will argue in this paragraph, *America's Army* propagates the U.S. Army ethos and through this, the rationale and legitimation of U.S.'s foreign policy.

The gamer is given a mission, stated upon joining a server. Take for example a part of the mission briefing of the popular Pipeline map:

> "Situation: Terrorist forces have captured Alaskan Pipeline pump station at grid WA542679, with the intent of creating an environmental disaster.
> Mission: Squad will seize Alaskan Pipeline station at grid WA542679 and accomplish one of the following: secure the main control panel; stop the flow of oil into the pumps at the three valve controls.
> ROE: Minimize damage to oil storage containers and pipes.
> Enemy: Enemy consists of a squad-sized terrorist force inside the main pump station" (Tran, 2005: 83).

This mission does not encompass the level of grand strategy and similar to the motivations of real U.S. Army soldiers, the objective is to complete the mission and to obey orders, not to engage in discussion about the validity of a mission. Any political motivation as to why Terrorist forces have captured an Alaskan Pipeline pump station is absent. There is no narrative

[318] I am aware of the controversy surrounding the "serious game"-debate. Nevertheless, the definition of Zyda is useful as he comes from the *America's Army* development team and is the author of Zyda & Sheehan (1997) and a big promoter of the military-entertainment complex.
[319] Originally published in Clausewitz, Carl von. Vom Kriege (1832) and republished many times.

explaining who these terrorist forces are and what there intention is other than to destroy U.S. property. As noted in chapter 2 and 3, FPS games notoriously lack any narrative, but as the analysis of World War Two FPS games as *Desert Combat* and *Battlefield 1942* in paragraph 3.5.2 make clear, there is no need for a back story as these games are part of the rich intertextuality of commoditised war. Many gamers are already aware, through movies and television series that they are fighting in World War Two, a fight between the evil-Axis and the victorious Allies. *America's Army* functions in a similar way as the FPS game *Battlefield 1942*; the former clearly is based on the discursive elements of the War on Terror. In *America's Army* you do not fight Russian or Chinese troops; you fight a shadowy force of stateless terrorists. *America's Army* does not directly refer to actual events during the War on Terror. The World on Terror theme is used, similar to the World War Two theme in *Battlefield*, as a mere backdrop, a pool of condensed concepts of this ongoing global conflict. The Pipeline map does note its geographical position, Alaska. Other maps give a coordinate such as WS763529 for the Bridge map, but explicit geographical references as to where the fights takes place have to be deducted by gamers.[320] Scutro (2004) reported about the implicit interaction of a real U.S. Army fighting a fictive war:

> "Game designers operated under some serious political restraints. Even if the virtual battleground looked just like Baghdad, it's not called Baghdad. The enemies are not exact copies of Fedayeen or guerrilla Republican Guard or Taliban. But they're close. "The Army knows," Henderson says. "In Afghanistan, who's your enemy one day is your friend the next. The Army is not depicting any enemy."

In this paragraph I will link the concept of strategic communication as it is used within the U.S. military - i.e. the U.S. Department of Defense, to the advergame dimension. Both dimensions show a considerable overlap and it is by distinguishing between advertisement and branding, and strategic communication that the role of *America's Army* as a propagame can be framed.

4.4.1 The Role of Strategic Communication

Since *America's Army* is dubbed by its developers as "a strategic communication tool", a definition and analysis of the use of strategic communication within the U.S. military can provide a better understanding about the relation of the advergame dimension with the propagame dimension.[321] Although the next definition does not directly include *America's Army*

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[320] The coordinates as given in the Mission Briefing of the Bridge map refer to a map-grid on a physical map. Although the system reflects authentic Army doctrine, one has to posses a real map to interpret the specific grid data given by the game, which is thus fake. The WS stands for a specific part of the map and the six digit code can be located on the map by a protractor. In other maps military acronyms are used to designate the location of a mission, e.g. location (or Unconventional Warfare Area of Operations UWAO) 'Jazz' (in the Hospital map) or 'Jennifer' (SF Sandstorm map).

[321] "The term is currently used by the National Security Council, Department of State (DoS), and Department of Defense (DoD)…" (Abraham, 2004: 1). The term is used outside governmental agencies to describe certain marketing actions. In the particular case of *America's Army* the two discourses merge. The reason to prefer the military definition and usages of the term is because the game originated within a U.S. military academy and the MOVES Institute and thus is grounded in military discourses.

or any other video game, it gives a valuable insight into the rationale of using strategic communication within U.S. military communities:

> "Strategic communication is vital to America's national security and foreign policy. Although recent attention to its value is driven by the terrorist attacks of 9/11, strategic communication describes a variety of instruments used by governments for generations to understand global attitudes and cultures, engage in a dialogue of ideas between people and institutions, advise policymakers, diplomats, and military leaders on the public opinion implications of policy choices, and influence attitudes and behavior through communications strategies" (Defense Science Board, 2004: 11).

The Defense Science Board report is one of many studies examining the role and use of strategic communication by the U.S. government and military.[322] An interesting overview of these various studies, from a military perspective, is the paper of Abrahamson (2004) entitled *The Strategic Communication Process - How to Get Our Message out More Effectively*. In his paper Abrahamson, student at the National Defense University, notes that there is a considerable amount of discussion about various strategic communication efforts, but no effective implementation of these efforts. His solutions are to put someone in charge of a strategic communication portfolio and to appropriate recourses accordingly. Four instruments are used by the U.S. government and to a considerable extent by the U.S. military, to deploy strategic communication. These instruments are public diplomacy, public affairs, information operations and international broadcasting services. Only latter does not correspond with the current use of *America's Army*.[323] International broadcasting services are government-funded broadcasts, transmitting news, information, public affairs programs, and entertainment to global audiences via radio, satellite television, and web-based systems. Information operations, also known within the U.S. military as Psychological Operations (PSYOPS), are radio transmission, leaflets, or television broadcasts aimed at foreigners in order to influence their behavior.[324] Today various Psychological Operations are conducted in Iraq and during the war in Afghanistan, leaflets were dropped 'informing' Afghanis about the negative aspects of the Taliban and offering rewards for the capture of Osama bin Laden. In an advice regarding *The Creation and Dissemination of All Forms of Information in Support of Psychological Operations (PSYOP) in Time of Military Conflict* to the U.S. Secretary of Defense, the Defense Science Board had an interesting opinion about the use of games for PSYOPS:

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322 The Defense Science Board (DSB) is part of the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. This DSB advices the Office on matters of Army Transformation, c.f. paragraph 3.2. Statements, opinions, conclusions, and recommendations of the Defense Science Board do not necessarily represent the official position of the Department of Defense.

323 *America's Army*, as a game, has nothing to do with the international broadcasting services, although it must be noted that the game can be used in a similar way. "Voice of America, Radio Free Europe/Radio Liberty, Radio/TV Marti, and the Radio Sawa, and Al Hurra Arabic language radio and television services are examples of U.S. international broadcasting" (Defense Science Board, 2004: 12)." Jowett and O'Donnell (1986: 21-1, 90) label Voice of America, the official international radio broadcasting service of the United States government, as white propaganda for its "deliberate aim to promote a specific political perspective to audiences in other countries." Voice of America is forbidden by U.S. law to broadcast in the U.S.

324 The motto of the U.S. Army PSYOPS brigade is said to be: "Capture their minds and their hearts and souls will follow."

> "A number of other media types, and means of dissemination, are also widely popular. Video games are perhaps the most popular. They can be disseminated by a number of techniques, ranging from diskettes to web downloads. Internet games allow a number of geographically dispersed players to participate in a large, shared virtual space. Web animations are also popular, as are Java applets. Other important media at this moment include CDs, CD-ROMs, and DVDs. All are suitable for PSYOP in some situations" (2000: 43).

Public diplomacy and public affairs are two aspects of strategic communication directly related to the use of *America's Army* as a propagame. As the battle for the hearts and minds is seen by many within U.S. military and government agencies as vital to win the War on Terror, this battle is fought through the use of various media. Public diplomacy is an interactive way to inform foreigners about U.S. culture, values and policy (e.g. by offering scholarships, official websites in language versions, and televised interviews with ambassadors and military commanders). Public affairs activities mainly focus on informing and influencing U.S. media, but as the Defense Science Board notes: "[…] public diplomacy and public affairs practitioners employ similar tools and methods; their audiences are global and local. This conceptual distinction is losing validity in the world of global media, global audiences, and porous borders" (2004: 20). As such, the instrument of public affairs overlaps with public diplomacy and through global media their distinctive traits as strategic communication instruments merge.

America's Army is both an example of a public affairs instrument as an instrument of public diplomacy as it shares many of the same goals and characteristic of both strategic communication instruments. However it is the role of *America's Army* as a tool of public diplomacy that signals a shift from the advergame dimension and towards the propagame dimension. Both dimensions still interact and reinforce rather than replace each other. However, the initial goal of a recruitment-aid and raising the brand awareness of the U.S. Army is partly bypassed when looked at the global use of the game, thereby giving way to the propagame dimension.

4.4.2 Army Ideology

> "In other words, they do not hate us for our values, but because of our policies" (Defense Science Board, 2004: 46).

The basic ideology of *America's Army* is based on the ideology of the U.S. Army, clearly represented and simulated through, for instance, the U.S. Army values and the Soldier's Creed (see appendix F). The success of *America's Army* as an advergame turned the game into a high profile example of the successful use of a simulation, for both strategic communication as well as the education of gamers. *America's Army* is not a neutral tool or game. The U.S. Army is arguably the most visible political tool the U.S. government has and in recent wars the most visible aspect of U.S. foreign policy. The U.S. Army, and therefore its simulation, is a

repressive state apparatus using repression (Althusser, 2001). This rationale is made explicit in the official 224-page game manual stating: "while tactical movement and communications are often essential to the success of a mission, the U.S. Army exists to defend freedom, and employing force in combat is an important element of their job" (Tran, 2003: 36). Hence, lethal force is justified a legitimate state action: "The rules and definitions of violent force are dangerously fluid and arbitrary. By mediating the definitions of violence, nation states have the ability to shield their own uses of force from censure and, furthermore, to manipulate representations of their uses of force to inspire citizens" (Hall, 2003: 27). The sole justification to use lethal force is to defend freedom.

The U.S. Army values - Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, and Personal Courage - are a central element of *America's Army*'s gameplay, as made clear in the discussion of the project's rationale in paragraph 2.5 and in the previous paragraphs on the advergame and edugame dimension. Common online ingame actions, such as nurturing, self-sacrifice and acts of (virtual) heroism, are repurposed by designating Army values to them, such as loyalty, selfless-service and personal courage. The U.S. Army values are part of the Army ethos, a set of guiding beliefs, standards, and ideals and "the soul of the profession as a U.S. soldier". In *Army Field Manual 1* (U.S. Army, 2001: 9), the U.S. Army ethos is said to reflect "U.S. culture, values, beliefs, and norms to the extent they are compatible with military service." The Army values are an important element during real life Basic Training as well.

Li, who had access to documents of the Office of Economic and Manpower Analysis (OEMA), the office heading the *America's Army* project, describes how "the gamespace becomes representative of the basic values of the whole of American society" (2004: 52). He then cites from an OEMA report; the gamespace and its community are opportunities for foreigners to "receive information about American ideals and values. Thus, the game embodies the capacity to communicate with rising generations abroad about the values and ethos that enliven the Army and the society whence the Army is drawn" (OEMA, 2003: 9 in Li). There are several instances where the representation and simulation of Army values interact with the other dimensions of *America's Army*. The FAQ-section on the official website explains why someone outside the U.S. can play *America's Army*: "we want the whole world to know how great the U.S. Army is."[325] By deliberately choosing to make the game accessible for gamers worldwide challenges the original goal of recruitment, i.e. the advergame dimension (Van der Graaf & Nieborg, 2003). While *America's Army* may be a legitimate branding tool and recruiting

[325] Source: America's Army - Support - Windows FAQ. 2004. Americasarmy.com. Available: http://www.americasarmy.com/support/faq_win.php?p=1&t=3#faq3. March 29, 2005. "Q: I am not in the United States, can I still play the game? A: Yes, we have official servers in Europe as well! There are no restrictions on who can play America's Army. We want the whole world to know how great the U.S. Army is." According to the game's EULA, the game may not be distributed to countries such as Cuba, Iran and Syria.

aid within the U.S. society, being available worldwide conflicts with the games' recruitment goals.[326]

As an important institution in the American society, the U.S. Army directly and indirectly represents the values of this society and its government. Since *America's Army* is a copy of the U.S. Army, the game reflects U.S. foreign policy. Freedom has to be defended in *America's Army*, the freedom of all U.S. citizens. The loading screen of the game features the Soldier's Creed (see appendix F), and before joining any online round, players see the Creed telling them: "I am a Warrior and a member of a team. I serve the people of the United States and live the Army Values", culminating in "I stand ready to deploy, engage, and destroy the enemies of the United States of America in close combat. I am a guardian of freedom and the American way of life. I am an American Soldier." It seems almost like a virtual contract. When the game is ready, the loading screen disappears and the player joins the U.S. Army. By showing a global audience why and how the U.S. Army fights, the game has become an example of public diplomacy through the exchange of "ideas to build lasting relationships and receptivity to a nation's culture, values, and policies" (Defense Science Board, 2004: 12). Or even a Psychological Operation, being a "military activity" using selected information and indicators "to influence the attitudes and behavior" of "groups, and individuals in support of military and national security objectives" (ibid: 13). *America's Army* is a perfect example of the use of 'sweet power' to win a war on ideas.

4.4.2.1 Sweet Power after 9/11

That infamous September-morning in New York the world changed the moment the first airplane hit the Twin Towers, the United States was at war. What happened inside the U.S. government during and after the terrorist attacks and how this event suddenly changed America's foreign policy, is documented by several journalists (c.f. Woodward, 2002, 2004; Hersh, 2004) and government officials (c.f. Clarke, 2004). Foreign relations expert Walter Russel Mead (2004) reflects in his book *Power, Terror, Peace, and War – America's Grand Strategy in a World at Risk* on the changing role of the U.S. as a superpower. In his opening chapter he discusses the almost messianic role of American grand strategy, to spread peace, freedom and liberty around the world using various forms of power. Mead builds on Joseph Nye's distinction between hard and soft power, offering two sub-categories for both.[327] Hard (military and economical) power is split up in sharp (military) and sticky (economical) power,

[326] It must be noted that for a very small number of non-U.S. gamers the game may function as a advergame: "The captain also made a friendly type accusation that we (the developers of *America's Army*, DBN) had re-invented the Roman Republic - his army and country is very aware that if a person can join the American Army they get automatic U.S. citizenship, an incalculable offer in that part of the world" (Zyda, 2003b).

[327] I.e. Nye, Joseph S. The Paradox of American Power: Why the World's Only Superpower Can't Go It Alone. Oxford: Oxford University Press, 2002.

and soft power (cultural power) is split up in sweet power and hegemonic power.[328] It is this second kind of power that directly relates to *America's Army's* propagame dimension: "In any case, American sweet power, though limited and variable, clearly plays an important role in winning sympathy and support for American foreign policy around the world" (Mead, 2004: 39-40). As movies, comic books and Coca-Cola are part of the U.S.'s sweet power, so is *America's Army*. But whereas comic books may indirectly address U.S. values; the sweet power in *America's Army* seems stronger than all.

The increasing attention of the role of strategic communication within defense communities is the direct result of the War on Terror. U.S. foreign policy transformed accordingly and drastically reformatted U.S.-E.U. relations. The war in Afghanistan followed and then, Iraq. The result: "The war has increased mistrust of America in Europe, weakened support for the War on Terrorism, and undermined U.S. credibility worldwide" (Defense Science Board, 2004: 15).[329] The War on Terror is not only a war on stateless criminals, according to Mead and the Defense Science Board, but according to U.S. government officials such as Defense Secretary Donald H. Rumsfeld; it is also a war on ideas. The War is not a war between the West and Islam, nor between nation states. It is a war to spread freedom and liberty - i.e. values appropriated by and associated with the United States. Anti-American attitudes have to be eliminated. How? Not by hard power but by soft power and this soft power has to be globally dispersed through strategic communication.

Just as the National Research Council (Zyda and Sheehan, 1997) acknowledged the lead of the commercial game development industries and outlined an agenda to forge a bond between entertainment and defense, the Defense Science Board recognises the expert knowledge of "the private sector" when it comes to bring across messages with an agenda.[330] The board proposes to gain an understanding of "the U.S. brand" (2004: 54). Anti-American attitudes are not only a direct threat to U.S. national security it also undermines the superpower's soft power. Directions on the implementation and methodical and strategic approach to global communication about U.S. policy includes methods such as deploying strategic communication teams, mobilising global spokespeople, utilize private sector media techniques and communicate to target audiences (Defense Science Board, 2004: 57). One way to do this is by using interactive and mediated channels and thus, not surprisingly, video games and online computer games could as well be used for the U.S. effort.[331]

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[328] Hegemonic power is the interplay of sharp, sticky, and sweet power making "something as artificial and arbitrary, historically speaking, as the American world system since World War II look natural, desirable, inevitable and permanent. So, at least, we hope" (Mead, 2004: 25).

[329] It would be very interesting to find out why Germany has the second biggest America's Army community and is home of the website of *AAOTracker*, an important part of the *America's Army* community.

[330] "The commercial sector has a dominant competitive edge in multi-media production, opinion and media surveys, information technologies, program evaluation, and measuring the influence of communications" (Defense Science Board, 2004: 4).

[331] "Use Interactive and Mediated Channels: Pervasive telecommunications technology permits the cost effective engagement of target audiences in sustained two-way interactions using electronic mail, interactive dialogue, virtual communication, interactive

4.4.3 Games, Movies and Propaganda

Jowett and O'Donnell (1986: 72) come to the conclusion that movies "never became the powerful propaganda vehicle that its critics thought it would be", despite having "the greatest potential for emotional appeal to its audience, offering a deeper level of identification with the characters and action on the screen than found elsewhere in popular culture." Based on the book *Operation Hollywood: How the Pentagon Shapes and Censors the Movies* by David Robb (2004), Soriano and Oldenburg (2005) come to a similar conclusion: "Viewers are either unaware of the relationship or don't mind. Military culture is hotter than ever." The relationship between Hollywood and the Pentagon is becoming more intimate as movie studios can gain access to material and expert knowledge if they are willing to put up their scripts for editing. Movie-goers do not seem to care. Because of this indifference the narrative of movies can be altered, but as these movies are still produced by the entertainment industries with profit as its main goal, contemporary Hollywood war-themed movies are not direct U.S. military propaganda. Jowett and O'Donnell (1986: 72) argue that the "Hollywood film industry never lent itself for to overt propaganda" but they do mention the production of various movies with some sort of agenda.[332]

Jowett and O'Donnell (1986: 81-2) give four factors why propaganda dissemination via films is restricted. First, a global audience is used to high standards and thus fairly expensive movies. With the advent of computer imaging and special effects departments these costs rose accordingly. The second factor is the convention of a fictional narrative complete with Hollywood stars, who are very expensive as well. Third, the distribution system for films is tightly organised and difficult to break in to as an outsider. And most interestingly, they point to new video technologies surpassing filmmaking technology as a means to spread a propaganda message. The medium of the motion picture is therefore "totally limited to the values and ideologies that are an integral part of the plot structure". As we are entering the age of "media convergence", the (digital) production and publishing of movies is much easier than in the 1980's (Jenkins, 2002). Nevertheless, producing a conventional Hollywood war movie with high production standards, still costs enormous amounts of money and has to take into account the problem of distribution.

These four factors may be an answer to the question why the U.S. Army never produced and published a motion picture for recruitment or branding purposes. Taking these four factors and comparing them with *America's Army* show that developing a full-blown propagame is far

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video games, and interactive Internet games. Similarly, this technology supports ad hoc group interactions using blogs and chat rooms. Mediated interactions involve an individual who orchestrated the posting of material on a web site focused on a specific issue. These new forms of engagement should be harnessed for appropriate audiences" (Defense Science Board, 2004: 57-8).

[332] Interesting in this respect are the recruiting - or as they were called "preparedness" – films *Devil Dogs of the Air*, *Here comes the Navy* and *Miss Pacific Fleet*, all produced in 1939 when the U.S. were still neutral Jowett and O'Donnell (1986: 77). These three films stem from 1934 and 1935 according to the Internet Movie Database. See http://www.imdb.com/title/tt0026721/, http://www.imdb.com/title/tt0025238/ and http://www.imdb.com/title/tt0026275/.

cheaper and easier than a high-profile movie. Gamers worldwide demand high standards, making a game based on Unreal technology however costs an estimated three to four million dollars while a Hollywood war movie costs at least seventy million dollars, c.f. *Saving Private Ryan* (Spielberg, 1998).[333] As new games such as *Grand Theft Auto: San Andreas* and *The Sims* show, (genre) conventions in game design are bended with every new game and even in the somewhat formulaic FPS genre and tactical sub-genre, experimentation with certain design elements is praised by gamers. As paragraph 2.3 on the specific family traits of *America's Army* and the previous paragraphs in this chapter make clear, the developers of *America's Army* succeeded very well in appropriating elements from the tactical FPS sub-genre and altering them to their specific need - e.g. compulsory training parts and only being able to play as a U.S. soldier. The factor of distribution is bypassed by the Internet and as paragraph 4.1.6 shows, this is done quite successfully. Gamers seem to be willing and capable of downloading large files and in line with the notion of the "gift economy", they are eager to share 'this new free game' via peer-to-peer networks or share a physical copy with their friends (Uricchio, 2004).

In the end, Jowett and O'Donnell's fourth factor turned out to be somewhat visionary. The U.S. Army does not have to make an expensive movie or produce their own television series; they are able to directly tap into existing technological and socio-economical frameworks of the military-entertainment complex. The Army can harness the collaborative nature of online game communities and use them to their advantage - spreading the Army's symbolic capital. Gamers are familiar, or at least not surprised by another Army game, since military advisers decorated the box shots of commercial games for over a long time. The analysis of the representation and simulation of modern war in computer games in paragraph 3.5 shows that there is already a common understanding about digital war and the expert knowledge of the Army about their own organisation gives *America's Army* the aura of objectivity needed to 'sell their product' – the U.S. Army.

4.4.4 Concluding Remarks

The label "infowar" describes the convergence of the technological transformation of the U.S. military - i.e. weapon systems - with networked information and communication technology-based warfare - i.e. sign-systems. In all its forms, information warfare can use simulations as weapon systems, in its hard form as a component of a weapon or in its soft form as (public) dissimulations:

[333] Source: Business Data for Saving Private Ryan (1998). 1998. Internet Movie Database. Available: http://www.imdb.com/title/tt0120815/business. March 22, 2005. A license for an Unreal costs approximately a half million dollars, the total production costs for *America's Army* are over 20 million for four years. It should be noted that the profit margins are much higher.

> "More a weapon of mass persuasion and distraction than destruction, infowar nonetheless shares some common characteristics with nuclear war: it targets civilian as well as military populations and its exchange-value as a deterrent outweighs its use-value as an actual weapon" (Der Derian, 2003: 47).

As strategic communication tool, the concept of infowar directly relates to the use of *America's Army*. Game based simulations, become weapons (of mass-distraction). Journalist James Wagner Au (2002) already lauded *America's Army* for creating "the wartime culture that is so desperately needed now" (i.e. in the U.S. during the War on Terror) and sees these tactical FPS games as the *Why we Fight* for the digital generation.[334] Hall (2003: 9) concurs: "The developmental resources which go into the production of combat spectacle used for destruction overlay with those used for pleasure. This overlap is bringing about increasingly similar affective results in subjects performing combat spectacle whether for force or for entertainment. Beyond the financial relationship fostered by their connection at the level of production, entertainment combat spectacles are a necessary means of gaining citizens' support for the maintenance of U.S. militarism." As such and coupled with the pure war character of the military-entertainment complex, the military and domestic spheres merge and *America's Army* is the ultimate example of this correlation (Crogan 2003a; Nieborg, 2004b). Pure war reaches the hearts and minds of a global youth culture, equally anticipating the next war as well as the next game based on it.

Propaganda works best if the receiver has no knowledge of the intended message. This seems clearly to be the case for *America's Army*. Many gamers see the game as 'just a game', and gamers may be unaware of any of the game's four dimensions or simply do not care about them - in the end, it is a free game. Ironically, Hollywood military-themed movies are seen by project director Wardynski as "stereotypical and sensationalist representations of the military" and movies are an ineffective way to spread information as they are "external, independent intermediaries beyond Army control" (Li, 2004: 45). The "militarised masculinity" of the FPS genre on the other hand is a fertile ground to be used for public diplomacy. Controlling the U.S. Army message is, as with any propaganda message, key. Despite the emergent character of online gameplay, the regulatory and top-down gameplay of *America's Army* coupled with a specific marketing message make *America's Army* a controlled environment. In order to play the game, players have to adhere to the rules of engagement if they want to play the game with their peers. Gamers may be pacifists or oppose shooting human beings, by entering the game they will soon be forced to kill an adversary if they want to win. Thus, to a certain degree the FPS ideology and the accompanying first person paradoxes have to be internalised,

[334] The "Why We Fight" metaphor is explained by Au (2002): "During World War II, as the country girded for battle, director Frank Capra created a series of films to instruct the Army's soldiers. A classic of righteous propaganda, "Why We Fight" laid out for the greatest generation who the enemy was, and why they must be defeated. If the presentation was simplistic, its message was irrefutable, and comprehensible to the least literate recruit." C.f. Hall (2003) for an analysis of the Why We Fight-films and its relation to the military-entertainment complex.

having a naturalising effect on players. Entertainment has always been an indispensable element in the propagandist's toolbox. In 1986, Jowett and O'Donnell stated; "Television's potential as a propaganda medium has yet to be fully realized in modern society" (95). Paragraphs 3.6 and 3.6.1 show that television's potential is fully utilized. Now it is time to tap into the popular culture and employ games as a propaganda medium.

4.5 Concluding remarks

The contents and theme of *America's Army* are familiar with many gamers and *America's Army* could be developed by a commercial game designer as well. The surplus value of *America's Army* as a game-based simulation derives from the four dimensions of the game, the interplay between these four parts make *America's Army* a constant evolving text worth exploring. The advergame and propagame dimensions pared with existing conventions for PC games versus the test bed and edugame dimensions are constantly balanced within America's Army. On the one hand, the modelling and simulation of virtual worlds, avatars, weapons and sounds can be done with implicit reference to other games within the tactical FPS genre. On the other hand, existing conventions within FPS gameplay are conversed, bended or deepened, in some cases setting new standards for what is seen as the portrayal of 'real combat'. The developers of *America's Army* are able to experiment and create *their* simulation within existing boundaries, building upon existing cultural, socio-economic and technological conventions and discourses; each having the respective input on the final product. The Army game is the centre of a growing community where gamers meet to experience a similar representation and simulation of war and combat to soldiers and vice versa. The success of *America's Army* has implications for thinking about games and simulations and the use of these interactive texts for advertisement, education, propaganda and training.

The four dimensions of *America's Army* are always in constant flux. Take the inclusion of several training modules, like the medic training, mandatory to unlock the role of combat life saver. Unlocking roles by gaining a certain amount of points or experience, is a common principle in various online games. The U.S. Army appropriates this element to educate gamers about the role of combat medic in the U.S. Army, and here the advergame and edugame dimension directly interact. The inclusion of the medic training segment in the game is the outcome of various research and development trajectories. It may seem clear that a pool of recruits readied by *America's Army* possess computer skills that can directly put to use in a transformed Army. Gamers who are proficient and at ease with online gaming technologies, are able to benefit from their knowledge acquired by playing countless of hours with their peers from all over the world. Thus, the game can be used to test this proficiency, to test whether games can be used for aptitude measurement and to test whether commercial modelling and simulation technologies can be used for Army training. By making the game freely available to gamers all over the world, the games becomes part of the U.S.'s soft power. *America's Army*

shows to non-U.S. players that the U.S. Army is a highly trained, professional force, willing to fight against terrorists and does this in an interactive dialogue with the gamer through both the game and its community.

For the first time in history it is possible to experience U.S. Army Basic Training and the horrific portrait of U.S. Marine Corps training, painted by the movie *Full Metal Jacket* (Kubrick, 1987) is replaced by a gentle and friendly drill instructor, who's only worry is his freshly harked sandpit. During Basic Training a gamers is introduced to the U.S. Army through entertainment. But in line with FPS design conventions, the Teen rating of the game and thus the advergame dimension, the U.S. Army drill instructor does not swear, does not threaten to rip your eyeballs out and ******** you , but indicates where firing point number nine is to start your training. And in the end, the reward of getting through 'Basic' is not being deployed to Iraq, but playing online with fellow gamers.

With the dwindling number of new U.S. Army recruits, cost-effective recruitment aids are more than welcome. The fear of parents that their children are going to get killed in Iraq after joining the infantry drives enlistments bonuses up and makes the Army spend more and more on advertisement. U.S. Army recruiting efforts for long relied on various media to promote their service but with *America's Army* the regained control over their message by first developing the U.S. Army brand and then to gain access to popular culture by creating the 'sub-brand' *America's Army*. The latest developments with regard to the *America's Army* brand show various developments moving away from the PC-game. Official action figures, merchandise and a console version spread the branded message of empowerment and the defense of freedom. But as a virtual copy of the U.S. Army, real life military matters spill over into the game, affecting all four dimensions.

The U.S. Army is transforming and so is *America's Army*, while this process in the real Army will takes decades, changes in a design of a game can take place almost overnight. As part of the Army's new doctrines, Special Forces, as 'Objective Force Warriors', are an important element in this process. The role of Special Forces, including training, weaponry and maps was successfully introduced when the need for more Special Forces recruits was identified by the U.S. military. *America's Army* game enhancements are now made by special sub-development teams such as the America's Army Government Applications-team, in line with the edugame dimension, and the America's Army Future Applications development team mainly increasing the importance of *America's Army* as a test tool. Military units are able to request a module. The U.S. Air Force Protection Battlelab desired a convoy force protection scenario and the MOVES Institute initiated the development. Within a view months and within security guidelines, the SF CSAR map was released, demonstrating the interacting dimensions.

Understanding the constant balancing of the four dimensions of *America's Army* is paramount to gain a proper understanding about the game and its production, and is essential to frame the numerous questions regarding the game's reception. For instance, without

properly analysing the advergame dimension, the relation of the U.S. Army towards the community cannot be understood and obvious questions as why the game is free and why the game is so cost-effective could be traced back to the advergame dimension. The four dimensions can be used to pinpoint choices in the design of the game, and as a virtual simulation of the U.S. Army, the complex negotiations of modelling this vast institution facilitates a discussion on both the U.S. military, game culture, online marketing, and military modelling and simulation.

The developers are able to tap into various existing frameworks, communities and technological developments. Not only profiting from the years of research on military themed simulations by various actors in the military-entertainment complex, but also the growing use of online marketing and the experience gained by online advertisers is of direct use for the Army. Advergames have become a genre of its own and *America's Army* may be bigger and better, gamers have seen it before. Military advisers are the ones decorating marketing material of commercial military-themed games and gamers are comfortable in the branded world of for instance *Coke Music*. The Army can tap into existing game communities and adopt and appropriate their norms. Peer-distribution of content and symbolic capital directly benefit the advergame, edugame and propagame dimensions. The test tool dimension interacts with the advergame dimension as gamers are more than willing to play with new weapons and anticipate future use. Existing (Unreal) game technology, already widely used within the U.S. military, has been used to create a somewhat familiar game. By choosing to build a game upon a commercial game engine, which powered various games selling millions of units, the core mechanics and aesthetics of *America's Army* resemble similar games in the genre. This same engine is used to model new weaponry in a way gamers are familiar with. At the same time, the game is a military training and test tool and those who are aware of this fact, are exhilarated about the possible synergies of game and military content.

The downside of levering existing communities, design conventions and norms, may be that some gamers are put off by the top-down nature of the game and the management of its community. There seems more and more discussion of the more adept gamers, those who really drive the community, the game and thus the *America's Army*-brand, that the game could be handled better. Some argue that there are too much bugs, others encounter too much cheaters and the official forum is said to be controlled by a dictatorial regime, locking posts and scoff at the notion of free speech. Since the success of the game is measured in the amount of online gamers and not the amount of units sold, playing online must be as smooth and joyful as possible and the means to do so must be within reach. The game must be obtainable relatively easy and the online playing this experience must be flawless. Too much cheaters and a gamer is gone, too much cheaters over an extended period of time and a players will vent his anger to whoever may be listening. The rapid success of the game can be

broken down by the same fans in an equally amount of time. As *America's Army* becomes an increasing popular tool and an increasingly more pervasive brand, this downside is not something to disregard.

Chapter 5 –
Tapping into the Popular Culture of *America's Army*

The aim of this chapter is to better understand the inner workings of *America's Army* and what sets it apart from other media forms and other games/simulations. The ultimate struggle in *America's Army* is to balance realism and fun. From this dichotomy many choices in design can be explained and interpreted. The fact that *America's Army* is an online multiplayer experience greatly strengthens and amplifies the primary objective of *America's Army*, being a tool for strategic communication. Nevertheless, as Judith Herz rightfully poses in her book *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, and Rewired Our Minds*, it is important to know who is responsible for making up the rules of the game:

> "Who has created this environment, and what do they want you to believe? And as politicians, media conglomerates, public relation firms, and management consultants churn out more simulations this question becomes proportionately more important. Because if you're going to buy stocks on a simulated trading floor or work in a virtual office or fight a computer-mediated war - if you're going to play these games - it's a good idea to know who's making up the rules" (1997: 223).

In the following paragraph, the subject of games as rule-bound texts will be discussed. This is followed by a perspective on how to critically approach a game as *America's Army*. Since the game is known for its much acclaimed realism, the game as well as its marketing message will be analysed. This combination, providing a military themed game which claims to be the most authentic military game ever, resulted in a considerable amount of criticism. By tapping into the popular culture of *America's Army*, the Rules of Engagement describing how to engage this culture are successfully altered.

5.1 First Person Rules

In order to facilitate a discussion about realism and authenticity in FPS games, it is worthwhile to look at the differences between games and simulations from a game design perspective. Game designers Zimmerman and Salen define a game, both digital and non-digital "as a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" (2004: 80). Applied to *America's Army* this means that gamers from all over the world engage in virtual squad based combat, under strict Rules of Engagement (ROE) and the laws of nature, resulting in a win or lose situation. When Zimmerman & Salen speak of games as "the play of simulation", they see a simulation as "a procedural representation of aspects of 'reality', whereby every game can be understood as a simulation" (ibid: 423). As such, *America's Army* is primarily a ludological construct. It is far more a rule based system than it conveys meaning through a narrative of pre-rendered or scripted material. Here games differ

from representational media such as television and movies: "(…) simulation and representation are two ways of dealing with reality. Until now, both have coexisted in our culture, but representation, along with narrative, have been dominant, mainly because complex simulations require a level of technical sophistication that is impossible without a computer" (Frasca, 2001b).[335]

America's Army does not primarily rely on a narrative to convey its branded message. As a simulation of infantry combat, the game has to convey its meaning through the rules of its simulation model. The characteristics of simulations, being abstract, numerical, limited and systematic (Zimmerman and Salen, 2004), are reflected in *America's Army* as a game. The simulation of combat is abstract - gravity does not affect bullet trajectories. Damage is numerically modelled - every bullet causes a certain pre-determined percentage of damage and the gamespace is limited - gamers fight in a confined space. And as a simulation of the real world, various sub-systems interact - e.g. a model of the human body interacts with various weapon systems, integrated in the games' overall simulation model.

Playing a game is a configurative practice resulting in emergent gameplay (Frasca, 2001a; Juul, 2002). Salen and Zimmerman go as far as to say that: "[…] one of the sweetest pleasures as a game designer is seeing your game played in ways that you did not anticipate" (2004: 540). While this may be true for games such as *The Sims* (Maxis, 2000) or *Counter-Strike*, where emergent behaviour is a crucial part of the gameplay, *America's Army* breaks with this trend in a radical way. The Rules of Engagement are just one of the more explicit rulesets governing the gameplay of the official U.S. Army Game.[336] As gamers interact with *America's Army* as a rule-based text, they come up with desirable emergence (from a designers perspective), such as co-operation with fellow gamers, or undesirable emergence, such as spawn killing and exploiting bugs. As a result of the multi-dimensional character of *America's Army*, the undesirable emergence during the online play is as limited as possible.

In paragraph 3.4.1 the paradoxical nature of war is linked to the simulation of war in FPS games, leading to a range of interesting 'first person paradoxes'. The constant negotiation between the goal to entertain and offering an authentic experience, resulted in a settlement where the behaviour of weapons is carefully balanced and combat is up-close and personal, instead of following the perceptional trend of a distant war. Various design conventions and technical limitations distort an authentic simulation of infantry combat. Take for example the modelling of the ingame Field of Vision (FOV) in *America's Army*, which is in line with FPS conventions. While humans have 120 degrees FOV and can detect motion in a peripheral field up to 180 degrees, a FPS game such as Quake (id software, 1996) has a FOV of only 30 degrees, while the FOV in *America's Army* is 90 degrees. This total lack of peripheral vision, changes the avatar in a FPS game into "a tunnel-visioned paraplegic in an electric wheelchair" according to

[335] Frasca (2001b: 26) defines simulations as: "representation of processes that mimic a system by the behaviour of another, even if its source system is not real."
[336] An important part of *America's Army's* Rules of Engagement is being punished for shooting a U.S. soldier (a team member).

game designers Rollings and Adams (2003). The developers of America's Army explain how technical constraints limited their design options:

> "For example, while a parachute jump is in the game, a beach landing is not, because recreating water's splash and flow is extremely hardware intensive. Similarly, ropes used dynamically in knotting and casting are currently more trouble than they're worth. But [America's Army] is continually under improvement and expansion. As the game engine evolves and consumer equipment improves, it will be possible to animate the Strykers and other vehicles that players can presently climb into and sight and shoot from; for now, they would move too slowly, look too crude, and require too vast a background" (Davis et al., 2004: 10).

Every map in *America's Army* has to be vouched for by 'real' U.S. Soldiers who ascertain that a particular scenario is in line with situations the U.S. Army encounters. Nevertheless, comparing a FPS game as *America's Army* to the empirical reality is near to impossible. Reflecting on the scope of the simulated level of strategy of *America's Army*, shows the reductive character of tactical FPS games and their simulation of combat. Where the first computer game in history, *Spacewar* (Russel, 1962) can be seen as a very simple simulation of space combat, to call *Spacewar* an unrealistic military simulation just because of its simple simulation model, does not contribute to the understanding of military simulations. In order to make a distinction between the different games/simulations used by both gamers and the military, the different levels of strategy as described in Luttwak's book *Strategy: the Logic of War and Peace* (2001), provides a distinction between the different levels. The levels of strategy are used by military strategists to describe the scope and level of the actions performed by opposing governments and their military forces.

The scale of *America's Army* as a military simulation is extremely limited taking the different levels of strategy into account. Only the tactical level of strategy is elaborately simulated in the game, while aspects of the technical level are present as well. The tactical level of strategy simulates the human factor in combat, mostly on a unit or squad level, representing "the intangibles of leadership, morale, discipline, and unit cohesion" (Luttwak, 2001: 105). The tactical level is the most notable level of strategy simulated by First Person Shooter games (see also paragraph 2.1). The third level of strategy – the operational level, simulating battles "in their dynamic totality", is absent in *America's Army*. Nor are the levels of theater strategy or grand strategy in any way simulated in the game. Tactical FPS games as *Counter-Strike* and *America's Army* are thus solely focusing on the lowest levels of strategy and as a result these games could therefore be labelled as unrealistic simulations of 'real' war. This raises the question why *America's Army* is not only able to market itself as "the most authentic military experience available", but also sustain this consensus among those who play the game.

5.1.1 Technological Differentiation

How realism and subjectivity operate in the FPS genre is explored by Peter Bell, arguing that "the impression of realism and interactivity in video games is not due to the advancement of technologies towards a paragon of interactive reality but from the technological differentiation of games in production, a differentiation that is naturalized as realistic and interactive" (2003: 1). Bell goes on to say that reality emerges through opposition e.g. comparing *America's Army* with *Counter-Strike* noting that "realism" in the Lacanian sense, is always unknowable. Next generation FPS games as *Far Cry* (Crytek, 2004) and *Half Life 2* (Valve Software, 2004) are lauded by gamers and the gaming press for their realism compared to 'older' shooters. In the following analysis of the acclaimed realism of *America's Army*, I will use the comparative argument of Bell as a starting point for the discussion of *America's Army* as "the most authentic military experience available, from exploring the development of Soldiers in individual and collective training to their deployment in simulated missions in the War on Terror".[337]

Bell (2003: 10-1) extends the theory of Marxist philosopher Louis Althusser to the FPS genre, arguing that: "products are naturalized as realistic and interactive through interpellation". This interpellation is the result of the appropriation of the rules and design convention of a game by the gamer as players are giving a sense of interactivity by obscuring the production of the game. One of the most obvious FPS design conventions is the use of a first-person perspective, extending the notion of autonomy of the player. Comprehension of the game's rules and conventions (its technological differences from other games) is akin to being interpellated, naturalizing those rules and design conventions of a FPS game as "freely chosen" and "realistic" by the player.[338]

As the various differences between the FPS *Counter-Strike* and *America's Army* described in chapter two, make clear: both games are based on certain aspects of 'reality', each emphasizing different aspects in its simulation model. It is in the design choices constituting the simulation model (and its accompanying ruleset) that set both games apart and make gamers, the game's developers and the gaming press say that 'America's Army is a more realistic wargame than Counter-Strike.' As we shall see in the following paragraphs, certain aspects in the simulation model of *America's Army* are more explicitly simulated than others. *Counter-Strike* uses the more simplistic and general model of the battle between an undefined group of terrorists fighting against U.S. Navy SEALS (the Counter-Terrorists). *America's Army* on the other hand uses 'reality' as the basis for its simulation model and will only deflect from

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337 *America's Army* - Game Intel – Features. 2005. Americasarmy.com. Available: http://www.americasarmy.com/intel/features.php. March 5, 2005.

338 Bell remarks that the process of stating alternative *ludus* rules (e.g. completing a mission without using a weapon nor getting an objective, which is near to impossible) could be seen as an alternate interpellation but this: "[…] does not overturn Althusser's model of subjectivity, but suggests some room for negotiation and thus follows in the footsteps of others who have found Althusser's theory compelling but overbearing."

certain aspects of reality when forced by FPS genre conventions (and this includes preferring entertainment over authenticity) or being forced by one (or more) of the four dimensions.

The result of the reductive character of simulations is that game/simulation designers have to make choices in design; hence games/simulations are "media of expression rather than a form of calculation" (Crawford, 2003, p. 4), turning the development of a simulation into an inevitable subjective exercise. And as Salen en Zimmerman remark, *America's Army*, in essence a wargame, "can never contain every aspect of the phenomena being simulated. Historical wargames have been wrestling with this challenge for at least a century, making it a wonderful case study for the design of simulations" (2004: 242). As the analysis of *America's Army* will show, it is this subjectivity which makes *America's Army* an interesting object worth exploring. According to game-designer Chris Crawford, the broad-minded considerations about subjectivity in design in other media are absent during the reception of simulations, because "the aura of digital precision that saturates our image of the computer, spills over into our appreciation of simulation, blinding us to the possibilities of the medium" (Crawford, 2003: 4). Whether the agency offered to a player as a result of the interactive character of simulations, make a simulation seem 'more real', is an equally comprehensive as intriguing question.[339] One important observation about the interpretation of a simulation is made by Frasca (2001a). He compares his interpretation of the game Tetris with the one of Janet Murray, concluding that "the interpretation of simulations, as any semiotic interpretation, does not escape from the need to consider that different observers may interpret it differently and, therefore, associate it with different source systems" (2001a: 29). The different interpretations of an actor are based on both the ideas the observer has of the source system (e.g. "real combat"), but also from the model of the source system.

5.1.2 Games as Free Speech?

There is much discussion whether games are able to express ideas and can be ideological constructs. Weise (2003) argues that the videogame is an expressive medium in ways that are varied, complex and unique. There is a misunderstanding, due to its interactive character, that a game is arbitrary in meaning and symbolism. Sicart on the other hand asserts that FPS games like *Counter-Strike* do not inhabit any ideological representations:

> "In its gameplay, in its rules, there is no ideological representation. It does not matter that one of the teams is called "terrorist", as it is just a definition, a name. In the game there are no rules that imply a certain ideology: it is just a simple game of killing

[339] Since there is not such thing as *the simulation*, I will leave this question open for the time being. Looking at the discursive elements in the various FPS game communities, it seems that those who do not have any experience of the 'source system' (i.e. real combat) on which the simulation model is based, label the game as realistic. *America's Army* is then often compared to other games such as *Counter-Strike*, but seldom with movies or television.

> or getting killed, a game of survival with rules oriented to deal with the very same fact of survival" (2003).

Simulation games, such as *The Sims* (Maxis, 2000) on the other hand, represent a certain ideological discourse through their rules. Although many FPS games discussed in chapter three may lack any narrative or non-playable sequences, they still should be seen as expressive texts for they are rule-based systems that convey meaning through the explicit and implicit boundaries put upon players. I would argue that FPS games (and their mods), do contain to a certain degree, a similar ideology, how trivial or superficial this ideology might be.

Frasca rightfully argues that FPS game designers by creating a moral set of (*ludus*) rules, define what is right and wrong, and thus games can be looked at as rules based systems for "there is an essential difference between creating a simulated environment where it is just possible to murder people, and another where you get a reward (score, extra levels) for doing it" (2000a: 48).[340] He then comes with a method for analysing games and simulations and poses that "the simulation author - and the videogame, game or toy designer - is ideologically responsible for the creation of three levels of representation" (ibid: 48). The first level corresponds with traditional storytelling, constituting scripted actions, descriptions and setting. The second level is a result of the design of the rules of *paidea* - i.e. "the rules that model the simulated system". In *America's Army* a *paidea* rule would be that the player is always a soldier of the U.S. Army. The third level encompasses the design of the *ludus* role, defining the victory condition - which in *America's Army* is accomplishing a mission (by killing all opponents or reaching the objective). As in all tactical FPS games, the winning state in *America's Army* is clearly defined. Frasca (2003: 230) explains: "Clearly defined goals do not generally leave much room neither for doubts nor for contesting that particular objective. Not surprisingly, all military games are *ludus* because they do not admit options that break its binary logic (friend or foe, dead or alive, with us or against us)." There is no option to prevent one of the parties from winning without completing an objective, making a peaceful resolution to a mission in *America's Army* nearly impossible. Surrendering or staying away from the battleground is possible, if a player is willing to accept defeat. However, as both parties are U.S. Army soldiers, not accomplishing a mission when told to do so heavily contradicts with the U.S. Army values and is thus, according to the simulations model, ruled out.

Analysing *America's Army* with the help of these three levels, and especially the second and third level, provides a framework for structural analysis and criticism. Some FPS games are indeed very straightforward, but through their rules, audiovisuals and representation, FPS games are ideological constructs as any other text. Labelling one team as terrorists is not just a definition or a name, in *Counter-Strike* the simulation model depicts the Terrorists as 'bad-guys', planting a bomb or holding 'innocent people' hostage. In *Counter-Strike: Source* the

[340] The difference between *paidea* and *ludus* rules is explained in chapter 2.

Counter-Terrorists are distinctly represented as U.S. forces; the ideological construct of a good-guy/bad-guy dichotomy is enforced. The fact that *Counter-Strike* is "a simple game of killing or getting killed" is an ideological construct in itself. There is no room for negotiation nor for surrender. Lethal violence is the sole solution for resolving the apparent conflict in *Counter-Strike*. At the same time the game follows the 'First Person Paradoxes' (as outlined in paragraph 3.4.1), simulating a battle between Terrorists and Counter-Terrorist as fair and balanced, purposely disregarding the technological superiority of U.S. Forces. As *The Sims* could be seen as a simulation of the ideology of late capitalistic societies, *Counter-Strike* and *America's Army* in particular can be seen as simulations of a "militarized masculinity" (Kline et al., 2004: 255-6), i.e. mobilizing fantasies of instrumental domination and annihilation within in a masculine discourse. Following Althusser's (2001) concept of "apparatuses", *America's Army* is not only part of the Ideological State Apparatus of today's cultural industries, as a simulation of the U.S. Army it is the embodiment of a Repressive State Apparatus.

While the pitfalls of the "computer game moral panic" (Morris, 2003), referring to the many factual errors made by critics of FPS games, must be avoided, it is worthwhile to shortly look into the various perspectives on *America's Army* as an authentic combat simulation. As a multi-dimensional game, *America's Army* has led to various forms of critique by gamers, researchers and the (gaming) press. Although there are remarkably little comments by game developers labelling *America's Army* as unfair competition, some members of the gaming press argue that *America's Army* is invading popular culture and especially the manifest appearance of the U.S. Army at the annual Electronic Entertainment Expo (E3) conventions in 2002, 2003 and 2004 has resulted in some debate. Hereafter I will try to pinpoint why so many game reviewers, fans, gamers, academics, journalists and the U.S. Army laude the game for its much acclaimed realism and argue that the notion of *America's Army* as an authentic combat simulation is based on technological differentiation. Being a simulation and a - procedural representation of aspects of 'reality' (Salen & Zimmerman, 2004), the games' authenticity focuses on those aspects of 'reality' that are corresponding to the games' four dimensions, leading to various forms of critique.

5.2 Much Acclaimed Realism

"Typically treated as a masculine genre, realism is a generic mode whose foremost goal is to reveal reality through empirical, rational observation. Realism in an entertainment context authorizes consumer citizens to gaze upon a visual recreation, a mediated rendition of the real" (Hall, 2003: 45). Representing an accurate empirical reality through simulation is and always will be impossible: "Judging realism according to the standards of photorealism limits discussion of cultural productions to a level of what the real is rather than how it comes to be" (ibid). Following Frasca's three levels of representation, only the first level deals with this

form of representation - i.e. photorealism - and indeed, by limiting the analysis of *America's Army* to its audiovisuals, one would bypass the complex multi-dimensionality of *America's Army*. As chapter 4 indicated, there is a constant struggle to adhere to the various needs of the U.S. Army and still being able to tap into the popular culture. This struggle results in interesting design choices and choices distorting reality. As a training tool for the U.S. Army, *America's Army* similar to many other tactical games, such as *Full Spectrum Warrior*, and *Close Combat: First to Fight*, focuses on specific elements in modelling an empirical reality. Certain aspects relevant to military training, such as weapons modelling, are simulated in great detail, while other aspects such as the asymmetric character of contemporary war, the nature and scope of real-life Basic Training and the modelling of the battlefield are far more reductive. Since there is no precedent for the simulation of Basic Training, no other game simulated real-life Army training in the same meticulous way as *America's Army* did, the U.S. Army is able to differentiate itself by just offering a Basic Training path, without design or genre convention constraints. Compared to real-life Basic Training (c.f. Volkin, 2004), Basic Training simulated in *America's Army* is extremely gentle and focuses mostly on weapon handling; i.e. the 'cool' parts of Basic Training.

Nevertheless, *America's Army* as a FPS game is still seen be many as 'the most realistic shooter' available. This hegemonic view is a result of two factors. First of all, as mediated realism is a relative notion, *America's Army* can claim to be authentic by comparing the game with other games in the genre. Second, the marketing message, discussed in the next sub-paragraph, adds to the supposed 'realness' of the game. Before analysing this marketing message, a comparative analysis of *America's Army* sheds light upon the hard to grasp notion of authentic gameplay.

Comparing *America's Army* to the tactical FPS *Counter-Strike* by using Frasca's three levels exemplifies which aspects of *America's Army* make 'more real'. The first level is similar to other FPS games - the game may look better or worse than *Counter-Strike: Source*, but in the end this is a more subjective claim. As said, photorealism is not the bottom-line in a discussion of the game's supposed authenticity. Both games are constantly updated and both incorporate the latest technological design innovations. The third level is similar to other FPS games as well; the *ludus* rule is within tactical FPS standards. There is no room for negotiation, no level of grand strategy; you win by achieving the objective. There is only peace, after fighting a war.

Therefore, it is the second level of representation - the simulation of *paidea* rules - the rules that make up the simulation setting *America's Army* apart from similar genre-games. The tactical dimension of *America's Army* makes the game far more complex than for instance the world of *DOOM* (id Software, 1994). The technological aspects of contemporary warfare, widening various options for tactical gameplay, make *America's Army* a unique tactical FPS. The simulation of for instance U.S. Army roles and communication channels allows for

elaborate tactical planning and execution of these plans. One can throw smoke to distract an enemy, form the right team to attack a position and using a silencer to remain undetected while communicating all this with team members. Associate Producer, David Kozlowski exemplifies this argument: "Consequently, we have the opportunity to model lots of weaponry and other equipment - the challenge is selecting the right arms and platforms to model - this isn't Counterstrike" (GameDaily Staff, 2004). Since FPS games and infantry combat mainly centres on shooting, the modelling of weapons is one of the most carefully simulated aspects of reality and one of the main reasons for the games' much acclaimed realism.

The weapons are modelled after their real life counterparts using high resolution reference material, obtained from Army sources:

> "Extensive, continually updated weaponry is an America's Army distinction. Modeled from high-res orthographic shots with as much refinement as a 2,000- polygon budget permits, weapons are employed logically and strategically; a grenadier who tried to conduct himself like a sniper would suffer decreased combat effectiveness, as would a sniper shooting on the run. To ensure equal advantage, much investigation went into matching up rival weapons" (Davis et al., 2004: 11).

Gamers have the same choice of weapons as a U.S. Army infantry squad, ranging from the well known M16A2 rifle to the moddable M4A1, or the M24 SWS sniper rifle. The handling of weapons is animated with the use of motion capture procedures such as a weapon's reloading procedure and unique for *America's Army*, the occasionally fixing of a (weapon's) jam. In opposition to many other FPS games, the position of an avatar - standing, crouching or going prone - affects the accuracy of the weapon used. Players can use iron sights, or with some weapons a scope, further increasing accuracy. If a player uses a scope or iron sights, a breathing cycle comes into play, this tidal motion of a weapon forces players to listen to the best moment for firing, i.e. at the top or bottom of the cycle. Thus the simulation of weapon handling not only simulates real-life combat, but also provides an extra immersive dimension to the overall gameplay. The simple aim-mouseclick-shoot of the standard FPS is turned into a go prone-zoom-listen-wait for the right point in the breathing cycle-aim-mouseclick-shoot.

Since *America's Army* is based on existing FPS design conventions - i.e. *Counter-Strike* - , the various first person paradoxes still apply to the tactical nature of combat simulation. Watching military themed films or playing video games: "Is like the roller coaster that gives the thrill and speed of mechanical power at the edge of its limits all from within a safe context; combat spectacle gives you the ability to get a taste of the power of U.S. military technology and yet not get hurt" (Hall, 2003: 21). However: "No matter how forcefully entertainment combat spectacle asserts its relationship to realism, for these reasons it is decidedly anti-realistic" (ibid: 24). The simulation of infantry combat in *America's Army* lacks various important features of the job of a U.S. soldier fighting in for instance Iraq. The focus on nine minute force-on-force combat downsizes the effects of asymmetric warfare during the War on

Terror.[341] Road-side bombs, suicide terrorists and other disruptive elements are absent in the almost surreal 'fair' fights in the game. Then again, *America's Army* does not have to simulate these aspects, as they are not present in 'the other games'. By focusing on specific parts of the simulation of combat spectacle, *America's Army* is able to change the notion of authentic combat through the real-time simulation of bullets trajectories, by simulating bullets that kill instantly when shot properly, and by simulating combat-effectiveness.

The conventions of the FPS genre even allow the depiction of the more gruesome effects of warfare, so called blue-on-blue accidents or also known as 'friendly fire'. The concept of friendly fire has always been a standard parameter for online tactical FPS games and by referring to real-life combat in *America's Army* this 'feature' is always 'on'. Many existing FPS conventions are simply broadened, in *Counter-Strike* you can bunny-hop (jumping rapidly to avoid enemy fire). *America's Army* on the other hand is 'more realistic', since a player can only jump three times before getting tired. In *Counter-Strike* a player might survive a direct hit of a High-Explosive grenade, *America's Army* is 'far more realistic', since you can get killed instantly by having an exploding grenade in ones vicinity. Many gamers are perfectly aware of the very specific set of sub-models simulating contemporary war. The bottom-line for a gamer is entertainment, for some this derives from the games' supposed authenticity for others it is the focus on combat spectacle. An *America's Army* forum member aptly summarizes this notion:

> "[A] realistic Army game would go like this:
> Install game
> Complete training
> Deploy on first mission
> Get shot in the head
> Game automatically uninstalls itself from your pc and permanently bans you because…
> You're dead!
> Now that's realistic. What fun."[342]

[341] Not being a soldier talking about real-life combat is somewhat strange. On the other hand the (diverse) portrayal of combat in Afghanistan and Iraq in books, magazines, newscasts and documentaries give a very different view than the regulated battles in *America's Army*.
[342] "Serious problem with realism", topic-url: http://forum.americasarmy.com/viewtopic.php?t=81889, created on October 22, 2004.

5.2.1 A Clear Marketing Message

> "The media promote the war, the war promotes the media, and advertising competes with the war. Promotion is the most thick-skinned parasite in our culture" (Baudrillard, 1991: 31).

While other tactical FPS games may state that they have meticulously simulated aspects of combat, the developers of *America's Army* took the idea of offering a realistic game one step further by the simple fact that the development of their game is completely institutionalised by the U.S. Army. It is hard to imagine which commercial developer can raise the reality bar, i.e. being a realistic tactical FPS game portraying the U.S. Army, without the help of the (ex-) military personal. The enormous amount of research and access to every military site available gives a head start for realistic portrayal of infantry combat:

> "Besides photographing modelling and texture referents, shooting motion-capture video for animations, and recording thousands of sound effects, the team jumped from towers, submitted to dog attacks, even rode a Blackhawk helicopter at three a.m., watching the fireworks as live shells barraged the terrain below. These first-person encounters gave the team an enthusiasm and surefootedness that mere stock footage and cold data could not provide" (Davis et al., 2004: 12).

One of the three official taglines explicitly emphasises this aspect: "No other Army game is this real, because nobody gets the Army, like the Army. Designed, Created and Developed By The U.S. Army" (Army Game Project, 2003: 12). The second tagline explicitly labels *America's Army* as: "The Most Authentic Army Game Ever! The power to succeed. The courage to exceed" and the third tagline adds a political motivation to play the game: "Empower Yourself. Defend Freedom. The Official U.S. Army Game." *America's Army* is officially developed by the U.S. Army and therefore the most authentic Army game *ever*. The answer to a Frequently Asked Question removes the last trace of doubt:

> "Q: What is the America's Army game?
> A: …an accurate portrayal of Soldier experiences …"[343]

Here the advergame directly interacts with the propagame with the main goal to create an aura of objectivity. The games theme and visual style as well as many parts of its simulation model are in accordance with many other tactical FPS games. But by employing a discourse of "realness" – i.e. "Nobody gets the Army like the Army" - the U.S. Army as the publisher of *America's Army* (mis)uses its institutional discursive power to market their game to a group of gamers who never seen real combat - i.e. teens. "In much the same way that melodrama trains

[343] Adding: "The *America's Army* game provides civilians with an inside perspective and a virtual role in today's premier land force: the U.S. Army. The game is designed to provide an accurate portrayal of Soldier experiences across a number of occupations. In the game, players will explore progressive individual and collective training events within the game. Once they successfully completed these events they will advance to multiplayer operations in small units". Source: *America's Army* - Support - Windows FAQ. 2003. Americasarmy.com. Available: http://www.americasarmy.com/support/faq_win.php. March 22, 2005.

spectators how to feel about domestic relations, pornography trains spectators how to feel about sex and what to find titillating, and horror films train spectators what to fear, combat spectacle trains consumer citizens how the power of the nation should feel in their bodies" (Hall, 2003: 16). *America's Army*'s authenticity is stressed over and over again in its marketing message and by developers interacting with the public.

This marketing message is akin to similar military-themed marketing campaigns for games. For instance, both the *America's Army* development team and the *Close Combat: First to Fight* developers use the exact same rhetoric. "We want to provide the kind of authenticity that can only be had because of the involvement of Marines who were very recently in the thick of urban combat" (Tamte, 2004b). The two games, both developed as training tools as well as commercial games, use the same argument why their games are better, more realistic and more fun: "First off, we (the developers, DBN) believe authenticity IS fun. An incredible thing about video games is that they allow us to get a taste of someone else's really dangerous life from the safety of our own living room" (Tamte, 2004b). The explicit claim of authenticity is backed up the U.S. military itself using the argument "who knows the military better than the military". A somewhat false claim, the military may be the best candidate for reflective thoughts on their own organisation, but the development of computer games is a different matter. The agenda of the U.S. Army differs considerably from that of the electronic entertainment industry. In this respect, the difference between *Full Spectrum Warrior* and *America's Army* is telling. In both games there is an interesting struggle between the need to provide a functional and realistic training tool without losing track of the 'gaminess' of the training tool. But where *Full Spectrum Warrior* chooses to simulate one of the gruesome effects of the devastating power of modern day warfare, e.g. blood, *America's Army* developers prefer to keep their games' teen rating, thereby acknowledging the advergame dimension. Philip Bossant, Art Director of the *America's Army* Public Applications team, is clear about what aspects of reality are important in a military game: "Our purpose here is not to show the horror of war, […] our job is to show Army values" (Davis et al., 2004 : 35). It is this aspect of reality - the simulation of the effects of war - that openly challenges the marketing message of *America's Army*.

5.2.2 Bleeding without Blood

The interactive nature of videogames makes it hard to simulate death because of the trivial nature of games. Death in a game is never permanent. Single player games allow players to save and thus begin all over again, trying the same actions results in the same death. By taking another path death can be avoided altogether. In multiplayer games death can last a few seconds or several minutes before a character 'respawns'. Frasca (2000) argues that only "ephemeral games" can be seen as "serious games" and deal with such (extremely) serious

topics as Auschwitz - the reversibility of computer games makes the simulation of fate and tragedy useless.[344] In these games it would be impossible to cheat death through save games or respawning. One-session games of narration would make it possible to create a game that deals more "seriously" with the notion death and thus the concept of war. An integral gameplay element of First Person Shooter games, violent and goal-oriented in nature, is death. Death in FPS games is inevitable and reduced to a statistic. FPS games are about killing opponents, many gamers see the number of kills as the true skill of a gamer, not the amount of deaths. The success of the community website *AAOTracker* and the emphasis on the 'fragrate' statistic underlines this claim.[345] A virtual life just facilitates gameplay and is as expendable as players' ammunition. Tactical FPS games make a virtual life more valuable, gamers who die have to wait, time is a much more precious commodity than a virtual life, until the next round when a gamer respawns and advances in his/her trail-and-error feedback loop.

As any FPS game, *America's Army* is detrimental to the notion of an ephemeral game. The trivial simulation of a temporary ingame death is accompanied by an even more trivial representation of human suffering: "These games (*America's Army* and other FPS games, DBN) may be ultra-realistic down to the calibre of the weapons, but when bullets hit flesh, people just crumple serenely in a heap. They're like Tom Clancy novels made into episodes of the A-Team. No blood. No exit wounds. No screams" (O'Hagan, 2004). *America's Army* may be the most authentic simulation of army weapon systems, it seems that the game wants to cheat on death itself, setting itself apart from games such as the World War two FPS *Call of Duty* (Infinity Ward, 2003) where injuries are simulated through limping avatars or the FPS *Soldier of Fortune II: Double Helix* (Raven Software, 2002), known for its 'realistic' simulation of human suffering, i.e. gory body damage and dismemberment.

By looking at the simulation of bodily harm in *America's Army* and comparing this element to other FPS games, the interchange between FPS conventions and the four dimensions of *America's Army* result in interesting and omnipotent choices in design. The simulation of getting shot in *America's Army* is one of the most criticised elements of the game. Shooting an opponent results in barely visible 'puff' of blood. This blood vanishes in thin air almost instantly and leaves no traces whatsoever. There are no auditory clues when being hit, other than a somewhat neutral rupture sound, indicating 'a hit'. Screams of any kind are absent, player may utter the predefined shout: "I'm hit", but this exclamation sounds more like a Hollywood action-hero taking fire than a mortally wounded soldier crying for his mother. *America's Army: Special Forces (Downrange)* version 2.1 added the Karma-physics engine to the game to provide more authentic death animations. In previous versions of the game, avatars simply folded, with the new physics engine 'ragdoll-effects' are added, avatars can fall of

[344] Note that no ephemeral games have been designed yet.
[345] A fragrate is the kill/death ratio of a player - i.e. killing ten enemy soldiers and only dying five times results in a fragrate of two.

rooftops, and fly through the air when a grenade explodes nearby. However, there is no change in the representation of the body whatsoever to complement the physics engine.

Health is, in line with tactical FPS conventions, impossible to regain during a round. There are no health packages that can boost a player's health upwards. A shot or shrapnel from a grenade will cause the bleeding (not a common FPS convention) of ones avatar while some injuries are more severe than others. A hit in the hand for instance will cause a bleeding but decreases only a slight percentage of the overall health. A hit in the torso will take more damage and a hit in the top of the head will result in a hundred percent drop of health, an avatar will die by a so called 'headshot'. The bleeding of an avatar is not, in line with *America's Army*'s advergame dimension, graphically simulated. When a player looks at his hands, there is never blood on them nor do friendly or enemy casualties show any sign of injury. The bleeding of a player, represented by a blinking red drop in the interface, can only be stopped by a specially trained combat life saver (medic) from the same team. Getting hurt in combat is thus represented through an interface with icons and indexes, not so much through the visual simulation of bodily dismemberment or representation of 'gore', i.e. splatters of blood and open wounds.[346]

Here *America's Army* differs immensely from a game such as *Soldier of Fortune II: Double Helix* (Raven Software, 2002). This FPS is lauded by (some) gamers and members of the (gaming) press for its 'realistic' simulation of human suffering: "[Soldier of Fortune II: *Double Helix*] has taken violence to an all-new level. I'm not saying that it is more violent than any other FPS, but graphically it has out done itself" (Giacobbi, 2002). *Soldier of Fortune II* uses the *Quake 3 Arena* engine and *GHOUL II* technology to provide "ultra realistic damage modelling". The human body is split into 36 damage zones - i.e. hitting an opponent in the hand does less damage than hitting the head - and 16 dismemberment zones - allowing to shoot a body in two, to shoot off a head, arm or leg. This coupled with a certain amount of dark red blood that splatters over the floors and walls makes death in *America's Army* seem like the cartoon violence of Tom & Jerry. Although *Soldier of Fortune II* may be on the far side of the 'simulation-of-violence-spectrum', there are numerous other FPS games showing blood. When being hit in *Shellshock: Nam '67* (Guerilla Games, 2004) or *Full Spectrum Warrior* thick splatters of blood hit the computer screen and the upcoming FPS F.E.A.R. (Monolith, 2005), has a simulation model similar to *Soldier of Fortune II* - adding a 'continuing-bleeding-animation' to soldiers when lying on the ground and being hit.

The rationale behind the refusal to simulate the horror of war is the games' Teen rating. Adding blood and gore would give the game a mature rating and would make it only available for persons older than seventeen, conflicting directly with the advergame dimension. Marketing the game as the "The Most Authentic Army Game Ever!" contradicts with being able

[346] C.f paragraph 2.1 and 2.3. When a small player figure in the right bottom corner of the interface is 'green', there is no injury at all. By taking fire the health status of a player turns from yellow (injured) to red (critically injured).

to bleed without a drop of blood. In an interview with *TIME Magazine* Major Chris Chambers, deputy director of the AGP struggles with the scope of the games' simulation model:

> "The violence, the combat--we recognize that's the part of the game people want to play, we treat it openly and honestly. We have a death animation. We don't sugarcoat it. It's real--" He stops and corrects himself. "It's not real; it's simulated. But we're simulating reality." But it has to be fun too, right? "Bottom line, it's gotta be fun," Chambers agrees. "If it's not fun, you don't have a game" (Grossman, 2005).

With this slip of the tongue, the project's deputy director summarises the various critical stances towards the game. The game does claim to offer the most authentic look at war available, war in *America's Army* is what 'real' war is like, it's simulated and it's real (fun). The game makes it seem that war is fun and the main group coming across this message are children of thirteen years (and older).

5.2.3 A Tool to Kill?

> "With respect to recruitment, actual results won't be known for four or five years, when the current raft of thirteen- and fourteen-year olds will be old enough to join. The hope is that through realistic role playing and exploration of a soldier's job, the important work of the military will be among the options that compatible young men and women will consider when planning a career" Zyda, 2003a: 2).

The critics of violent video game mainly express their dismissal of the game for being available to young children. Critics of violent video games/simulations, such as the former Army Lt. Col. David Grossman, label FPS games as murder simulators which should not be available for children since they naturalise violent imagery and train kids to kill (Grossman & DeGaetano, 1999). The online availability and the teen rating of *America's Army* are both characteristics Grossman & DeGaetano warn against.[347] Killing is not a 'natural' thing to do and has to be trained. The game is said to desensitise killing, by letting children repetitively perform the act of (virtually) killing opponents. This process resembles the role of U.S. Army Basic Training during which military trainers use proven techniques to "dehumanise and distance" the enemy to 'ease' the process of taking someone's life (Hall, 2003).[348]

The National Institute on Media and the Family has made up its mind when it comes to violence in video games. In their annually *Video Game Report Card*, the Institute releases a top-10 list with "games to avoid for your children and teens" as well as a top-10 list with "recommended games for children and teens."[349] The ICCR and other groups "also voiced their concerns about a free, Web-based game 'America's Army,' which is used to promote

[347] The work of Grossman & DeGaetano is criticised by academics for its lack of proper research proving their claim (games make children kill), its factual errors and the gap in knowledge of contemporary FPS game culture (c.f. Morris, 2003).
[348] "Improved training techniques have increased U.S. infantry kill rates from twenty percent in WWII to ninety-five percent in the Vietnam war" (Hall, 2003: 66).
[349] Although the Institute claims to be "an independent, non-partisan, non-sectarian, non-profit organization", their choice in games seems arbitrary and without proper (academic) analysis. Nevertheless their opinion is valuable since their message seem to come across quite well.

enlistment in the U.S. Army, but is accessible to the youngest of children" (Interfaith Center on Corporate Responsibility, 2004).[350] Espen Aarseth puts the use of simulations in perspective when he notes that: "it's really a question of how much or whether you want to control the potential for skill acquisition. What types of simulations are dangerous ones? That is very hard to say. An innocent flight simulator is probably more dangerous or potentially dangerous than a satirical game about refugee detention centres" (Crogan, 2004).

Professor of international studies James Der Derian is more pragmatic about the role of *America's Army*: "I see the need for simulation for training purposes. The risk, and this one that the military has not investigated sufficiently, is that as they increase the 'reality' of video games, there comes to be a blurring of the reality principle. That is, confusing the games for the real thing" (Scutro, 2004). The Army Game Project's director, Wardynski "has heard all the criticisms before", emphasising the job opening opportunity the U.S. Army is: "Kids aren't stupid. They know the Army is not a game. The Army, he said, put him through college all the way to his Ph.D. He loves the Army. It's a career choice he wants to share with all kids. His enthusiasm is not dampened by the fact that 30 percent of today's recruits will fight in Iraq" (Ryan, 2004).

The notion of *America's Army* as a recruitment aid may shield the game from critique inside the U.S., on the other hand it overlooks the global nature of *America's Army*'s player base. A significant amount of players are non-U.S.-citizens and their only experience with the U.S. Army is a mediated one. Wardynski himself stresses the "aura of objectivity" (c.f. Crawford, 2003) of digital games in an interview with Li:

> "Computers tend to be persuasive by nature… seen as devices that are sort of unbiased… very analytic in nature. Computer's just sitting there… it processes data and dumps out a result. It's very different from a recruiter… that's the hard sell. The game is very much a different kind of sell." [It represents] "a virtual world where you can separate them from their [real world] structure, and take them elsewhere [i.e. the Army] and this gets rid of the intermediator problems" (Li, 2004: 49).

Wardynski argues that computers are tools. This notion directly relates to the multi-dimensional character of *America's Army*, marketing and branding the U.S. Army, educating young people, and as a tool to test new weapons and a tool to propagate the U.S. Army's ideology. *America's Army* provides a controlled virtual environment where the spoils of 'real' war seem far, far away. In a time where the death of U.S. soldiers in the War on Terror are reported upon on a daily basis, the game is a branded experience, with top-down and

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350 "The five groups -- the Interfaith Center on Corporate Responsibility (ICCR), the National Council of Women's Organizations, Mothers Against Violence in America, Center for Advancement of Public Policy, Justice and Witness Ministries of the United Church of Christ and NYC Council Member Eric Gioia -- highlighted 10 video games as the worst in terms of violence (in alphabetical order): (1) *Doom 3*; (2) *Grand Theft Auto: San Andreas*; (3) *Gunslinger Girls 2*; (4) *Half Life 2*; (5) *Halo 2*; (6) *Hitman: Blood Money* (releases in 2005); (7) *Manhunt*; (8) *Mortal Kombat: Deception*; (9) *Postal 2*; and (10) *Shadow Heart*." Source: Interfaith Center on Corporate Responsibility News - Media Press Releases. 2004. Interfaith Center on Corporate Responsibility. Available: http://www.iccr.org/news/press_releases/pr_videogames112304.htm. December 8, 2004.

controlled gameplay and a sanitised version of death. As a persuasive tool *America's Army* simulates combat based on spectacle and makes it available to those who have no experience of it. A veteran of war will be aware of these shortcomings but a thirteen year old kid whose only experiences of armed conflicts are mediated, may well be able to construct a stylised and clean perspective on war provided by the first-person experiences of modern media. In his interviews with military gamers, Li (2004: 100) found that those gamers with combat experience let their children play the game, but also made "a point of establishing the difference between the game and the violence of real combat."[351] *America's Army* is meant to be fun and as the game solely simulates combat: war is fun. Far removed from coffins draped with American flags and the constant fear of suicidal insurgents, the game provides access to anyone with an Internet connection and a decent PC to one of the most fetishised aspects of contemporary war - the adrenaline rush of man-to-man close combat.

5.3 Changing the Rules of Engagement

The ideological struggle of the U.S. Army against FPS game culture and youth popular culture is an extremely uneven 'war'. The U.S. Army picked out the battlefield, the playground to play in and the rules to play by. Because of its high production values, familiar design, by making the game 'official' and freely available, the U.S. Army rapidly created a large fan base, who wilfully subjected themselves to the U.S. Army ideology. *America's Army* is a constant struggle between various design constraints, balancing between authenticity, providing a 'fun' game, FPS game design conventions and the games' four dimensions. Antonio Gramsci's concept of hegemony is useful to frame the notion of *America's Army* as a realistic game. On the one hand, the developers of *America's Army* use their intellectual and moral power as the exclusive authors of the text to enable a hegemonic status where the game could be seen as the most realistic shooter available - marketing the game as the "Official U.S. Army Game". On the other hand, by explicitly tapping into FPS design conventions, the U.S. Army maintains a discursive consensus where *America's Army* is seen by many as 'just a game'. Within this hegemonic discourse, the game is able to alter the Rules of Engagement. By tapping into popular culture, *America's Army* is able to create a niche for *their* multi-dimensional game-based simulation.

By developing a game explicitly based on existing game design conventions, i.e. *Counter-Strike* and *Rainbow Six*, *America's Army*/U.S. Army ideology is seldom questioned. If the game is not real enough, it is because of FPS design conventions or other external factors outside the game's control. For instance, the main argument to not include blood is not because of the game's propagame or advergame dimension, it is the result of the game's Teen rating. A major shift in the Rules of Engagement - i.e. the appropriation and adjustment of FPS

[351] "(JTF) W. related to me, for instance, how he used the internet to show his America's Army-playing godson the Vietnam War Memorial website, as well as photos depicting real combat casualties" (Li, 2004: 101).

design conventions -, is the change in point-of-view. In *America's Army* you are always an American soldier, setting the game apart from all other FPS games on the market. Where you can choose to be a German, British, American or Russian soldier in almost every World War Two shooter, you can not play a terrorist in *America's Army*. The game's point of view is limited to that of an American soldier. The cinematic convention of the 'hero's perspective' is regained.

While Arab networks (e.g. Al Jazeera) as well as some European networks, framed the second Gulf War as an illegal 'invasion' of U.S. and British troops (Kellner, 2003a), U.S. news media engaged in "a vicious branding war, each network trying to project an image of itself as more patriotic than the competition" (Compton, 2004: 16). Just as news reporters used "we" and "us" to bend the complex logic of war into the more streamlined ideology of 'good-versus-evil, "we" and "us" in *America's Army* always stands for the U.S. Army. Make no mistake, in *America's Army* you are always 'with US'. The acceptance of the role as an U.S. soldier is never really questioned on the official forum and debates asking for different roles - i.e. to play a terrorist - are nonexistent. Many gamers are aware of the fact that they perform two roles - i.e. functioning as 'double-bound warriors'. An American soldier towards oneself, and towards your team, you see your own hands holding an American weapon. At the same time you are, in the eyes of your opponent, one of the opposing forces. Your perspective is always that of a U.S. Army soldier and by playing the game you always are able to "Empower Yourself" in order to "Defend Freedom". The terrorist perspective from e.g. *Counter-Strike* is lost to reinstate the 'right' point-of-view. After all, the opposing forces are 'enemies of freedom'. And you? You are "ready to deploy, engage, and destroy the enemies of the United States of America in close combat, a guardian of freedom and the American way of life, you are an American Soldier."[352]

As major cable news networks provide 24-hour coverage of the "Showdown with Saddam", gamers can engage in this War on Terror in "the most authentic military experience available". *America's Army* already made an important choice for its audience, the perspective of somebody other than a U.S. soldier is impossible.[353] Watching the 'other' side either means watching unofficial - i.e. non-U.S. - television, or playing un-official U.S. Army games. *America's Army*, being the most realistic shooter available, unintentionally redefines the tactical FPS genre. The construction of the enemy bears resemblances to a wider television discourse showing a distorted construction of 'the other'. Claire Norton (2003) reflected in an essay analysing aspects of the U.S.-television discourse during the second Iraq conflict on the constructing of the Fedayeen (Saddam Hussein's most loyal troops):

[352] See appendix F – The Soldier's Creed.
[353] Again the actual practices of playing games should not be overlooked. The FPS game *Counter-Strike* does allow shooting down U.S. Counter-Terrorists, but a random online session playing *Counter-Strike* will show that the choice to be a terrorist or a counter-terrorist does depend on which group of gamers is better during a round or on the taste for a weapon or gameplay style (defending versus attacking).

> "American and British combatants are named and described in the media as soldiers and more specifically, as marines, artillery, infantry and special forces. Such a naming positions them in a narrative where they are viewed as members or representatives of a legitimate state institution; the army. Thus their violence is authorized and legitimized, they are not armed thugs, criminals or terrorists, but soldiers licensed to carry out limited acts of aggression in the interests of the state".

This description seems like the introduction of the *America's Army* manual. In the game the enemy is more neutrally referred to as (the) OpFor (Opposing Forces), but from any perspective 'they' are clearly terrorists, to be stopped at all costs.[354] In an ironic way *America's Army* simulates the troubled status of being a terrorist, i.e. one person's terrorist can be the other person's liberator, hero, or soldier.

Another ironic outcome of the modelling of the two fighting parties as both U.S. soldiers and opposing forces, is the impossibility to emphasize the role of technology within the U.S. military (i.e. military transformation). Since both teams consist of online players, the gameplay has to be balanced. One of the teams can not be outfitted with superior weapons as team balancing is one of the most critical elements in online FPS games. As the developers strive to minimize the effects of online emergent gameplay they are unable to simulate the use of different weapons and their specifications. In *America's Army* you are a member of the world's most premier land force and you are outfitted with the most advanced weapons for the job. The emphasis on sophisticated technology, as well as being well-trained, is a crucial factor in the representation and simulation of the U.S. Army. On the level of the simulation of *America's Army's* virtual battlefield, the focus on technical superiority is neutralized by the simulation of a double-bound warrior. Both teams use the same (American) weapons and so on the level of weaponry no team has an advantage. Other factors have their respective influence of the outcome of a (virtual) battle such as the individual skills and experience of gamers and the will to co-operate and communicate.

This leads to a situation where American soldiers lose as often as win. Within the domain of *America's Army* as a propagame this is an interesting characteristic because the Army is unable, due to the conventions (balance issues) within online games, to simulate the (supposedly) superiority of American soldiers. Where a Hollywood movie such as *Black Hawk Down* (Scott, 2001), is able represent the technological and logistical supremacy of a outnumbered group of well trained U.S. soldiers fighting against an armed crowd of both civilians and insurgents, *America's Army* is unable to simulate this in their game. If *America's Army* would be a truly realistic simulation of infantry combat, more than half of the soldiers who would engage in a battle would die from enemy fire. This led to the conception of the future version *America's Army: Special Forces (Overmatch)*. This future version is in accordance with recent lessons learned from the War on Terror, where "21st century

[354] "Being able to tell friend from foe is extremely important. This includes civilians, and indigenous fighters. In America's Army, there are only so many variations between the 'good guys' and the 'bad guys' " (Tran, 2005: 53).

overmatching power is more important than 'overwhelming force' " (Franks & Rumsfeld, 2003). In *Overmatch*, gamers will cooperate (co-op) as a squad of outnumbered Special Forces soldiers waging war against an artificially intelligent-operated enemy, simulating past military operations in the Iraqi and Afghani theatres. The version will also include artillery, vehicles and (fire-and-forget) missiles. This release will be a blatant break with the hegemonic multi-player FPS conventions, demonstrating that the unbalanced nature of modern war can only be simulated by removing the human agent from the virtual battlefield (by using an AI-operated enemy). This version will simulate the way the U.S. Army "really fights battles".[355] The Rules of Engagement will be changed again.

Combat in *America's Army* may be more seen as emotional realism (Ang, 1985 in Jenkins, 1992: 107), for fans could see these games as the symbolic representations of more general combat experiences, (live, death, camaraderie, tension, values, chain of command), since the representation and simulation of infantry combat is a general conformity to the ideological norms by which combat is portrayed in popular fiction, news media and most of all computer games, c.f. television fans in Jenkins (1992: 107). Although a great deal of the *America's Army* fans never experienced combat, they see the combat in the game as relatively real, because of the strong marketing by the Army and the shared beliefs of mediated warfare. An often quoted line in the official forum is the endorsement of fans saying: "This game is as real as a war game can get". This hegemonic view can be partly explained with the concept of emotional realism. Although the concept refers to the idea of making internal real-world (empirical) references in the reading of television texts, the result in comparison with the game text seems to be the same. Gamers compare their shared sets of beliefs about war and combat, a mediated interpretative schema, with the game and conclude that it may well be as real as it possibly can get. It is this wilful suspension of disbelief that is the basis for an enjoyable game experience. When gamers do set foot in the virtual world they seem to acknowledge the games' ideology. It seems an irrelevant question whether the simulation of combat is based on an empirical reality or a mediated reality.

America's Army could be seen as taking the embedded journalist-concept to a new level. The simulation designer's rigid control over the simulation is used to shape the perfect image of war. As a gamer you get a first-person view of a battle, as if you are there, in the middle of a real war. Obvious elements as the logistical factors of war (water, food and ammunition), the spoils of war (human disasters, dying children, women and innocent men), the dullness of war (waiting for a battle, lying in an ambush for ours), the rules of war (taking Prisoners of War and interrogating them), the intrusion of war (by journalists, Non-

[355] Which will probably be version 2.5 or 2.6, scheduled for release somewhere in the near future. James '[Dev]nXain' Cowgill, lead designer of the *America's Army* Government Applications development team posted on the official forum: "Our primary goal in designing the Overmatch release is to bring a taste of how the Army really fights battles into the game. Overmatch is about a group of well trained soldiers using their training and resources to dominate the battlefield despite being outnumbered in men or materials." Source: "DataBank on the Future - 11-03-2005 *Updated*", topic-url: http://forum.americasarmy.com/viewtopic.php?t=79389, created on October 10, 2004.

Governmental Organisations and civilians), dismemberment (physical and mental hurting of civilians, enemies and comrades) and the inevitable death (the permanent loss of life of civilians, enemies and comrades) are conveniently absent in "the most real wargame" out there.

The games authenticity is and always has been a much discussed topic among community members, on fora and through the game itself. Fans of the game will argue in unison that *America's Army* does not have to be real: 'It is a First Person Shooter GAME, Duhhhh!??? Games are not real…' Combat spectacle is an essential component of U.S. youth popular culture and its audience are U.S. citizens, not the 'bad' guys. As a result: "Much like political spectacle, entertainment spectacle manipulates the categories of realism, history and patriotism which in the majority of cases shield it from social critique" (Hall 2003:14).

The game is not realistic; it is 'just' a realistic *game,* with high production standards that happens to be free of charge. This line of reasoning bypasses the logic of the complex interaction of the games' four dimensions. The U.S. Army endorsement communicates the U.S. Army brand, the role of U.S. Army training, *America's Army* as a test tool, and *America's Army* as a propagame. Aimed at the nation's youth, camouflaged as a free game, *America's Army* distorts the discourse of 'real war' through the interaction of ingame combat simulation - focusing on technological differentiation - with a very clear marketing message: '*America's Army* is a realistic game; *America's Army is* the U.S. Army'.

Chapter 6 - Conclusion

The military-industrial complex is bigger than ever before. And as weapon systems and U.S. Army doctrines transform, so does the complex, only to become more pervasive. Within the one game of *America's Army* many, if not all, characteristics of the changing relationship between the U.S. military and popular culture seem to come together. Chapter 3 analysed this changing relationship and *America's Army* could then be seen as a logic outcome of the military-entertainment complex as it originated in the 1990's. The grounding of the electronic entertainment industry within this ever-growing complex facilitated the use of games as training tools within the U.S. military. The logistics of perception and the changing logic of warfare coupled with the current transformation of U.S. armed forces, facilitated and fuelled the development of the Official Army Game. Firmly grounded in the military-entertainment complex are a discourse and a culture of war that *America's Army* is able to appropriate relatively easy. War has become an intertextual experiential commodity and the (pressing) need for simulations of war is omnipresent in today's youth popular culture. *America's Army* has become yet another text, albeit free of charge and authorised by the U.S. Army. The U.S. Army joins a rich intertextual web of mediatized experiences of war and fills in the blanks under the cover of 'realism'. The Official U.S. Army Game has earned its spot within the highly competitive media-saturated marketplace of FPS game culture and was only able to do so because of existing notions and an institutionalised perspective on the logic of war.

Physical and digital war games help U.S. military commanders to prepare for coming battles and the war game 'Internal Look 90', which took place during the start of the first Gulf War, already had to put stamps with "Exercise Only" on training material to avoid confusion.[356] Civilians were obviously excluded from these exercises, but with the irrepressible growth of the military-entertainment complex and the continuing merge of military and entertainment (perceptual) technologies, experiencing 'real' war has become a (virtual) reality. A result of this linkage is the growing interaction between the representation of recent conflicts (i.e. the U.S. led War on Terror) in news media and the representation and simulation of this conflict in computer games. The intertextual experiential commodity of war and the interaction of the 'clean' representation of war on television with the medium of the computer game, results in a distorted view on the process of war. While CNN broadcasted from Baghdad, *America's Army* narrowcasted a custom made simulation of the Middle-East. U.S. Army captain Jason Amerine, who served during the first Gulf War and the War on Terror, had a 'funny' thought:

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[356] "As the exercise unfolded, the real-world movements of Iraq's air and ground forces eerily paralleled the scripted scenario of the war game. So closely did actual intelligence reports resemble the fictional exercise messages, the latter had to be prominently stamped Exercise Only." See: Internal Look. 2005. Globalsecurity.org. Available: http://www.globalsecurity.org/military/ops/internal-look.htm. February 16, 2005. C.f. Macedonia (2004).

> "It [fighting in the mountains of Afghanistan] was kind of funny, because it was sort of like, Well, this is just like what I did on my computer, I guess.' Having reenacted similar scenarios so many times, he (Amerine, DBN) found these games had helped prepare him for that moment, when he came up firing. '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" (Au, 2002).

The process of U.S. military's transformation is becoming the catalyst of both mediated and post-human warfare and military games integrate new weapon systems before they are actually used on the real battlefield. Simulated in *America's Army*, the Talon robot is such an example of a mediated and post-human weapon system. And in the upcoming FPS *Battlefield 2*, certain players will have the ability to use the Predator unmanned aerial vehicle for reconnaissance, 'just like in Iraq' (Adams, 2004).[357] The U.S. military modelled the hardware interface for a missile system interface on the PlayStation 2 controller, in order to "make the technology fit the user, not force the user to fit the technology" (Sheffield, 2005). Because of the extensive (re)mediation of (future) weapon systems and the appropriation of commercial technologies, modern war resembles playing games and vice versa. The thumb trained by controlling online soldiers may well be able to take the life of another human being.

In the late nineties, partly due to the favourable economy, recruiting goals were missed. Today, recruiting soldiers for the All Volunteer Force is even harder since parents, as main influencers of possible recruits, are anxious to let their children go to Iraq. One of the biggest problems facing contemporary recruiting efforts is its effectiveness and something had to be done to re-establish a long-term connection with the American youth. Games, as one of the favourite activities of children around the world, were already used for marketing purposes and the 'only' thing the U.S. Army had to do was some branding of their own. The U.S. Army already has a vast marketing apparatus to spread the "U.S. Army: An Army of One" message. The game fits perfectly in the 'marketing mix' of Army marketers. By tapping into existing social networks, building upon trust, peer-to-peer communication and acknowledgment, the U.S. Army taps into a pool of semi-organised and enthusiastic gamers, using their collective intelligence to produce all sorts of fruitful interactions (c.f. Jenkins, 2002). As the viral distribution aspects regarding the game show, the Army has only to trigger certain people and events and by doing so, the community takes over, which directly benefits the Army.

The contents and theme of *America's Army* are familiar with many gamers and *America's Army* could have been developed by a commercial game designer as well. The developers of *America's Army* are able to experiment and create their simulation within existing boundaries, building upon existing cultural, socio-economic and technological

[357] "UAV Predator: Like the satellite scan, this ability is used for surveillance. A drone (not visible by player characters) will be sent out in a certain area and will reveal all enemy units in that smaller area to both the commander and soldiers on the ground."

conventions and discourses; each having their respective input on the final product. The Army Game is the centre of a growing community where gamers meet to experience a similar representation and simulation of war as soldiers do (and vice versa). The costs of the game's production and publishing are extremely low, compared to the costs of Army recruiters and expensive television ads. The success of the game, counted in millions of hours played; make it a great tool to provide possible recruits with information about a military career. It is much easier for a U.S. Army recruiter to start a conversation (at e.g. a gaming tournament) with a seventeen-year old about computer games than about the door opening opportunity the U.S. Army might be.

By analysing the game itself, its production, distribution, and its reception, four different dimensions of the game have been proposed: America's Army is a recruiting tool, a propagame, an edugame, and a test bed and tool for the U.S. Army. As soon as the game's developers got wind of the multi-dimensional potential of the game, *America's Army* transformed into a platform. Plans were drafted to disseminate the *America's Army* brand into popular culture, as well as the intention to use the game for "analysis and acquisition" - testing of military weapon technology (Zyda & Sheehan, 1997). Within an Army that actively wants to transform itself as fast as possible, soldiers who are able to keep up with constantly evolving technologies and are even eager to do so, are a valuable asset. The 'games generation' has made it one of their main goals to demand a constant technological edge of their latest games. The versatile capabilities and modifiable character of *America's Army's* software engine make the game an ideal test bed for different government agencies. According to Michael Zyda, the director of MOVES, the institute:

> "Learned lots from America's Army. We learned that the project was pivotal in the future of defense modelling and simulation. Before America's Army, DoD was 'kind of' interested in using games for training and experimentation. With America's Army produced inside the DoD tent, now nearly every group that requires training, experimentation, and analysis systems is thinking of building their next-generation system with a game face" (Davis et al., 2004).

America's Army became a successful multi-dimensional game now used by the U.S. Army to train the same recruits who may have joined because of the game. Hand in hand with marketing and branding goes education. Players wilfully subject themselves to classroom lectures to be able to play the ingame role as Combat Life Saver or Special Forces operator. In the branded world of *America's Army* players may acquire various bits of trivial information about the U.S. Army. But the knowledge and information which does get picked up by gamers can be directly related to an external reality. Why do we fight in *America's Army*? To defend freedom! How? Well with my friends from all over the world, online. From a propaganda perspective the U.S. Army did hit the jackpot. Pervasive telecommunication technologies enable to reach their target audience in a sustained two-way interaction, through the use of

the game and its community. *America's Army* may well be the first form of engagement "to be harnessed for appropriate audiences." The Defense Science Board (2004) is clear about this (possible) new role for the military-entertainment complex; as military contractors they will be ordered to develop vehicles for the dissemination of U.S.'s sweet power. All dimensions interact to make up one seamless authentic official simulation; project director Wardynski implicitly connects the four dimensions:

> "The country is at war and to the extent that America's Army can play a larger role, it should. We know there is no silver bullet for homeland security. In this case America's Army can serve two purposes for one taxpayer investment -communicate with young adults about soldiering and provide Americans with skills to address immediate consequences in a first-responder situation" (Halter, 2005).

If the digital game is the ideal commodity in a post-Fordist society, then *America's Army* is the epitome of this notion. Kline et al. (2004: 278-9) introduced the concept of "Sim Capital" to clarify the role of the digital market system in the post-Fordist society: "Sim Capital designates the accumulatory regime emerging from the dynamic interplay of transnational enterprise, convergent communication technologies, and postmodern culture, in which increased reliance on simulations both as work tools and as consumer commodities, escalating surveillance and synergistic management of segmented markets, and the cultivation of an increasingly symbiotic relation between production and consumption is mediated through the feedback loops created by ever more sophisticated digital media and virtual technologies." *America's Army* fits well within this notion. Being a product of a transnational 'enterprise', *America's Army* fully adopted this post-modern character through its simulation and anticipation of war and future virtual weapon technologies, being a training tool and a consumer commodity at the same time and part of one of the most technologically advanced game genres.

America's Army changes the Rules of Engagement as how to use digital games for education, propaganda, advertisement and testing technologies. New business models are emerging and the question will be whether the U.S. Army will be able to face these new and probably closer relations with gamers. New genres and forms of gaming, such as Massive Multiplayer Online FPS games are on the horizon, as well as the development of an open-source Army game-engine. Will the Army be able to catch up with the technology driven game industry and modification-culture, will it appropriate game culture or will it simply lag behind on a continuous basis?

Late November 2004, the U.S. Air Force joined the Army with *USAF: Air Dominance* (Critical Mass Interactive, 2004), while the U.S. Marines endorsed the commercial game *Close Combat: First to Fight*. The U.S. military has clearly found its place within popular culture. Former director of the MOVES Institute Michael Zyda looks into the future: "(…) the plan now is to turn the entire Army experience into a video game, and create a complete, virtual

replication of the institution" (Scutro, 2004). Because of the enormous efforts and budget of the U.S. Army, the future of military modelling and simulation does look bright. *America's Army* is funded until at least 2008 and maybe in a few years *America's Army* will not be known as a PC game, but as a global brand.

'The only one who gets the Army is the Army' and through this rationale the U.S. Army seems to successfully redefine the notion of 'a realistic combat simulation' for being (perceived as) the most authentic virtual experience of warfare available. However, as a game with a clear agenda, it is essential to keep in mind who makes up the rules of the game: "Gaming literacy will some day make players aware that games are not free of ideological content and certainly advergames will play a role in this education because they have a clear agenda" (Frasca, 2003). The wars of the future will most likely not be fought with a game-based simulation such as *America's Army*. But let us hope that future wars will be similar to the game, without blood, and without any human casualties.

Registering an *America's Army* account simply equals entering the U.S. Army. You do not become an anonymous Counter-Terrorist as in *Counter-Strike*, and certainly not a Terrorist. After downloading, installing and entering Basic Training, you become a soldier in the U.S. Army. You are welcomed on the rifle range, receive your equipment from a friendly looking soldier and enter 'firing pit number nine'. Going through Basic Training is a process similar to the introductions of other FPS games, but this time it is mandatory, you must qualify and you can not fool around: "You are in the Army now Soldier!" After completing your Basic Training you can finally "defend freedom" and just before entering a server the Soldier's Creed will remind you of your new status as a virtual GI Joe: "I am an American Soldier".

"Open Fire!" Hey, it is 'just a game'…

Literature

Aarseth, Espen. Playing Research: Methodological Approaches to Game Analysis. 2003. Melbourne DAC2003. Available: http://hypertext.rmit.edu.au/dac/papers/Aarseth.pdf2003.

Abraham, Arnold J. The Strategic Communication Process – How to Get Our Message out More Effectively. 2004. National Defense University - National War College. Available: http://www.ndu.edu/nwc/writing/AY04/5603/index.htm. March 22, 2005.

Accardo, Sal "Sluggo". Battlefield: 1942 (Pc). 2002. Gamespy.com. Available: http://archive.gamespy.com/reviews/september02/bf1942/. August 18, 2004.

Adair, Bill. Did the Army Get out-Gamed? 2005. St. Petersburg Times. Available: http://sptimes.com/2005/02/20/Worldandnation/Did_the_Army_get_out_.shtml. February 22, 2005.

Adams, Dan. Battlefield 2 Hands-On. 2004. IGN.com. Available: http://pc.ign.com/articles/571/571943p1.html. April 1, 2005.

Alberts, David S., Garstka, John J., Hayes, Richard E., Signori, David A. Understanding Information Age Warfare. Washington D.C.: CCRP, 2001. Available: http://www.dodccrp.org/publications/pdf/Alberts_IAT.pdf.

Althusser, Louis. Lenin and Philosophy and Other Essays. Trans. Ben Brewster. New York: Monthly Review, 2001.

Ang, Ien. Het Geval Dallas: Populaire Kultuur, Ideologie en Plezier. Amsterdam: SUA, 1982.

Army Game Project. America's Army Recruiter Support Brand Style Guide: US Army, 2003.

Associated Press. War Games: Army's Hollywood Sim. 2004. Wired.com. Available: http://www.wired.com/news/games/0,2101,66085,00.html. December 23, 2004.

Atkinson, Rick. In the Company of Soldiers - a Chronicle of Combat in Iraq. London: Little Brown, 2004.

Au, James Wagner. Weapons of Mass Distraction. 2002. Salon.com. Available: http://www.salon.com/tech/feature/2002/10/04/why_we_fight/index.html. 6 january 2003.

---. Masters of "Doom". 2003. Salon.com. Available: http://www.salon.com/tech/feature/2003/05/05/doom/. May 29, 2004.

---. "America's Arming - Digital Memories, Real Bullets." America's Army Pc Game Vision and Realization. Ed. Margaret Davis: US Army and the Moves Institute, 2004. 33-35.

Autrijve, Rainier Van. Swedish Defense to Use Battlefield 2 (Pc). 2004. Gamespy.com. Available: http://pc.gamespy.com/pc/battlefield-2/552113p1.html. February 28, 2005.

Ball, Jerry T. & Gluck, Kevin A. Interfacing Act-R 5.0 to an Uninhabited Air Vehicle (Uav) Synthetic Task Environment (STE). 2003. Available: http://act-r.psy.cmu.edu /workshops/ workshop-2003/proceedings/29.pdf.

Barlow, Michael., Peter Morrison, and Adam Easton. "1st-Person Tactical Shooters: Cots Games with Military Training Potential?" SimTecT 2002. Melbourne, Australia: Simulation Industry Association of Australia, 2002.

Bartle, Richard. Hearts, Clubs, Diamonds, Spades: Players Who Suit Muds. 1996. http://www.mud.co.uk/. Available: http://www.mud.co.uk/richard/hcds.htm. December 8, 2003.

Battah, Habib. Syrian-Developed Pc Game Portrays Palestinian Anguish. 2004. dailystar.com.lb. Available: http://www.dailystar.com.lb/article.asp?edition_id=1&categ_id=3&article_id=9455. December 29, 2004.

Baudrillard, Jean. The Gulf War Did Not Take Place. 1991. Trans. Paul Patton. Sydney: Power Publications, 1995.

Bell, Peter. "Realism & Subjectivity in First-Person Shooter Games." Georgetown's peer-reviewed journal of Communication, Culture and Technology (2003).

Belton, John. Widescreen Cinema. Cambridge: Harvard University Press, 1992.

Berardini, César A. Digital Illusions Reports Record Revenues. 2004. TeamXbox.com. Available: http://news.teamxbox.com/xbox/6490/Digital-Illusions-Reports-Record-Revenues. August 18, 2004.

Berman, Nina. Purple Hearts: Back from Iraq. London: Trolley Press, 2004.

Berkowitz, Ben. Doctors Use Video Games to Hone Skills. 2004. Reuters.com. Available: http://www.reuters.com/audi/newsArticle.jhtml?type=technologyNews&storyID=7132744. January 19, 2005.

Binnendijk, Hans. Transforming America's Military. Washington, D.C.: National Defense University Press, 2002.

Book, Betsy. These Bodies Are Free, So Get One Now!: Advertising and Branding in Social Virtual Worlds. 2004. Social Sience Research Network. Available: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=536422. August 25, 2004.

Bouckaert, Paul. "De Rol van Communicatie tussen Gamers in de Motivatie om Online Games te Spelen." Bachelor Thesis. Utrecht University, 2004.

Bowden, Mark. Black Hawk Down. Penguin Books, 2002.

Brandweek. Brandweek Superbrands, 2001. Available: http://www.brandweek.com/brandweek/features/superbrands/top2000_01a.jsp. August 18, 2004.

---. Brandweek Superbrands, 2004. Available: http://www.brandweek.com/brandweek/features/superbrands/superbrands.jsp. August 18, 2004.

Brzezinski, Matthew. "The Unmanned Army." The New York Times 20 April 2003, Late ed., sec. 6: 38.

Buckner K, Fang H & Qiao S. "Advergaming: A New Genre in Internet Advertising." SoCbytes

Journal 2.1 (2002).

Bulik, Beth Snyder. Advergaming Grows in Reach and Power. 2004. Advertising Age. Available: www.adage.com/news.cms?newsId=40573. August 25, 2004.

Caillois, Roger. Man, Play and Games. 1958. Trans. Meyer Barash. Urbana and Chicago: University of Illinois Press, 2001.

Campbell, Charlotte H. May H. Throne, Barbara A. Black and Carl W. Lickteig. Research Observations and Lessons Learned for the Future Combat Systems. Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences, 2003.

Capps, Michael, McDowell, Perry and Zyda, Michael. "A Future for Entertainment-Defense Research Collaboration." IEEE Computer Graphics and Applications 21.1 (2001).

Cassell, Justine and Henry Jenkins, ed. From Barbi to Mortal Kombat: Gender and Computer Games. Cambridge, MA: MIT Press, 1999.

CBC News. "Deadline Iraq - Uncensored Stories of the War." USA: CBC-TV, 2003. 60 min. Ed. CBC News.

CBS Broadcasting. Army Recruits Video Gamers. 2004. cbsnews.com. Available: http://www.cbsnews.com/stories/2004/03/30/eveningnews/main609489.shtml. March 22, 2005.

Child, David A. "Patterns of Simulator Use within a Military Training Environment." International Journal of Instructional Media 24.1 (1997): 43-53.

Clarke, Richard A. Against All Enemies: Inside America's War on Terror. New York: Free Press, 2004.

Cobb, Jim. Behind the Lines #22. 2004. www.wargamer.com. Available: http://www.wargamer.com/articles/behind_the_lines_22/Default.asp. October 12, 2004.

Compton, James R. "Shocked and Awed: The Convergence of Military and Media Discourse." Communication and Democracy: Challenges for a New World. Porto Alegre, Brazil, 2004. Available: http://www.pucrs.br/famecos/iamcr/textos/compton.pdf.

Consalvo, Mia. "It's No Videogame: New Commentary and the Second Gulf War." Level Up: Digital Games Research Conference. Eds. Marinka Copier & Joost Raessens. Utrecht, Holland: Universiteit Utrecht, 2003. 312-24.

Conte, Christopher. "Honey, I Shrunk the Deficit!" Governing Magazine December 2003. Available: http://governing.com/archive/2003/dec/games.txt. February 5, 2005.

Crawford, Chris. Subjectivity and Simulation. 2003. Serious Games Initiative. Available: http://www.seriousgames.org/images/Seriousgamescrawfordfinal.pdf. November 18 2004.

Crogan, Patrick. "Gametime - History, Narrative, and Temporality in Combat Flight Simulator 2." The Video Game Theory Reader. Ed. Mark J. P. Wolf & Bernard Perron. New York: Routledge, 2003a. 275-301.

---. "The Experience of Information in Computer Games." The 5th International Digital Arts and Culture Conference. Melbourne, 2003b.

---. "Wargaming and Computer Games: Fun with the Future." Level Up: Digital Games Research Conference. Ed. Marinka Copier & Joost Raessens. Utrecht, Holland: Universiteit Utrecht, 2003c. CD-ROM.

---. "Games, Simulation & Serious Fun: An Interview with Espen Aarseth." Scan 1.1 (2004).

Davey, Monica. Former G.I.'s, Ordered to War, Fight Not to Go. 2004. New York Times.com. Available: http://www.nytimes.com/2004/11/16/national/16reserves.html. November 16, 2004.

Davis, James. Male Dominance of Videogame Production and Consumption: Understanding the Social and Cultural Processes. Gamasutra.com May 2002. Available: Http://www.gamasutra.com/education/theses/20020708/davies_01.shtml. September 16, 2003.

Davis, Margaret, ed. America's Army PC Game Vision and Realization. San Francisco: US Army and the Moves Institute, 2004.

Davis, Margaret., Russell Shilling, Alex Mayberry, Phillip Bossant, Jesse McCree, Scott Dossett, Christian Buhl, Christopher Chang, Evan Champlin, Travis Wiglesworth, and Michael Zyda. "Making America's Army." America's Army PC Game Vision and Realization. Ed. Margaret Davis. San Francisco: US Army and the Moves Institute, 2004. 9-15.

DeBrine, Jeffrey & Morrow, Donald E. "Re-Purposing Commercial Entertainment Software for Military Use." MA Thesis. Naval Postgraduate School, 2000.

Defense Science Board. The Creation and Dissemination of All Forms of Information in Support of Psychological Operations (PSYOP) in Time of Military Conflict. Washington, D.C.: Office of the Under Secretary of Defense For Acquisition, Technology, and Logistics, 2000.

---. Report of the Defense Science Board Task Force on Strategic Communication. Washington, D.C.: Office of the Under Secretary of Defense For Acquisition, Technology, and Logistics, 2004. Also available: http://www.fas.org/irp/agency/dod/dsb/commun.pdf.

Department of Defense. Army Announces New Advertising Campaign. 2001. Department of Defense. Available: http://www.defenselink.mil/transcripts/2001/t01102001_t110army.html. August 22, 2004.

Department of Defense. Department of Defense Dictionary of Military and Associated Terms. Washington DC: Department of Defense, 2004. Available: http://www.dtic.mil/doctrine/jel/doddict.

Der Derian, James. "Interview with Paul Virilio." _SPEED_: Technology, Media, Society 1.4 (1997).

---. "War as Game." The Brown Journal of World Affairs 10.1 (2003): 37-48.

Douglas, Susan J. "The Navy Adopts the Radio, 1899-1919." Military Enterprise and Technological Change: Perspectives on the American Experience. Ed. Merritt Roe Smith. Cambridge: MIT Press, 1985.

Duncan, Tom. Using Advertising and Promotion to Build Brands. New York: McGraw-Hill-Irvin, 2002.

Egenfeldt-Nielsen, Simon. "Keep the Monkey Rolling: Eye-Hand Coordination in Super Monkey Ball." Level Up: Digital Games Research Conference. Ed. Marinka Copier & Joost Raessens. Utrecht, Holland: Universiteit Utrecht, 2003. 364-73.

---. Review of the Research on Educational Usage of Games. Work in progress. 2004. Available: http://www.it-c.dk/people/sen/public.htm. January 20 2005.

ESA. Essential Facts About the Computer and Video Game Industry: Electronic Software Association, 2004. Available: http://www.theesa.com/files/EFBrochure.pdf. March 6, 2005.

Farrell, Christopher M. William K. Klimack and Carl R. Jacquet. "Employing Interactive Multimedia Instruction in Military Science Education at the U.S. Military Academy." Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC). Orlando, Florida, 2003.

Fong, Gwenda. "Adapting Cots Games for Military Simulation." ACM SIGGRAPH international conference on Virtual RealityContinuum and its Application in Industry, VRCAI 2004. Singapore, 2004.

Fileplanet Weekly. "FilePlanet Weekly: Savage Demo, Hidden & Dangerous Deluxe for Free, and More!" E-mail to the author (DBN). 14 October 2003.

Fischer, Russ. Conflict: Desert Storm (GCN). 2003. GameSpy.com. Available: http://cube.gamespy.com/gamecube/conflict-desert-storm/5813p1.html. December 5, 2004.

Fiske, John. Television Culture. London: Routledge, 1987.

Frank, Anders and Lundblad, Nicklas. "The New Role of Gaming - How Games Move Outside Entertainment." International Workshop on Entertainment Computing. Tokyo, Japan, 2002.

Flono, Fannie. Video Game Used to Lure New Recruits. 2005. The Charlotte Observer. Available: http://www.charlotte.com/mld/observer/news/11047787.htm. March 5, 2005.

Frasca, Gonzalo. "Videogames of the Oppressed - Videogames as a Means for Critical Thinking and Debate." Master. Georgia Insitute of Technology, 2001a.

---. Simulation 101: Simulation Versus Representation. 2001b. Ludology.org. Available: http://www.ludology.org/articles/sim1/simulation101.html. September 3, 2004.

---. "Simulation Versus Narrative - Introduction to Ludology." The Video Game Theory

Reader. Eds. Mark J. P. Wolf & Bernard Perron. New York: Routledge, 2003. 221-35.

Friedman, Ted. "Making Sense of Software: Computer Games and Interactive Textuality." Cybersociety: Computer-Mediated Communication and Community. Ed. Steven G. Jones. Thousand Oaks, CA: Sage, 1995. 73-89.

GameDaily Staff. Interview: America's Army. 2004. GameDaily. Available: http://www.gamedaily.com/general/feature/general.asp?id=384. February 5, 2005.

Gamespy.com. Take Off and Stay High. 2004. Gamespy.com. Available: http://www.gamespy.com/articles/556/556463p1.html. November 9, 2004.

Garstka, John and Alberts, David. Network Centric Operations Conceptual Framework - Version 2.0. 2004. Office of Force Transformation. Available: http://www.oft.osd.mil/ncw.cfm. November 20, 2004.

Gaudiosi, John. War, with a Restart Button. 2004. Newsobserver.com. Available: http://www.newsobserver.com/business/story/1362135p-7485043c.html. January 30, 2005.

General Accounting Office (GAO). Improving the Effectiveness and Efficiency of Recruiting: United States General Accounting Office, 1976a.

---. Advertising for Military Recruiting: How Effective Is It?: United States General Accounting Office, 1976b.

---. Military Recruiting: DOD Needs to Establish Objectives and Measures to Better Evaluate Advertising's Effectiveness: United States General Accounting Office, 2003.

Giacobbi, Kevin “BIFF”. Soldier of Fortune II Double Helix. 2002. pc.gamezone.com. Available: http://pc.gamezone.com/gzreviews/r18523.htm. March 26, 2005.

Gibson, James W. The Perfect War. Technowar in Vietnam. New York: Atlantic Monthly Press. 1986.

Gordon, Andrew S. "Authoring Branching Storylines for Training Applications." Sixth International Conference of the Learning Sciences. Santa Monica, CA, 2004. Available: http://www.ict.usc.edu/~gordon/ICLS04.pdf.

Graaf, Shenja van der & Nieborg, David B. "Together We Brand: America's Army." Level Up: Digital Games Research Conference. Ed. Marinka Copier & Joost Raessens. Utrecht, Holland: Universiteit Utrecht, 2003. 324-38.

Graaf, Shenja van der. "Viral Experiences: Do You Trust Your Friends?" Contemporary Research in E-Marketing. Ed. Sandeep Krishnamurthy. Vol. 1, 2004.

Green, C.S. & Bavelier, D. "The Effect of Video Games on Visual Attention." Nature 423 (2003): 534-37. Also Available at: http://www.bcs.rochester.edu/people/daphne/GreenandBavelier.pdf.

Greenwald, Thomas W. "An Analysis of Auditory Cues for Inclusion in a Virtual Close Quarters Combat Room Clearing Operation." MA Thesis. Naval Postgraduate School, 2002.

Grossman, Lev. The Army's Killer App. 2005. TIME Magazine. Available: www.time.com/time/magazine/article/0,9171,1029872-2,00.html. March 29 2005.

Hall, Karen J. "War Games and Imperial Postures: Spectacles of Combat in U.S. Popular Culture, 1942-2001." PhD Thesis. Syracuse University, 2003.

Halter, Ed. CGI Joe - How the Military and Private Tech Contractors Are Training a New Generation of Soldiers. 2005. The Village Voice. Available: http://www.villagevoice.com/news/0506,halter,60855,6.html. February 8 2005.

Hanson, Victor Davis. "Military Technology and American Culture." The New Atlantis 1.1 (2003).

Hecht, Anthony. Playing in an Army of One. 2004. PBS.org. Available: http://www.pbs.org/kcts/videogamerevolution/impact/army.html. March 1, 2005.

Hedges, Chris. War Is a Force That Gives Us Meaning. New York: Random House, 2002.

Heer, Keimpe de., Keeris, Eva., Lucht, van der Jelmer., and Nieborg, David B. "Towards an Academic Method for Analysing Fps Games." DiGRA Level Up Conference. Utrecht University, 2003.

Hersh, Seymour M. Chain of Command - the Road from 9/11 to Abu Ghraib. New York: HarperCollins, 2004.

Herz, J.C. Joystick Nation : How Videogames Ate Our Quarters, Won Our Hearts, and Rewired Our Minds. New York: Little, Brown & Company, 1997.

---. "Gaming the System: What Higher Education Can Learn from Multiplayer Online Worlds." The Internet and the University: 2001 Forum. Educause, 2001.

Herz, J.C. & Macedonia, Michael R. "Computer Games and the Military: Two Views." Defense Horizons. 11 (2002).

Hiebert, Ray Eldon. "Public Relations and Propaganda in Framing the Iraq War: A Preliminary Review." Public Relations Review 29.3 (2003): 243-55.

Hodes, Jacob & Emma Ruby-Sachs. 'America's Army' Targets Youth. 2002. The Nation. Available: http://www.thenation.com/doc.mhtml?i=20020902&s=hodes20020823. August 11, 2003.

Hone, Thomas C. and Norman Friedman. "Harnessing New Technologies." Transforming America's Military. Ed. Hans Binnendijk. Washington, D.C.: National Defense University Press, 2002.

Humphreys, Sal. "Commodifying Culture - It's Not Just About the Virtual Sword." Other Players. Eds. Jonas Heide Smith and Miguel Sicart. Copenhagen: IT University of Copenhagen, 2004.

IGDA Online Games Committee. IGDA Online Games White Paper: Internation Game Developers Association, 2003. Available: http://www.igda.org/online/IGDA_Online_Games_Whitepaper_2003.pdf. March 15, 2005.

Interfaith Center on Corporate Responsibility. Interfaith Center on Corporate Responsibility News - Media Press Releases. 2004. Interfaith Center on Corporate Responsibility. Available: http://www.iccr.org/news/press_releases/pr_videogames112304.htm.

Jehl, Douglas & Shanker, Thom. For the First Time since Vietnam, the Army Prints a Guide to Fighting Insurgents. 2004. The New York Times. Available: http://www.nytimes.com/2004/11/13/politics/13army.html. November 14, 2004.

Jenkins, Henry. Textual Poachers: Television Fans and Participatory Culture. London: Routledge, 1992.

---. "Interactive Audiences? The Collective Intelligence of Media Fans." The New Media Book. Ed. Dan Harries. London: BFI, 2002.

---. "Quentin Tarantino's Star Wars?: Digital Cinema, Media Convergence and Participatory Culture." Rethinking Media Change. Eds. David Thorburn and Henry Jenkins. Cambridge: MIT Press, 2003.

Jowett, Garth S. and Victoria O'Donnell. Propaganda and Persuasion. Newbury Park, CA: Sage Publications, 1986.

Juul, Jesper. "The Open and the Closed: Games of Emergence and Games of Progression." Computer Games and Digital Cultures. Ed. Frans Mäyrä. Tampere Finland: Tampere University Press, 2002. 323-31.

Kaplan. Kaplan ASVAB 2004 Edition. Ed. Larrisa Shmailo. New York: Simon and Schuster, 2003.

Kasmiya, Radwan. "Re: Question on Your Fps Games." Ed. D.B. Nieborg. Amersfoort, 2004. Email.

Kellner, Douglas. The Persian Gulf TV War. Boulder, Colorado: Westview Press, 1992. Also available at http://www.gseis.ucla.edu/faculty/kellner/kellnerhtml.html.

---. Spectacle and Media Propaganda in the War on Iraq: A Critique of U.S. Broadcasting Networks. 2003a. http://www.gseis.ucla.edu/faculty/kellner/. Available: http://www.gseis.ucla.edu/faculty/kellner/essays/spectaclemediapropagandawariraq.pdf. November 13, 2004.

---. "September 11, Spectacles of Terror, and Media Manipulation: A Critique of Jihadist and Bush Media Politics." Logos 2.1 (2003b).

Kent, Steven. The Ultimate History of Videogames: From Pong to Pokemon - the Story Behind the Craze That Touched Our Lives and Changed the World. Roseville: Prisma Publishing, 2001.

King, Brad & Borland, John. Dungeons and Dreamers: The Rise of Computer Game Culture from Geek to Chic. San Francisco: McGraw-Hill/Osborne, 2003.

Kingsepp, Eva. "Apocalypse the Spielberg Way: Representations of Death and Ethics in Saving Private Ryan, Band of Brothers and the Videogame Medal of Honor: Frontline." Level Up: Digital Games Research Conference. Ed. Marinka Copier & Joost Raessens. Utrecht, Holland: Universiteit Utrecht, 2003a. CD-ROM.

---. "War as Total Art: The Issue of Immersive Historicity in World War II Videogames." Next 2.0 – New Extensions of Technology, 2003b. Available: www.goodgame.se/files/spelakademin/War_As_Total_Art.pdf. 1 December 2004.

Kittler, Friedrich A. Gramophone Film Typewriter. Trans. Winthrop-Young, Geoffrey and Michael Wutz. Stanford: Stanford University Press. 1999.

Klabbers, Jan H.G. "The Gaming Landscape: A Taxonomy for Classifying Games and Simulations." Level Up: Digital Games Research Conference. Eds. Marinka Copier & Joost Raessens. Utrecht, Holland: Universiteit Utrecht, 2003. 48-54.

Klein, Naomi. No Logo. New York: Picador, 1999.

Klevjer, Rune. "Gladiator, Worker, Operative: The Hero of the First Person Shooter Adventure." Level Up: Digital Games Research Conference. Ed. Marinka Copier & Joost Raessens. Utrecht, Holland: Universiteit Utrecht, 2003. CD-ROM.

Konzack, Lars. "Computer Game Criticism: A Method for Computer Game Analysis." CGDC Conference. Ed. Frans Mäyra. Tampere Finland: Tampere University Press, 2002. 89-100.

Kushner, David. Masters of Doom: How Two Guys Created an Empire and Transformed Pop Culture. New York: Random House, 2003.

Levy, Pierre. Collective Intelligence: Mankind's Emerging World in Cyberspace. Cambridge: Perseus, 1997.

Lenoir, Tim & Lowood, Henry. "Theaters of War: The Military-Entertainment Complex." Kunstkammer, Laboratorium, Bühne--Schäuplatze Des Wissens Im 17. Jahrhundert/ Collection, Laboratory, Theater. Eds. Helmar Schramm, Jan Lazardzig and Ludger Schwarte. Berlin: Walter de Gruyter Publishers, 2003.

Lenoir, Timothy. "Programming Theaters of War: Gamemakers as Soldiers." Bombs and Bandwidth: The Emerging Relationship between It and Security. Ed. Robert Latham. New York: New Press, 2003. 175-98.

Lewis, Ed. Fugitive Hunter: War on Terror - Low-Budget Blockhead Goes Off in Search of Evildoers. 2003. IGN.com. Available: http://ps2.ign.com/articles/440/440031p1.html. December 29, 2004.

Leyden, John. Sony Cuts the Getaway at Bt's Behest. 2002. The Register. Available: http://www.theregister.co.uk/2002/12/31/sony_cuts_the_getaway/. August 25, 2004.

Li, Zhan. "The Potential of America's Army the Video Game as Civilian-Military Public Sphere." Masters thesis. Massachusetts Institute of Technology, 2004.

Linderoth, Jonas., Annika Lantz-Andersson & Berner Lindström. "Electronic Exaggerations and Virtual Worries: Mapping Research of Computer Games Relevant to the Understanding of Children's Game Play." Contemporary Issues in Early Childhood 3.2 (2002): 226-50.

Linderoth, Jonas., Berner Lindström, Mikael Alexandersson. "Learning with Computer Games." Toys, Games, and Media. Ed. David Buckingham Jeffrey Goldstein, Gilles Brougère.

Mahwah, New Jersy: Lawrence Erlbaum Associates, 2004.

Lister Martin., Jon Dovey, Seth Giddens, Ian Grant and Kieran Kelly., "Gameplay." New Media: A Critical Introduction. London, New York: Routledge, 2003. 260-83.

Luttwak, Edward N. Strategy: The Logic of War and Peace. London: Harvard University Press, 2001.

Macedonia, Michael. R. & Rosenbloom, P. S. "Entertainment Technology and Virtual Environments for Training and Education." The Internet and the University: 2000 Forum. Eds. R. Larson & J. Meyerson M. Devlin. Boulder: Educause, 2001. 79-95.

Macedonia, Michael. Games Soldiers Play. March 2002 2004. Available: http://www.spectrum.ieee.org/WEBONLY/publicfeature/mar02/mili.html. 26 january 2004.

MacDonald, Ryan. Counter-Strike. 2004. Gamespot.com. Available: http://www.gamespot.com/features/6091340/p-8.html. March 15, 2004.

Maguire, Flack, Michael van Lent, Marc Prensky and Ron Tarr. "Defense Combat Sim Olympics – Methodologies for Incorporating the "Cyber Gaming Culture"." I/ITSEC 2002, 2002. CD-ROM.

Manojlovich, Joseph., Phongsak Prasithsangaree, Stephen Hughes, Jinlin Chen, Michael Lewis. "Utsaf: A Multi-Agent-Based Framework for Supporting Military-Based Distributed Interactive Simulations in 3d Virtual Environments." Winter Simulation Conference. Eds. S. Chick, P. J. Sánchez, D. Ferrin, and D. J. Morrice. New Orleans, LA, 2003.

Manninen, Tony. "Virtual Team Interactions in Networked Multimedia Games - Case: "Counter-Strike" - Multi-Player 3d Action Game." PRESENCE2001 Conference. Temple University, Philadelphia, 2001.

Manuel, Chris. "Unmanned Aerial Vehicles: Lessons Learned from the Past and Planning for the Future." NPS Research. Ed. Danielle Kuska. Vol. 13: Naval Postgraduate School, 2003. 14-15.

Marshall, David P. "The New Intertextual Commodity." The New Media Book. Ed. Dan Harries. London: BFI, 2002.

McCandless, David. Make Cheats, Not War. 2003. Guardian Unlimited. Available: http://www.guardian.co.uk/online/story/0,,960616,00.html. February 7, 2005.

McChesney, Robert. Rich Media, Poor Democracy: Communication Politics in Dubious Times. New York: The New Press, 2000.

McGonigal, Jane. This Is Not a Game: Immersive Aesthetics Collective Play. 2003. MelbourneDAC2003. Available: http://hypertext.rmit.edu.au/dac/papers/McGonigal.pdf. 11 March 2004.

Mead, Walter Russell. Power, Terror, Peace and War - America's Grand Strategy in a World at Risk. New York: Alfred A. Knopf, 2004.

Merideth, Jerry. Army's Own Computer Game Available July 4. 2002. USAREUR Public Affairs.

Available: http://www.hqusareur.army.mil/htmlinks/Press_Releases/2002/Jun2002/27Jun2002-01.htm. January 17, 2005.

Miller, William. "The End Game." Military Training Technology 8.5 (2003).

Moore, Michael. Dude, Where's My Country? New York: Warner Books, 2003.

Morath, Ray, Elana Light, Nick Gompper, Jim Harris, Michelle Zazanis. Developing an Army Market Research Index in Support of Army Recruiting. 2001. U.S. Army Research Institute. Available: http://www.hqda.army.mil/ari/pdf/rr1766.pdf. 25 October 2004.

Morgan, David J. "Algorithmic Approaches to Finding Cover in Threedimensional, Virtual Environments." MA Thesis. Naval Postgraduate School, 2003.

Morris, Chris. Your Tax Dollars at Play - U.S. Army Gets into the Gaming Business. You're Paying for it. 2002.CNN/Money. Available: http://money.cnn.com/2002/05/31/commentary/game_over/column_gaming/. May 20, 2004.

Morris, Sue. The Computer Game Moral Panic. 2003. Game Culture. Available: http://www.game-culture.com/articles/moralpanic.html. May 20, 2004.

Mosbruger, Michael C. "Alternative Audio Solution to Enhance Immersion in Deployable Synthetic Environments." MA Thesis. Naval Postgraduate School, 2003.

Moseley, Bob. Spot On: Marketing and Games. 2004. Gamespot. Available: http://www.gamespot.com/pc/action/darkenedskye/news_6091835.html. 01-09 2004

Naylor, Sean. Not a Good Day to Die : The Untold Story of Operation Anaconda. New York: Berkley Publishing Group, 2005.

National Defense Panel. Transforming Defense - National Security in the 21 St Century. 1997. Available: http://www.fas.org/man/docs/ndp/toc.htm.

Newman, James. Videogames. London: Routledge, 2004.

Nieborg, David B. Ik: Man™, Utrecht 1980® Zoek: Vrouw© - Het Gebruik Van Merken op Branddating.nl om de Persoonlijkheid te Representeren. Draft. Utrecht University, 2002.

---. Good Job Soldier, a Gender Analysis of America's Army. 2003a. Draft. Utrecht University. Available: http://www.gamespace.nl/research.htm.

---. "A First Person Analysis: The Three Domains of Games." PhD-course Game Analysis Methodology. Copenhagen: IT University of Copenhagen, 2003b.

---. Who Put the Mod in Commodification? - A Descriptive Analysis of the First Person Shooter Mod Culture. 2004a. Draft. Available: http://www.gamespace.nl/research.htm.

---. "America's Army: More Than a Game." Transforming Knowledge into Action through Gaming and Simulation. Ed. Thomas Eberle & Willy Christian Kriz. München: SAGSAGA, 2004b. CD-ROM.

---. "Militaire Game(r)s : Vechten in De Virtuele Werkelijkheid." Tijdschrift voor Mediageschiedenis 7.2 (2004c): 53-76.

---. "Am I Mod or Not? - an Analysis of First Person Shooter Modification Culture." Creative Gamers Seminar - Exploring Participatory Culture in Gaming. Hypermedia Laboratory (University of Tampere): GameSpace.nl/research.htm, 2005.

Norton, Claire. "Marines Versus Fedayeen: Interpretive Naming and Constructing the 'Other'." Bad Subjects. 63 (2003). Available: http://bad.eserver.org/issues/2003/63/norton.html.

Nye, Joseph S. The Paradox of American Power: Why the World's Only Superpower Can't Go It Alone. Oxford: Oxford University Press, 2002.

Ocampo, Jason. Tom Clancy's Rainbow Six. 2004. Gamespot.com. Available: http://www.gamespot.com/features/6091340/p-4.html. March 15, 2004.

OEF_XR. Exclusive Interview #2 - [Dev]Skyhuntr (May 2004). 2004. www.oefgaming.us. Available: http://www.oefgaming.us/content.php?article.8. May 20, 2004.

Office of Management and Budget. Budget of the United States Government Fiscal Year 2003. 2003. Available: http://www.whitehouse.gov/omb/budget/fy2003/budget.html.

Office of the Secretary of Defense. Unmanned Aerial Vehicles Roadmap. Washington, D.C.: Department of Defense, 2002. Available: http://www.oft.osd.mil/library/library_files/document_130_uav_roadmap.pdf.

O'Hagan, Steve. Recruitment Hard Drive. 2004. The Guardian. Available: http://www.guardian.co.uk/theguide/features/story/0,,1242262,00.html. March 22, 2005.

Olsen, Jennifer and Jill Zinner. Game Developer's Salary Survey. 2001. Gamasutra.com: Available: http://www.gamasutra.com/features/20010831/survey_01.htm. October 11, 2003.

Osborn, Brian A. "An Agent-Based Architecture for Generating Interactive Stories." PhD Thesis. Naval Postgraduate School, 2002.

Peck, Michael. 'America's Army' Fan Base Expanding. 2004. National Defense. Available: http://www.nationaldefensemagazine.org/issues/2004/Dec/AmericasArmyFan.htm. January 16, 2005.

Peckham, Matt. America's Army 2.0 - Special Forces (Pc). 2004. GameSpy.com. Available: http://pc.gamespy.com/pc/americas-army-special-forces/505423p1.html. February 20, 2005.

Penney, Lisa M., Martha J. Sutton, & Walter C. Borman. An Annotated Bibliography of Recruiting Research Conducted in the U.S. Armed Services and in Foreign Services. 2001. U.S. Army Research Institute for the Behavioral and Social Sciences. Available: http://www.hqda.army.mil/ari/pdf/tr1109.pdf. October 25, 2004.

Pennington, Robert. "Signs of Marketing in Virtual Reality." Journal of Interactive Advertising

2.1 (2001).

Perkins, Keith M. "Implementing Realistic Helicopter Physics in 3d Game Environments." MA Thesis. Naval Postgraduate School, 2002.

Petermeyer, Kelli R. 'America's Army' One of Top 5 Games Online. 2004. The Voice. Available: http://w4.pica.army.mil/voice2004/041105/041105%20America's%20Army.htm. December 23, 2004.

Pine II, B. Joseph and Gilmore, J. H. The Experience Economy: Work Is Theatre & Every Business a Stage. Boston: Harvard Business School Press, 1999.

Poole, Steven. Trigger Happy: The Inner Life of Video Games. London: Fourth Estate, 2000.

PR Newswire. "U.S. Army Enlists Disc Marketing Enhanced Cds as Recruitment Tool; Targeted Marketing Test Program Designed to Drive Qualified Leads." 2003. Available : http://www.findarticles.com/cf_dls/m4PRN/2003_August_25/106851477/p1/article.jhtml. January 8, 2004.

Prensky, Marc. Digital Game-Based Learning. New York: McGraw-Hill, 2000.

---. "Has 'Growing up Digital' and Extensive Video Game Playing Affected Younger Military Personnel's Skill Sets?" Interservice/Industry Training, Simulation and Education Conference 2003. CD-ROM. Orlando Florida, 2003.

Rumsfeld, Donald H. & Franks, Tommy R. "Prepared Testimony by U.S. Secretary of Defense Donald H. Rumsfeld." Senate Armed Services Commitee. Washinton D.C.: http://armed-services.senate.gov, 2003.

Remote Technology Spares U.S. Soldiers. 2004. CNN.com. Available: http://www.cnn.com/2004/TECH/biztech/11/08/iraq.unmannedvehicles.ap/index.html. November 9, 2004.

Riddel, Rob. Doom Goes to War. 1997. Wired.com. Available: http://www.wired.com/wired/archive/5.04/ff_doom.html. 15 May 2004.

Robb, David. Operation Hollywood: How the Pentagon Shapes and Censors the Movies. Amherst, NY: Prometheus Books, 2004.

Rollings, Andrew and Ernest Adams. Andrew Rollings and Ernest Adams on Game Design. Indianapolis: New Riders, 2003.

Roth, Peter. "'America's Army' Is Big Hit, and Not Just with Civilians." Wall Street Journal May 16, 2003.

Rushkoff, Douglas. Children of Chaos - Surviving the World as We Know It. London: Flamingo, 1997.

Ryan, Joan. Army's War Game Recruits Kids. 2004. San Francisco Chronicle. Available: http://www.commondreams.org/views04/0923-11.htm. March 10, 2005.

Salen, Katie & Zimmerman, Eric. Rules of Play : Game Design Fundamentals. Cambridge: MIT Press, 2004.

Salovaara, Antti., Mikael Johnson, Kalle Toiskallio, Sauli Tiitta, Marko Turpeinen. "Nurturers: A

Creative Player Segment and Their Motivations in Multi-Player Games." Creative Gamers Seminar - Exploring Participatory Culture in Gaming. Hypermedia Laboratory (University of Tampere), 2005.

Schaab, Brooke B., Dressel, J Douglas. Training the Troops : What Today's Soldiers Tell Us About Training for Information-Age Digital Competency. Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences, 2003.

Schmitt, B. and Simonson, A. Marketing Aesthethics: The Strategic Management of Brands, Identity, and Image. New York: The Free Press, 1997.

Schmitt, Eric. "Guard Reports Serious Drop in Enlistment." The New York Times December 17 2004, Late ed., sec. A: 32. Available: http://www.nytimes.com/2004/12/17/politics/17reserves.html. January 7, 2005.

---. Army Officials Voice Concern over Shortfall in Recruitment. 2005. New York Times. Available: http://www.nytimes.com/2005/03/04/politics/04recruit.html. March 5, 2005.

Schiller, Herbert I. "Media, Technology, and the Market: The Interacting Dynamic." Culture on the Brink: Ideologies of Technology. Ed. Gretchen Bender and Timothy Druckrey. Seattle: Bay Press, 1994. 31-46.

Scutro, Andrew. "Entertainment War - Is America's Army a Video Game, a Recruitment Device, or a Violence Training Tool?" Monterey County Weekly 2004.

Seely Brown, John. "Learning in the Digital Age." The Internet & the University: Forum 2001. Ed. Maureen Devlin Richard Larson and Joel Meyerson: Forum for the Future of Higher Education and EDUCAUSE, 2002. 65-91.

Shachtman, Noah. More Robot Grunts Ready for Duty. 2004. Wired.com. Available: http://www.wired.com/news/technology/0,1282,65885,00.html. December 23, 2004.

Shaheen, Jack G. "Hollywood's Muslim Arabs." Muslim World 90.1 (2000): 22-43.

Sheffield, Brandon. Serious Games Summit: Making Game-Based Learning & Training Pervasive in the Armed Forces and Elsewhere. 2005. Gamasutra.com. Available: http://www.gamasutra.com/gdc2005/features/20050307/postcard-sheffield.htm. April 1, 2005.

Shilling, Russell., Zyda, M., and Wardynski, C.E. "Introducing Emotion into Military Simulation and Videogame Design: America's Army Operations and Virte." GameOn Conference. London, 2002. 151-54.

Sicart, Miguel. "Family Values: Ideology, Computer Games & the Sims." Level Up: Digital Games Research Conference. Ed. Marinka Copier & Joost Raessens. Utrecht, Holland: Universiteit Utrecht, 2004. CD-ROM.

Silberman, Steve. The War Room. 12.09. 2004. Wired.com. Available: http://www.wired.com/wired/archive/12.09/warroom.html. September 29, 2004.

Simons, P.R.J., & Ruijters, M.C.P. "Learning Professionals: Towards an Integrated Model."

Professional Learning: Gaps and Transitions on the Way from Novice to Expert. Ed. H.P.A. Boshuizen, R. Bromme, & H. Gruber. Dordrecht: Kluwer Academic publishers, 2004. 207-29.

Singh, Harnam and Jean L. Dyer. The Computer Backgrounds of Soldiers in Army Units: FY01. Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences, 2002.

Soriano, César G and Ann Oldenburg. With America at War, Hollywood Follows. February 8, 2005. USA Today. Available: http://www.usatoday.com/life/movies/news/2005-02-07-military-projects_x.htm. February 10, 2005.

Sotamaa, Olli. "Modders as Game Fans and Beyond: Case OFP" Creative Gamers Seminar – Exploring Participatory Culture in Gaming. Hypermedia Laboratory (University of Tampere), 2005.

Southern, Matthew. The Cultural Study of Games: More Than Just Games. 2001. www.igda.org. Available: http://www.igda.org/articles/msouthern_culture.php. October 13, 2004.

Sponauer, John "Spoons". Preview and Interview: America's Army. 2002. SimHQ.com. Available: http://www.simhq.com/simhq3/sims/interviews/americasarmy/index.shtml. August 18 2004.

Sterling, Bruce. War Is Virtual Hell. 1993. Wired.com. Available: http://www.wired.com/wired/archive/1.01/virthell.html?topic=&topic_set=. October 3, 2004.

Sullivan, Andy. Video Games Teach More Than Hand-Eye Coordination. 2004. Reuters. Available: http://www.reuters.com/newsArticle.jhtml;jsessionid=2G2CAHUFZGG5KCRBAE0CFEY?type=technologyNews&storyID=6934839&pageNumber=1. November 29, 2004.

Talbot, David. "We kregen niets door todat ze op ons in ramden." Technology Review 2004: 44-52.

Tamte, Peter. Close Combat: First to Fight - Vol #1 (Pc). 2004a. Gamespy.com. Available: http://pc.gamespy.com/pc/close-combat-first-to-fight/531637p1.html. October 12, 2004.

---. Close Combat: First to Fight - Vol #2 (Pc). 2004b. Gamespy.com. Available: http://pc.gamespy.com/pc/close-combat-first-to-fight/536639p1.html. October 12, 2004.

"The Army We Need." Editorial. The New York Times January 2 2005. Available: http://www.nytimes.com/2005/01/02/opinion/02sun1.htm. January 7, 2005.

The Second Bush-Kerry Presidential Debate. 2004. Commission on Presidential Debates. Available: http://www.debates.org/pages/trans2004c.html. November 19, 2004.

Thompson, John B. The Media and Modernity - a Social Theory of the Media. Padstow: TJ International, 1995.

Thompson, Clive. The Making of an X Box Warrior. Late Edition. 2004. The New York Times. Available: http://www.nytimes.com/2004/08/22/magazine/22GAMES.html. August 23, 2004.

Tran, Nam "DocNartman". America's Army Training Manual (version 2.0). Army Game Project, 2003. Available: http://www.americasarmy.com/downloads/files/AmericasArmyManual.pdf.

---. America's Army Training Manual (version 2.3). Army Game Project, 2005. Available: http://www.americasarmy.com/downloads/files/AmericasArmyManual.pdf.

Turner, Benjamin. Close Combat: First to Fight (Xbox). 2004. Gamespy.com. Available: http://xbox.gamespy.com/xbox/close-combat-first-to-fight/526475p1.html. October 12, 2004.

Tyler, Kelly Ann. Adventure Van Helps Recruit Civilians. 2005. www.tradoc.army.mil. Available: http://www.tradoc.army.mil/pao/TNSarchives/January05/013105.htm. February 4, 2005.

Ulate, Stephen O. "The Impact of Emotional Arousal on Learning in Virtual Environments." MA Thesis. Naval Postgraduate School, 2002.

Uricchio, William. "Media and War... Beyond Propaganda." Tijdschrift voor Mediageschiedenis 2.2 (1999).

---. "Cultural Citizenship in the Age of P2p Networks." European Culture and the Media. Eds. Ib Bondebjerg and Peter Golding. Bristol: Intellect Books, 2004.

---. "Simulation, History and Computer Games." Handbook of Computer Game Studies. Eds. Joost Raessens and Jeffrey Goldstein. Cambridge Massachusetts: MIT Press, 2005.

U.S. Army. Field Manual 1. Washington D.C.: Department of the Army, 2001.

U.S. Army War College. How the Army Runs - a Senior Leader Reference Handbook. Washington, D.C: Goverrment Printing Office, 2003. Online available at http://www.carlisle.army.mil/usawc/dclm/linkedtextchapters/htar2003.pdf.

USAREC G5 Public Affairs Division. Conducting Successful Media Interviews - U.S. Army Recruiting Command Pocket Guide. United States Army Recruiting Command G5. Available at http://www.usarec.army.mil/hq/apa/download/mediapoc.pdf

---. Marketing America's Army. United States Army Recruiting Command G5, 2004. PowerPoint presentation. Available at: http://www.usarec.army.mil/hq/apa/download/mediatng.ppt

Verhoeff, Nanna. "After the Beginnig - Westerns before 1915." Ph.D. Utrecht University, 2002.

Virilio, Paul. War and Cinema: The Logistics of Perception. Trans. Patrick Camiller. London/New York: Verso, 1989.

Volkin, Michael C. The Ultimate Basic Training Guidebook. Bangor, ME: Booklocker.com, Inc., 2004.

---. Changing Basic Training to Suit a Changing Army. 2005. Military.com. Available: http://www.military.com/Recruiting/Content/0,13898,012405_changing,,00.html. February 6, 2005.

Wadhams, Nick. Troops Stationed in Iraq Turn to Gaming. January 3 2005. USA Today. Available: http://www.usatoday.com/tech/news/2005-01-03-iraq-gaming_x.htm. January 10, 2005.

Walsh, David. Douglas Gentile, Jeremy Gieske; Monica Walsh, Emily Chasco. Mediawise Video Game Report Card: National Institute on Media and the Family, 2004. Available at: http://www.mediafamily.org/research/2004_VGRC.pdf. November 27, 2004.

Webb, Gary. The Killing Game. 2004. newsreview.com. Available: http://www.newsreview.com/issues/sacto/2004-10-14/cover.asp. October 20, 2004.

Weijer, Bard van de. "Nog Even Wachten Op De Grote Sprong Voorwaarts." De Volkskrant May 14, 2004.

Weiner, Tim. Pentagon Envisioning a Costly Internet for War. 2004. The New York Times. Available: http://www.nytimes.com/2004/11/13/technology/13warnet.html. November 16, 2004.

---. A New Model Army Soldier Rolls Closer to the Battlefield. 2005. The New York Times. Available: http://www.nytimes.com/2005/02/16/technology/16robots.html. February 16, 2005.

Weise, Matthew. "How Videogames Express Ideas." Level Up: Digital Games Research Conference. Ed. Marinka Copier & Joost Raessens. Utrecht, Holland: Universiteit Utrecht, 2003. CD-ROM.

Wegert, Tessa. Advergaming Catches On. 2003. Clickz.com. Available: http://www.clickz.com/experts/media/media_buy/article.php/2239071. August 8, 2004.

Williams, Dmitri. "Structure and Competition in the U.S. Home Video Game Industry." The International Journal on Media Management 4.1 (2002): 41 – 54.

Wiltenburg, Mary. 'Sophisticated Recruiting', 2003. CSMonitor.com, Available: http://www.csmonitor.com/2003/0403/p14s01-stct.htm. December 27, 2004.

Woodward, Bob. Bush at War. New York: Simon & Schuster, 2002.

---. Plan of Attack. New York: Simon & Schuster, 2004.

Wilson, Clay. Network Centric Warfare: Background and Oversight Issues for Congress. 2004. Congressional Research Service. Available: http://www.fas.org/man/crs/RL32411.pdf. March 1, 2005.

Wittgenstein, Ludwig. Philosophical Investigations. 1953. Trans. G.E.M Anscombe. Oxford: Basil Blackwell, 1963.

Wray, Robert E., Laird, John E., Andrew Nuxoll and Randolph M. Jones. "Intelligent Opponents

for Virtual Reality Trainers." Interservice/Industry Training, Simulation and Education Conference (I/ITSEC). Orlando, Florida, 2002.

Wright, Talmadge., Eric Boria and Paul Breidenbach. "Creative Player Actions in FPS Online Video Games." Game Studies 2.2 (2002). Available: http://www.gamestudies.org/0202/wright/.

Zeller, Shawn. Training Games. 2005. Goverment Executive. Available: http://www.military.com/soldiertech/0,14632,Soldiertech_Talon,,00.html. January 30, 2005.

Zielinski, Siegfried. Audiovisions; Cinema and Television as Entr'Actes in History. 1989. Amsterdam: University of Amsterdam Press, 1999.

Zonk. U.S. Army to D00dz - We're Coming for You. 2005. Slashdot.org. Available: http://games.slashdot.org/article.pl?sid=05/01/12/2121206&tid=103. February 12, 2005.

Zyda, Michael and Sheehan, Jerry, ed. Modeling and Simulation: Linking Entertainment & Defense. Washington, DC: National Academy Press, 1997. Integral online available at: http://books.nap.edu/html/modeling/.

Zyda, Michael. "The Naval Postgraduate School Moves Program – Entertainment Research Directions." Summer Computer Simulation Conference 2000. Vancouver, B.C. Canada, 2000. Available: http://www.scs.org/scsarchive/getDoc.cfm?id=1121.

---. 2002 in the Moves Institute. 2002. MOVES Institute. Available: http://www.movesinstitute.org/MOVESactivity2002.pdf. August 14, 2004.

---. "America's Army: Operations Game." NPS Research. Ed. Danielle Kuska. ed. Vol. 13: Naval Postgraduate School, 2003a.

---. Weapons of Mass Distraction - America's Army Recruits for the Real War. 2003b. State of Play Conference (New York Law School). Available: http://www.npsnet.org/~zyda/presentations/Games%26LawTalk-15Nov2003.pdf. January 30, 2005.

---. From Visual Simulation to Virtual Reality to Games. 2005. USC Viterbi School of Engineering. Available: http://www.isi.edu/GamePipe/Publications.html. March 23, 2005.

Zyda, Michael., Hiles, J., Rosenbaum, R., Roddy, K., Gagnon, T., and Boyd, M. "Simnavy – Phase 0 Building an Enterprise Model of the Us Navy." Technology Initiatives Game. Fort Belvoir, VA, 1998.

Zyda, Michael. Hiles, J. Mayberry, A. Wardynski, C. Capps, M. Osborn, B. Shilling, R. Robaszewski, M. Davis, M. " The Moves Institute's Army Game Project: Entertainment R&D for Defense." Computer Graphics and Applications, IEEE 23.1 (2003): 28-36.

Zyda, Michael Alex Mayberry, Jesse McCree, Margaret Davis. From Viz-Sim to Vr to Games: How We Built a Hit Game-Based Simulation. Monterey: The MOVES Institute, 2004.

Filmography

Annaud, Jean-Jacques. "Enemy at the Gates." USA / Germany / UK / Ireland: Paramount Pictures, 2001. 131 min.

Aronson, Raney. "The Soldier's Heart." PBS Frontline. Ed. Raney Aronson: PBS.org, 2005.

Epperlein, Petra and Michael Tucker. "Gunner Palace." USA: Palm Pictures, 2004. 85 min. Ed. Petra Epperlein.

Kubrick, Stanley. "Full Metal Jacket." USA: Warner Bros, 1987. 116 min.

Mendes, Sam. "Jarhead." USA: Universal Pictures, 2005 (forthcoming).

Moore, Michael. "Fahrenheit 9/11." USA: Paradiso Entertainment, 2004. 122 min.

Mostow, Jonathan. "Terminator 3: Rise of the Machines." USA: Intermedia Films, 2004. 109 mins.

MrGood. "SSM: Navy Seals." Great Britain: DCR Productions, 2004. 30 min.

"National Geographic - 21 Days to Baghdad." USA: Warner Home Video, 2003. 60 min. Ed. National Geographic.

Proyas, Alex. "I, Robot." USA: Twentieth Century Fox Film Corp., 2004. 115 mins.

Roberts, Tom. "A Company of Soldiers." Frontline. Ed. Tom Roberts: PBS.org, 2005.

Scott, Ridley. "Black Hawk Down." USA: Sony Pictures Entertainment, 2001.

Spielberg, Steven. "Saving Private Ryan." USA: United International Pictures, 1998. 170 min.

To, Tony; Mikael Salomon, Phil Alden Robinson, David Nutter, Richard Loncraine, David Leland, Tom Hanks, David Frankel. "Band of Brothers." UK / USA: Home Box Office, 2001. 600 Min.

West, Bing. "The Battle for Fallujah." USA Universal Pictures: Universal Pictures, 2006 (forthcoming).

Ludology

2015 Inc. Medal of Honour: Allied Assault. Vers. PC. Computer software. Electronic Arts, 2002.

Amusement Vision. Super Monkey Ball. Vers. GameCube. Computer software. SEGA, 2001.

Anarchy Enterprises. Desert Fury. Vers. PC. Computer software, 2003.

BF1982 mod team. Battlefield Interstate 1982. Vers. PC. Computer software. BF1982.com, 2003.

BioWare. Star Wars: Knights of the Old Republic. Vers. PC. Computer software. LucasArts, 2003.

---. Neverwinter Nights. Vers. PC. Computer software. Atari, 2002.

Bohemia Interactive. Operation Flashpoint: Cold War Crisis. Vers. PC. Computer software. Codemasters, 2001.

Bohemia Interactive & Coalescent Technologies Corporation. VBS1. Computer software. Bohemia Interactive, 2001.

Brainbox Games. Desert Thunder. Computer software. Groove Games, 2003.

Bungie Software & Gearbox Software. Halo: Combat Evolved. Vers. PC. Computer software. Microsoft, 2003.

CIS|BHD staff. Conflict in Somalia: Black Hawk Down Mod. Vers. PC. Computer software. Http://www.bhdmod.com/, 2005.

CITY Interactive. Terrorist Takedown. Vers. PC. Computer software. Merscom, 2004.

Coil Games. Duffers Golf. Vers. PC. Computer software. http://duffers.beyondunreal.com/, 2004.

Critical Mass Interactive. USAF: Air Dominance. Vers. PC. Computer software. U.S. Air Force, 2004.

Crytek. Far Cry. Vers. PC. Computer software. Ubisoft, 2004.

DC Extended mod team. Desert Combat Extended. Computer software. PC mod, 2004.

Desert Combat Realism mod team. Desert Combat Realism. Computer software. PC mod, 2004.

Destineer. Close Combat: First to Fight. Vers. PC. Computer software. Destineer, 2005.

Digital Extremes. Unreal. Vers. PC. Computer software. Epic Games, 1998.

Digital Illusions CE (DICE). Battlefield 1942. Vers. PC Computer software. Electronic Arts, 2002.

---. Battlefield 1942: Secret Weapons of World War II. Vers. PC. Computer software. Electronic Arts, 2003.

---. Battlefield 1942: The Road to Rome. Vers. PC. Computer software. Electronic Arts, 2003.

---. Battlefield Vietnam. Vers. PC. Computer software. Electronic Arts, 2004.

DivoGames. Airstrike II: Gulf Thunder. Vers. PC. Computer software. DivoGames, 2005.

DreamWorks Interactive. Medal of Honor: Frontline. Vers. PS2. Computer software. Electronic Arts, 2002.

EA Los Angeles. Medal of Honor: Pacific Assault. Vers. PC. Computer software. Electronic Arts, 2004.

EA Pacific. Command & Conquer Generals. Computer software. Electronic Arts, 2003.

Electronic Arts. Sub Command. Vers. PC. Computer software. Electronic Arts, 2001.

Encore. America's 10 Most Wanted : War on Terror. Vers. Playstation 2. Computer software. Black Ops, 2003.

Epic Games. Unreal Tournament 2004. Vers. PC. Computer software. Atari Corporation, 2004.

Forterra Systems. There. Computer software. Forterra Systems, 2003.

Gearbox Software. Brothers In Arms: Road to Hill 30. Vers. Xbox. Computer software. Ubisoft, 2005.

Gray Matter Studios / Nerve Software. Return to Castle Wolfenstein. Vers. PC. Computer software. Activision, 2001.

Gray Matter Studios. Call of Duty: United Offensive. Vers. PC. Computer software. Activision, 2004.

Guerilla Games. Shellshock: Nam '67. Vers. PC. Computer software. Eidos Interactive, 2004.

Hazmat Project. Hazmat: Hotzone. Vers. PC. Computer software. Entertainment Technology Center, 2004.

Hizbullah Central Internet Bureau. Special Force. Vers. PC. Computer software, 2003.

HPS Simulations. Decisive Action. Vers. PC. Computer software. HPS Simulations, 2001.

id Software. Catacomb 3-D. Vers. PC. Computer software. Softdisk Publishing, 1991.

---. Hovertank. Vers. PC. Computer software. SoftDisk, 1991.

---. Wolfenstein 3-D. Vers. PC. Computer software. Apogee, 1992.

---. DOOM. Computer software. GT Interactive, 1994.

---. DOOM II. Vers. PC. Computer software. GT Interactive, 1994.

---. Quake. Vers. PC. Computer software. id Software, 1996.

---. DOOM 3. Vers. PC. Computer software. Activision, 2004.

Infinity Ward. Call of Duty. Vers. PC. Computer software. Activision, 2003.

Jane's Combat Simulations. Jane's Fleet Command. Vers. PC. Computer software. Electronic Arts, 1999.

Kuma Reality Games. Kuma\War. Vers. PC. Computer software. Kuma Reality Games, 2004.

Le. Minh "Gooseman". Half-Life Counter-Strike. Vers. PC mod. Computer software. http://www.counter-strike.net/, 1999.

Linden Lab. Second Life. Computer software. Linden Lab, 2003, PC.

Lost Battalion mod team. The Lost Battalion. Vers. PC mod. Computer software, 2003.

Marine Corps Modeling and Simulation Management Office. Marine Doom. Vers. PC mod. Computer software. Marine Corps Modeling and Simulation Management Office, 1996.

Maxis. Simcity. Vers. PC. Computer software. Maxis, 1989.

---. The Sims. Vers. PC. Computer software. Electronic Arts, 2000.

MicroProse. Hellcat Ace. Vers. Atari 800. Computer software. MicroProse, 1984.

---. Falcon 4.0. Vers. PC. Computer software. MicroProse, 1998.

Microsoft. Combat Flight Simulator 2: WWII Pacific Theater. Vers. PC. Computer software. Microsoft, 2000.

---. Microsoft Flight Simulator 2004: A Century of Flight. Vers. PC. Computer software. Microsoft, 2003.

Midway. Mortal Kombat. Vers. Various platforms. Computer software. Acclaim, 1993.

Monolith. F.E.A.R. Vers. PC. Computer software. Vivendi Universal Games, 2005 (forthcoming).

National Alliance. Ethnic Cleansing. Vers. PC. Computer software. Resistance Records, 2002.

Novalogic. Delta Force. Vers. PC. Computer software. Novalogic, 1998.

---. Delta Force 2. Vers. PC. Computer software. NovaLogic, 1999.

---. Delta Force: Black Hawk Down. Vers. PC. Computer software. Novalogic, 2003.

Pandemic Studios. Full Spectrum Warrior. Vers. Xbox. Computer software. THQ, 2004.

People Can Fly. Painkiller. Vers. PC. Computer software. Dreamcatcher Interactive, 2004.

Pivotal Games. Conflict: Desert Storm. Vers. PC, PS2, Xbox, NGC. Computer software. Gotham Games, 2002.

---. Conflict: Desert Storm 2 - Back to Baghdad. Vers. PC, PS2, Xbox, NGC. Computer software. Gathering, 2003.

Raven Software. Soldier of Fortune II: Double Helix. Vers. PC. Computer software. Activision, 2002.

Red Storm Entertainment. Tom Clancy's Rainbow Six. Vers. PC. Computer software. Red Storm Entertainment, 1998.

---. Entertainment. Tom Clancy's Rainbow Six: Rogue Spear. Vers. PC. Computer software. Red Storm Entertainment, 1999.

Raven Software. Soldier of Fortune. Vers. PC. Computer software. Activision, 2000.

Rival Interactive / Semi Logic Entertaiment. Guard Force. Vers. PC. Computer software. Army National Guard, 2002.

Rockstar Games. Grand Theft Auto III. Vers. PC. Computer software. Rockstar Games, 2002.

Rockstar North. Grand Theft Auto: San Andreas. Vers. Playstation 2. Computer software. Rockstar Games, 2004.

Running with Scissors. Postal 2. Computer software. Whiptail Interactive, 2003, PC.

Russell, Steve. Spacewar. Computer software, 1962.

Secret Level / U.S. Army. America's Army: Rise of a Soldier. Vers. Playstation 2, Xbox. Computer software. Ubisoft, 2005 (forthcoming).

Sony Computer Entertainment. Gran Turismo. Vers. Playstation. Computer software. Sony Computer Entertainment, 1998.

Splash Damage. Return to Castle Wolfenstein: Enemy Territory. Vers. PC. Computer software. Activision / id Software, 2003.

Sulake Corporation. Habbo Hotel. Vers. PC. Computer software. Sulake Corporation, 2000.

Supersoft. Under Ash. Vers. PC. Computer software. Afkar Media, 2001.

Team17 Software. Worms 3D. Vers. PC. Computer software. SEGA / Acclaim, 2004.

Trauma Studios. Desert Combat. Vers. PC mod. Computer software, 2003.

Ubisoft Montreal. Tom Clancy's Splinter Cell. Vers. PC. Computer software. Ubisoft, 2003.

US Army. America's Army: Recon. Vers. PC 1.0. Computer Software. US Army, 2002.

---. America's Army: Special Forces. Vers. PC 2.0a. Computer software. US Army, 2003.

---. America's Army: Special Forces (Vanguard). Vers. PC 2.2.1. Computer software. US Army, 2004.

---. America's Army: Special Forces (Firefight). Vers. PC 2.3. Computer Software. US Army, 2005.

Valve Software. Half-Life. Vers. PC. Computer software. Sierra Studios, 1998.

---. Day of Defeat. Vers. PC. Computer software. Activision, 2003.

---. Half-Life 2. Vers. PC. Computer software. Vivendi Universal, 2004.

Verant Interactive. PlanetSide. Vers. PC. Computer software. Sony Online Entertainment, 2003.

Wings Simulations GmbH. Söldner: Secret Wars. Vers. PC. Computer software. Encore, 2004.

America's Army Forum Topics

"Regarding Cheaters", topic-url:
http://americasarmy.com/forum/viewtopic.php?topic=34395&forum=15,
created on November 24, 2002.

“Effectiveness of this game..”, topic-url:
http://forum.americasarmy.com/viewtopic.php?t=11112, created on December 15, 2003.

"Check out this NEW AA Stryker Picture", topic-url:
http://forum.americasarmy.com/viewtopic.php?t=27062, created on February 16, 2004.

"creators of RedOrchestra join the AA developers?", topic-url:
http://americasarmy.com/forum/viewtopic.php?topic=70926, created on August 24, 2004.

"DataBank on the Future - 11-03-2005 *Updated*", topic-url:
http://forum.americasarmy.com/viewtopic.php?t=79389, created on October 10, 2004.

"Serious problem with realism", topic-url:
http://forum.americasarmy.com/viewtopic.php?t=81889, created on October 22, 2004.

"149 page research article on AA", topic-url:
http://forum.americasarmy.com/viewtopic.php?t=108288, created on November 14, 2004.

"Players Begging For ".mil" Emails :-/", topic-url:
http://forum.americasarmy.com/viewtopic.php?t=108317, created on November 15, 2004.

"The Army is Angry and coming after the cheaters", topic-url:
http://forum.americasarmy.com/viewtopic.php?t=143447, created on January 12, 2005.

"Cheating becomming more frequent", topic-url:
http://forum.americasarmy.com/viewtopic.php?t=148364, created on February 8, 2005.

"DO WE REALLY NEED PB?", topic-url:
http://forum.americasarmy.com/viewtopic.php?t=148323, created on February 8, 2005.

"where can i report a hacker i have screen shots?", topic-url:
http://forum.americasarmy.com/viewtopic.php?t=148464, created on February 9, 2005.

"Hackers!!!!!", topic-url: http://forum.americasarmy.com/viewtopic.php?t=148471, created on February 9 2005.

Appendices

Appendix A – America's Army Medic Training Transcript

Source: "Medic Training 1: Airway Management". Transcript by: MedmanDC. Available: http://aaotracker.4players.de/downloaddb.php?file=36. February 8, 2005.

[Enter training room]

INSTRUCTOR: "Welcome to class, soldier."

[Sit down in empty seat]

INSTRUCTOR: "Let's get started."

Slide 1: Basic First Aid
Throughout history, soldiers have been helping their injured buddies, and you will be no exception. If you see a wounded soldier, your first action is to help that buddy. Being here today shows that all of you have the desire to help, but the question is, "Do you know how?" What we will attempt to do is give you an appreciation for the significance of prompt, effective first-aid and a basic proficiency in the application of critical first-aid skills.

Slide 2: Evaluate Casualty
Performing first aid on a fellow human being is one of the purest examples of living up to the Army core values. It is our duty to learn first-aid and our duty to provide first-aid to others. Whenever we give first-aid to any other person, you are being loyal to other members of your unit, fulfilling your obligation to other soldiers, and showing those people the same respect you would expect from them.

In many cases, you will be risking your own life in a selfless way to provide first-aid. You are doing what's right, and showing personal courage, both physically and morally. By performing first aid, we are living up to the Army value of honor, because saving a human life brings honor to yourselves and to the United States Army.

Slide 3: Combat Life Saving Steps
It is important that you treat injuries in the order in which they are most life-threatening. During this lesson, you will learn how to evaluate a casualty for breathing difficulties, and decide in which order to give first aid measures.

In this, and in future lessons, we will be teaching you the signs and symptoms for evaluating and treating a casualty according to the priorities needed to prevent death, control shock, and lessen further injuries.

Slide 4: Check Responsiveness
Our first step is to ascertain that our buddy is, in fact, a casualty. We do this in a procedure called "Shake and Shout," where we first ask in a loud, but calm voice, "Are you OK?" Then, we gently shake, or tap, the casualty on the shoulder. Watch for a response. A conscious casualty may be asked where his body feels different than usual, or where it hurts. If the casualty does not respond, assume mouth-to-mouth resuscitation is needed. Call for help, and begin resuscitation procedures.

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f you or the casualty thinks they may have hurt their neck or back, do not move them unless it is absolutely necessary to save their life. If the casualty is conscious, but is choking or cannot talk, stop the evaluation, and begin first-aid immediately.

Slide 5: Open the Airway
When it is safe to do so, lay the casualty on their back and open the airway with the appropriate maneuver. This action alone may start the casualty breathing again on their own.

All living things must have oxygen to live, and it is through the breathing process that the lungs draw oxygen from the air and put it into the blood for the heart to pump through the body, where it is then used. Without this oxygen, cells in the brain and nervous system may die after 4 to 6 minutes. This lack of oxygen may mean irreversible brain damage, because these dead cells can never be replaced.

Slide 6: Open Airway
The method to open the airway on a casualty with no suspected head or neck injury is the "Head Tilt Chin Lift" method. Since the tongue is the single most common cause of airway obstruction, the airway in most cases can be cleared by simply extending the neck. This action pulls the tongue away from the air passage in the throat. This procedure again is called the "Head Tilt Chin Lift" method.

Slide 7: Head Tilt Chin Lift
To perform this life-saving procedure, kneel at the level of the casualty's shoulders. Place one hand on the casualty's forehead and apply firm, backward pressure with the palm to tilt the head back. Place the fingertips of the other hand under the bony part of the lower jaw and lift, bringing the chin forward.

Please note: do not use your thumb to lift, and do not press deeply into the soft tissue under the chin with your fingers. Any foreign material that you see should be removed as soon as possible.

Slide 8: Jaw Thrust
For casualties that may have sustained significant head or neck injuries, we use a procedure called the "Jaw Thrust." Kneel behind the casualty's head and rest your elbows on the surface on which the casualty is lying. Place one hand on each side of the casualty's head, and grasp the angles of the lower jaw with your fingertips. Place your thumbs on the jaw, just below the level of the teeth. Lift with both hands to move the jaw forward and upward.

This action will also cause the casualty's head to tilt back somewhat. Keep the head and neck from moving more than necessary. If the casualty's lips are still closed after the jaw has been moved forward, use your thumbs to retract the lower lip and allow air to enter the casualty's mouth.

Slide 9: Check the Breathing
Next, check to see if the casualty is breathing by using the "Look, Listen, and Feel" method. Place your ear over the casualty's mouth and nose with your face toward the casualty's chest and LOOK for the rise and fall of the casualty's chest, LISTEN for breathing, and simultaneously FEEL for breath on your ear and cheek. If casualty is not breathing, immediately call for medical help and continue with your first-aid.

Slide 10: Rescue Breaths (List)
If the casualty does not spontaneously start breathing when you open their airway, you will need to provide what we call "rescue breaths." If you are using the "Head Tilt, Chin Lift" method, use the thumb and index finger of your hand on the casualty's forehead to gently pinch the casualty's nostrils closed. If you are using the "Jaw Thrust," close the casualty's nostrils by placing your cheek tightly against the nose.

Administer two full breaths by opening your mouth wide and taking a deep breath. Place your mouth over the casualty's mouth. Make sure that your mouth forms a good seal, so that air will not escape when you blow into the casualty's mouth. Maintaining the open airway will keep the casualty's mouth open slightly.

Blow a breath into the casualty's mouth. As you blow, observe the casualty's chest. If air is getting into the casualty's lungs, his chest will rise. After blowing the first breath, quickly break the seal and take another deep breath. Seal your mouth over the casualty's mouth again, and blow. Administering the two full breaths should take about 2 to 3 seconds.

Slide 11: Rescue Breaths (Pic. 1)
After delivering your breaths, break the seal over the casualty's mouth and release their nose. This will allow the casualty's body to exhale naturally. If you cannot seal off the casualty's nose, or if the casualty has injuries to their mouth or jaw area that prevent you from administering mouth-to-mouth resuscitation, administer mouth-to-nose resuscitation instead. Close the casualty's mouth so that air will not escape. Seal your mouth over the casualty's nose and blow the two breaths into their nostrils.

Slide 12: Rescue Breaths (Pic. 2)
If the casualty begins breathing on their own, look for additional injuries. After treating the injuries, arrange for the casualty to be evacuated to a medical treatment facility. Do not leave the casualty alone, since their breathing may stop again.

The casualty may still require help to keep their airway open. If air goes in and out of the casualty's lungs, but they do not start breathing on their own, check their pulse. If the casualty's chest did not rise and fall, then fresh air is not getting into the lungs. Try to open the casualty's airway more, and administer two full breaths again. If the casualty's chest still does not rise, a foreign object is probably blocking their airway. Administer finger sweeps and manual thrusts as necessary to unblock the airway. Once the airway is unblocked, administer two full breaths again, and constantly reevaluate.

[Slides off]

INSTRUCTOR: "That concludes the lecture on Airway Management. Your tests are in front of you. When you're through, come up and see me to get your grade."

Appendix B – Original anti-cheater post by Phil '[DEV]Skippy' DeLuca

Source original post: DeLuca, Phil '[DEV]Skippy'. The Army is Angry and coming after the cheaters. 2005. America'sarmy.com. Available: http://forum.americasarmy.com/viewtopic.php?t=143447

Mirror: KaDargo. The Army is Angry and coming after the cheaters. 2005. http://www.thealphacompanyclan.org/. Available: http://www.thealphacompanyclan.org/tac/index.php?option=com_simpleboard&Itemid=240&func=view&id=45&catid=23. February 8, 2005.

Title: The Army is Angry and coming after the cheaters

It's been a little over a week since Jerry "Skyhuntr" Heneghan posted about Operation Punk Buster. It's time to give the community an update so you know we haven't forgotten.

We're not going to share details about our response – ever. Don't expect any. However, I do want the community to know that we're getting ready to deliver a new version that includes many features designed to reduce the problems we're running into in addition to some rather nifty features. The coolest part of making this happen is it happened as part of our normal development. While we worked a little harder to get the extra security features in, it had no impact on our schedule.

No solution is bullet-proof, and only a fool would think one could be. But we solve problems as they come up in a matter of hours – in some cases less time than it takes a bad guy to create a new problem. And our solutions allow us to make changes almost immediately to catch new things the bad guys come up with. Either way, it's relatively easy when we put our heads to it.

We're also adding a human element to our response. For the past few weeks we've been doing something fast, now we have to do something good. We're working that out because it's a little more complicated than reaching into the database and turning off a few accounts. The AACMs are important to us, and we want to make sure they are a part of it because they know this community well and they have to deal with the results of our actions first-hand.

Our bans last week came without notice and took the bad guys by surprise. They don't know the extend of what we know, and moreover how we know it. For example, we have the means to detect bad guy activities that I know the bad guys do not know we can detect. That's the way we want it, too – while we haven't banned them yet, we're using them to collect more data, track down their friends, and their friends, and learn more as we discover new behavior. Truth be told, the bloodiest day in America's Army Game account history is still ahead of us and we got most of the information leading to that day from the bad guys themselves!

That doesn't alter that we should have done something earlier – but priorities were what they were and the activity of the bad guys was low-level, well within what I'd consider normal tolerances for an online game when I got here. It escalated and we took notice.

By the way, there's something to consider in that statement that gets missed time and again: we took notice. By we, I mean the entire AA team. That includes Public Applications, Government Applications, Ignited Minds, everyone associated with the development of the project – and the United States Army.

That last fact should give some of the bad guys pause, and yet it hasn't. Some of you (and clearly the bad guys are among them) don't always remember that this game, and all accounts and derivative products, are the property of the United States Army. When you tamper with the game, not only are you breaking the EULA you're misusing Army property – and, worse, you're misusing US Army computer programs and equipment.

Tampering with software and servers owned or used by the Army is cyber crime.

In the early 1940's, Japan learned an important lesson – "let the sleeping giant lie." We may not react swiftly, but when we do it's with unstoppable force. The Army has partners that deal with cyber crime as a matter of course. These include not just various Army IT departments, but also the Department of Justice, the Secret Service, and the Federal Bureau of Investigations.

It's going to get uncomfortable for some of the bad guys, but you know what? They brought it on themselves. Knowing this anyone who continues to be bad is just plain foolish. Keep trying, though. Sooner or later the bad guy will realize we've known about him for a while… and by then it's too late.

Allow me to speak directly to the bad guys for a moment: When you get banned, know that we know and have records showing you were doing something that's a violation of terms of service, breaks your EULA, and also happens to be against the law. We know who you are, and can track down where you play from. We have incontrovertible proof you did something illegal. The Army is angry, and we're coming for you.

Phil DeLuca

_____

Phil DeLuca
Executive Producer - Public Applications
America's Army Game Project
ONE TEAM

Appendix C – America's Army Version History

Sources: Zyda et al. (2004) and America's Army - Wikipedia, the free encyclopedia. 2005. Wikipedia. Available: http://en.wikipedia.org/wiki/Americas_army. February 21, 2005.

Legenda: W = Windows release, L = Linux release, M = Mac release.

America's Army : Recon

Version 1.0.0 - America's Army: Recon. July 4, 2002. W

Version 1.0.1 - America's Army: Recon. July 12, 2002. W.

America's Army: Operations

Version 1.1.1 - America's Army. August 1, 2002. W.

Version 1.2.0 - America's Army. August 22, 2002. W.

Version 1.2.1 - America's Army: Operations. August 27, 2002. W.

Version 1.3.0 - America's Army: Operations. October 10, 2002. W.

Version 1.4.0 - America's Army: Operations. November 25, 2002. W.

Version 1.5.0 - America's Army: Operations. December 23, 2002. W.

Version 1.6.0 - America's Army: Operations. March 16, 2003.

Version 1.7.0 - America's Army: Operations. April 21, 2003. May 1, 2003. W. L. M.

Version 1.9.0 - America's Army: Operations. August 8, 2003. W. L. M.

America's Army: Special Forces

Version 2.0 - America's Army: Special Forces. November 6, 2003. W. L. M.

Version 2.0a - America's Army: Special Forces. December 23, 2003.

Version 2.1.0 - America's Army: Special Forces (Downrange). June 1, 2004. W. L. M.

Version 2.2.0 - America's Army: Special Forces (Vanguard). October 19, 2004. W. L. M.

Version 2.2.1 - America's Army: Special Forces (Vanguard). November 18, 2004. W. L. M.

Version 2.3.0 - America's Army: Special Forces (Firefight). February 18, 2005. W. L.

Possible future versions (subject to change)

Version 2.4 - America's Army: Special Forces (Q-Course). Projected release: May 2005

Version 2.5/6 - America's Army: Special Forces (Overmatch). Projected release: Summer 2005

Version 3.0 - America's Army: ? Projected release: 2006

Appendix D – The use of games/simulations in the US Air Force and the US Navy

The commercial game developer Microprose is credited for "virtually inventing the genre of commercial flight simulators" by developing *Hellcat Ace* (MicroProse, 1984), an Atari 800 game used by the US Air Force to screen new helicopter pilots (Herz, 1997: 211).[358] Since the earliest days of training pilots, the military has used physical simulators to mimic aircraft. Belton (1992) names the Vitarama as the precursor of the Cinerama, used to train Air Force pilots during World War Two with widescreen technology. When the computing powers and graphical display technology permitted it, virtual flight simulators surfaced and dedicated groups of mostly middle-aged men spend their days in virtual cockpits ever-since. There are numerous kinds of virtual flight simulators (e.g. combat versus non-combat, arcade versus ultra-realistic), with the commercial successful non-military *Microsoft Flight Simulator*-series as prime example. Visits to hobby computer clubs will show that a dedicated group of hardcore gamers go at great length to simulate a real life flight experience by using various monitors and multiple hardware interfaces. As is often the case with contemporary PC-games, the simulation software is partially developed by gamers themselves (c.f. Nieborg, 2004a; 2005). Flight simulation developers such as Microsoft, issue software development kits (SDKs) with their products to enable users to create their own content, e.g. landscapes, voice packs and aircraft models.[359] Community of aficionados have sprang up, such as the Dutch group *The Netherlands 2000*, who created a complete new overhaul of the (virtual) Netherlands for *Microsoft Flight Simulator* (c.f. Weijer, 2004). Naturally, these user-created modifications are free of charge.

The military, or military contractors, are eager to take advantage of user-created content. Flight Safety International for instance, which develops both civilian and military flight simulations, remarketed a version of *Microsoft Flight Simulator* for the U.S. Navy to use in experimental new pilot training and custom versions of *Microsoft Flight Simulator* are widely used for defense pilot training by the U.S. Navy and the US Air Force at Naval Reserve Officer Training Courses (Macedonia & Rosenbloom 2001). According to Herz & Macedonia (2002) "an extensive Navy study on the training value of Flight Simulator found that students who use microsimulation products during early flight training tend to have higher scores than students who do not use the software."[360] A much cited commercial flight simulation game customized by the military, is *Falcon 4.0* (MicroProse, 1998), developed by the same company that published *Hellcat Ace*. The level of customization – i.e. the possibility to design a custom

[358] "All in all, Hellcat Ace is an effective flight / combat simulator, responding smoothly to the joystick, and with enough varying difficulty to interest both and novice and the professional pilot (it was play tested by members of an Air National Guard Wing)." Source: Underdogs. Hellcat Ace. www.the-underdogs.org. Available: http://www.the-underdogs.org/game.php?id=2465. November 19, 2004.

[359] See for the SDK for Microsoft Flight Simulator 2004: A Century of Flight (Microsoft, 2003): Microsoft Flight Simulator Century of Flight. 2004. Microsoft.com. Available: http://www.microsoft.com/games/flightsimulator/fs2004_downloads_sdk.asp. November 19, 2004.

[360] To finish the quote: "In fact, 54 percent more of these students received above-average flight scores. This revelation also came after the realization that most Navy flight training students were using Flight Simulator at home."

campaign -, made *Falcon 4.0* useful for Air Force training (Lenoir & Lowood, 2003). Both *Falcon 4.0* and the *Microsoft Flight Simulator*-series show the symbiotic interaction between the US defense communities, the entertainment industry and individual gamers.

An interesting article on the gaming portal *Gamespy.com* reveals the linkage between the U.S. Air Force and their branding and recruiting efforts by tapping into gaming culture through a commercial game website (Gamespy Staff, 2004). "As the master of U.S. skies, the United States Air Force knows a thing or two about high quality flying". This line motivated the Gamespy Staff to come up with a Top 25 Flying Games of All Time. The marketing intent of the Air Forces is made explicit through the inclusion of banners and links and the inevitable "Win your Wings" sweepstakes action, leading to a special US Air Force promotion website.[361] The different web pages also show banners leading directly to the USAF website. As will be laid out in more detail in paragraph 4.1.3, the use advertisement (on gaming portals) is an important element of US Army branding efforts. The before mentioned flight simulators *Falcon 4.0* (#9) and *Microsoft Flight Simulator*-series (#1 and #2), are present in the Gamespy top 25.

Instructors at the Naval War College use the commercial *Jane's Fleet Command* (Jane's Combat Simulations, 1999), a real-time strategic simulation of modern naval combat. There were plans in 1998 of developing a *SimNavy* game, which could be converted to a marketable game (Zyda et al, 1998), but this plan seems to be abandoned. A weapon system that experienced solely through screens and thus a excellent candidate for digital training simulations, is the submarine. The U.S. Navy uses the commercial multiplayer game *Sub Command* (Electronic Arts, 2001) to train the planning of missions, including planning Tomahawk cruise missile operations (Herz & Macedonia, 2002). Prensky (2000) describes the development of a game created within the US Navy to train submariners. What started out as a simulation on estimating target-range became the 'fun' game *Bottom Gun*, showing how simulations can become successful training tools by taking a "game-oriented approach" towards developing training simulations.

[361] IGN.com Presents The Win Your Wings Sweepstakes. 2004. Available: http://microsites.igngamespy.com/airforce/. November 19, 2004. This website leads to the official USAF website, which can be found at http://www.airforce.com.

Appendix E – Game Study Kuma\War: Real War?

Whereas the First Gulf War was represented on television, the Second Gulf War could be experienced trough the first person view of both embedded journalists with their shaky cameras and through the simulation of the war in computer games.[362] A game in which the representation of recent U.S. military actions, the media coverage on these actions and computer games in an exceptional way interact, is *Kuma\War* (Kuma Reality Games, 2004). "If Kuma has its way, the next revolution won't just be televised, it'll also be digitized", according to a game reviewer from the *Computer Games Magazine*, emphasizing the possibility for configurative and interactive experiences of 'real' war.[363] The commercial game studio Kuma Reality Games develops the game in New York and it is distributed online only, by paying a ten-dollar monthly subscription fee. In the autumn of 2004 there will become a CD-ROM version of the game available listening to the name *Kuma\War: The War on Terror*. The most important battles in the U.S.-led War on Terror are to be played by gamers ad infinitum. The website markets the CD-ROM version of the game with the meaningful slogan: "You've seen in on the news, NOW PLAY IT!"[364] The War on Terror-pack features such missions as 'Mosul: The al Qaeda Connection', 'Samarra Bank Heist' and the exclusive mission: 'Freedom's Heroes: The Road to Baghdad – (built with the assistance of U.S. Marines returned from Iraq - only available on this disc!)'.

"We have developed an innovative new entertainment genre combining the best of reality television with high-quality action gaming", according to K. Halper, CEO of Kuma Reality Games. [365] The game allows gamers to experience not only 'what war is like', a characterisation often used by the marketers of computer war games, gamers are also able to experience 'the news'. *Kuma\War* is a First Person Shooter game featuring a single player and multiplayer mode, where gamers can play missions based on real world events - i.e. armed global conflicts in the world news. These events always have a military character and most missions of *Kuma\War* let the game fit in the tactical shooter genre – i.e. two teams fight against each other in a realistic setting under real life conditions using a range of real life weaponry and the gameplay allows for tactical decisions.

The big difference between Kuma and other shooters is the extensive back-story accompanying every mission. Early FPS games notoriously lacked a narrative, the back story of *DOOM* is as simple as its gameplay. Narrative driven games as *Star Wars: Knights of the Old Republic* (BioWare, 2003) outshine tactical shooters like *Counter-Strike*, where there is no

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362 This paragraph was originally published in Nieborg (2004c).
363 Quote from the Computer Games Magazine (December 2003). Source: Online Reality War Games for PC War Games Online. 2004. KumaWar.com. Available: http://www.kumawar.com/about.php. October 4, 2004.
364 Source: KumaWar The War on Terror. 2004. KumaWar.com. Available: http://www.kumawar.com/Retail/screenshots.php. October 4, 2004.
365 Source: Kuma: War - FULL Client Available NOW. 2004. Worthplaying.com. Available http://www.worthplaying.com/article.php?sid=17009. March 31, 2004.

narrative at all. In *Counter-Strike* you are a terrorist (or counter-terrorist) and you have plant a bomb (or prevent the other team to do so). *America's Army* lacks a back-story as well, all gamers are U.S. soldiers who have to fulfil a mission. Nobody knows why and quite frankly nobody seems to care either. *Kuma\War* overwhelms the player with information about the mission and provides sufficient information why a soldier is 'at the wrong place at the wrong time'. The missions are put into context, which is of course the main characteristic putting *Kuma\War* apart from other shooters, although one can easily skip the information and gun blaze oneself through a mission.

Before gamers start a new mission, they get a wealth of information about their mission. There is data about their opponents, available weaponry, tactical tips for planning the inevitable attack, satellite data and a chronologic overview of the happenings upon the moment where the mission starts. The available audio and video clips blur the line between real and fake news, a *Kuma\War* reporter briefs the gamer by showing short authentic footage from the real world counterpart of the mission. The developers underline the authentic appearance of a mission by using the mise-en-scène of television news casts. The developer also hired an "experienced" documentary film maker and a news producer, as well as a military consultant, a retired USMC major-general, all to stress the ingame portrayal of real war.

The first available mission of the game is named "Uday and Qusay's Last Stand", one of the many battles in Operation Iraqi Freedom. A player has the assignment to kill or capture the sons of Saddam Hoessein. The real operation took place in July 22, 2003 and at a press debriefing, commanding Lieutenant-General Ricardo Sanchez made the following statement about the fight: "[Saddam his sons] died in a fierce gun battle. They resisted the detention and the efforts of the coalition forces to go in there and apprehend them, and they were killed in the ensuing gunfight and the attacks that we conducted on the residence."[366] The mission in *Kuma\War* was made available in February 2004 and consists of two parts. In the first part the player has to secure the area surrounding the compound where the Hussein brothers have entrenched themselves. In the second part of the mission, players are able to kill the brothers. The option to capture them alive is impossible. Thus, *Kuma\War* rules out the configurative possibilities computer games as simulations offer, i.e. playing through a 'what-if scenario', in favour of a realistic simulation of the real world occurrences.

At the legal section of the *Kuma\War* website a paradoxical text shows the relation between games as simulations and the media coverage of the war: "Kuma games are works of fiction. Any Kuma game that is based on real-world events is only representational and not an accurate depiction of real-world events. You should not rely on the accuracy of any Kuma game for any purpose, and under no circumstances should you seek to imitate any game experience

[366] Source: DoD News Lt Gen Sanchez Press Briefing on Uday and Qusay Hussein. 2003. Department of Defense. Available: http://www.dod.mil/transcripts/2003/tr20030722-0421.html. October 4, 2004.

in real life."[367] Whereas in marketing slogans the realistic approach to combat simulation and experiencing news is stressed, the warning on the website points to the subjective character of the representations and simulations of (re)mediated combat.

[367] Source: KumaWar. 2004. KumaWar.com. Available: http://www.kumawar.com/legal/terms.htm. October 4, 2004.

Appendix F – The Soldier's Creed

The Soldier's Creed is used as a loading screen and cannot be turned off. The Creed entered the game with America's Army: Special Forces (Downrange) Version 2.1.0.

The Soldier's Creed

I am an American Soldier.

I am a Warrior and a member of a team. I serve the people of the United States and live the Army Values.

I will always place the mission first.

I will never accept defeat.

I will never quit.

I will never leave a fallen comrade.

I am disciplined, physically and mentally tough, trained and proficient in my warrior tasks and drills. I always maintain my arms, my equipment and myself.

I am an expert and I am a professional.

I stand ready to deploy, engage, and destroy the enemies of the United States of America in close combat.

I am a guardian of freedom and the American way of life.

I am an American Soldier.

Abstract in Dutch
(Nederlandse Samenvatting)

De wereld is in constante staat van oorlog. Honderdduizenden soldaten zijn elk moment van de dag bezig met het uitvechten van vluchtige digitale conflicten op gesimuleerde slagvelden. Deze virtuele oorlogsvoering omhelst niet alleen grote groepen adolescenten, ook leden van verschillende krijgsmachten gebruiken technologisch geavanceerde digitale computerspellen (games). Het Amerikaanse leger profiteert gretig van deze positieve attitude van gamers ten opzichte van alles wat met de representatie van wapens en (recente) oorlogsvoering te maken heeft. Het gevolg is een verregaande samenwerking tussen het Amerikaanse leger en de commerciële game industrie, iets wat zijn weerslag heeft op de representatie van oorlog binnen de populaire cultuur.

In deze scriptie staat de gratis te verkrijgen computergame *America's Army* centraal. De eerste stappen die geleid hebben tot de uiteindelijke ontwikkeling en het huidige gebruik van dit digitale spel, zijn terug te voeren naar begin jaren tachtig en de opkomst van bruikbare simulatietechnieken. Dat de Amerikaanse defensie zich hierbij wendt tot commerciële spel- en simulatie-ontwikkelaars is evident, immers zij zijn het die beschikken over de technologische kennis om grootschalige en technologisch hoogstaande simulaties te fabriceren tegen relatief lage kosten. Tegelijkertijd is deze industrie in staat om simulaties te maken met spelelementen, zodat voor het leger gemaakte simulaties enerzijds een aantrekkelijke vorm van training worden en aan de andere kant kunnen dienen als vermaak.

Wat *America's Army* een uniek spel maakt is de aanwezigheid van vier interacterende dimensies: die van *advergame, edugame, propagame* en *test tool*. Sommige van deze dimensies zijn apart terug te vinden in andere *First Person Shooter* games, maar juist de aanwezigheid van deze vier maakt *America's Army* uniek. *America's Army* bouwt verder op bestaande conventies binnen het *First Person Shooter* genre en dringt haast ongemerkt de populaire cultuur binnen.

Het succes van het spel stemt dan ook tot nadenken over het gebruik van games voor marketingdoeleinden, educatie, op verschillende niveaus als testmiddel en als propagandamiddel. De implicaties die het gevolg zijn van het toe-eigenen van een internationale gamecultuur, resulteert in een dynamische relatie tussen de autoritaire Amerikaanse strijdmachten en het open karakter van game communities en toont een verschuiving in de veranderende status van de representatie en simulatie van moderne oorlogsvoering. De uitgebreide multi-dimensionale analyse van een enkel spel, dient enerzijds als historiografie en documenteert de levenswandel van een steeds veranderd populair spel. Anderzijds biedt het aanknopingspunten en een raamwerk voor verder onderzoek.

List of Abbreviations and Acronyms

AA	America's Army
AAFA	America's Army Future Applications team
AAGA	Army Government Applications team
AAR	After Action Review
AAPA	America's Army Public Applications team
AA:SF	America's Army Special Forces
ABCS	Army Battle Command System (Military Acronym)
ACOG	Advanced Combat Optical Gunsight (Military Acronym).
AFQT	Armed Forces Qualifying Test (Military Acronym)
AGP	Army Game Project
AI	Artificial Intelligence
ARI	Army Research Institute
ASVAB	Armed Services Vocational Aptitude Battery (Military Acronym)
AVF	All Volunteer Force (Military Acronym)
AVWID	Aircraft, Vehicle and Weapon Identification (Military Acronym)
CEM	Combat Effectiveness Meter
COTS	Commercial-of-the-shelve (Military Acronym)
CQC	Close Quarter Combat (Military Acronym)
CRS	Congressional Research Service
CSAR	Combat Search and Rescue (Military Acronym)
DARPA	Defense Advanced Research Projects Agency (Military Acronym)
DC	Desert Combat (FPS modification of Battlefield 1942)
DIVITCH	Deployable, Immersive, VIbro-Tactile CHair
DOD	Department of Defense (Military Acronym)
DSB	Defense Science Board (Military Acronym)
ERSB	Entertainment Software Rating Board
ESA	Entertainment Software Association
EULA	End User License Agreement
FM	Field Manual
FMV	Full Motion Video
FY	Fiscal Year (the US Government fiscal year begins on October 1 of the previous Calendar year and ends on September 30 of the year with which it is numbered)
GAO	General Accounting Office (Governmental Acronym)
GNP	Gross National Production
GOTS	Government-of-the-shelve (Military Acronym)
GPS	Global Positioning System
ICT	Institute of Creative Technology
ICTs	Information and Communication Technologies
IDSA	Interactive Digital Software Association, changed its name to ESA.
IED	Improvised Explosive Device (Military Acronym)
IF	Indigenous Fighters
IRC	Internet Relay Chat
ISI	Information Sciences Institute
JFETS	Joint Fires and Effects Trainer System (Military Acronym)
MOS	Military Occupational Specialty (Military Acronym)
MMOG	Massive Multiplayer Online Game (MMOGs pl.)

M & S	Modeling and Simulation
MOUT	Military Operations in Urban Terrain (Military Acronym)
MOVES	Modeling, Virtual Reality and Simulation Institute. MOVES is located within the Naval Postgraduate School (see NPS) and Michael Zyda is director of MOVES.
NATO	North Atlantic Treaty Organisation
NCO	Non-commissioned Officer (Military Acronym)
NGO	Non-governmental Organisation
NPC	Non Player Character
NRC	National Research Council
NPS	Naval Postgraduate School (Military Acronym)
OEMA	Office of Economic and Manpower Analysis. Office within the USMA.
OIF	Operation Iraqi Freedom (Military Acronym)
OPTEMPO	Operating Tempo (Military Acronym)
PDM	Pursuit Deterrent Munition
PEO STRI	Program Executive Office for Simulation, Training & Instrumentation (Military Acronym)
POW	Prisoner of War (Military Acronym)
PSYOPS	Psychological Operations (Military Acronym)
R&D	Research and Development
ROE	Rules of Engagement (Military Acronym & Gamer vernacular)
ROTC	Reserve Officers' Training Corps (Military Acronym)
REV	Robotic Extraction Vehicle
RPG	Rocket Propelled Grenade (Military Acronym)
RTS	Real Time Strategy
SDK	Software Development Kit
SF	Special Forces (Military Acronym)
SMAW-D	Shoulder-launched Multipurpose Assault Weapon/bunker-defeat munition
SME	Subject Matter Experts
SIMNET	SIMulator NETworking
STRICOM	Simulation, Training & Instrumentation Command, currently known as: PEO STRI (Military Acronym)
TACOM	the U.S. Army's Tank-automotive and Armaments Command (Military Acronym)
TADSS	training aids, devices, simulators, and simulations (Military Acronym)
TWL	Team Warfare League
UAV	Unmanned (or Uninhabited) Aerial Vehicle (Military Acronym)
UCAV	Unmanned Combat Air Vehicle (Military Acronym)
UGVs	Unmanned Ground Vehicles
U.S.	United States (of America)
USAF	United States Air Force (Military Acronym)
USAREC	United States Army Recruiting Command (Military Acronym)
USC	University of Southern California
USFK	United States Forces Korea
USMA	United States Military Academy, also known as ‘West Point’ (Military Acronym)
USMC	United States Marine Corps (Military Acronym)
USN	United States Navy (Military Acronym)
UWAO	Unconventional Warfare Area of Operations
VOIP	Voice Over IP

Disclaimers

DECLARATION OF ORIGINALITY

To the best of my knowledge, this thesis contains no copy or paraphrase of work published by another person, except where duly acknowledged in the text. This thesis contains no material which has been presented for a degree at the University of Utrecht or any other university.

Amersfoort, April 2, 2005.

(David B. Nieborg).

DISCLAIMER

The opinions and conclusions expressed in this dissertation are those of the author and do not necessarily represent the views of the U.S. Army and Utrecht University or any other (governmental) agency.