

**AMERICA'S  ARMY.**

# **THE ARMY GAME PROJECT**

Creating an Artefact of War

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Master's Thesis  
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<p><b>Abstract</b></p> <p>In recent years the U.S. Army has struggled in attracting high potential prospects into the service. These difficulties have forced the Army to widen its horizons when it comes to strategic communication and recruiting initiatives. In 2000 the MOVES institute, aligning its research directions according to 1997 National Research Institute report, started to develop a free Internet-deployed first-person shooter game, <i>America´s Army</i> (AA). The impetus behind the overall game project, the Army Game Project (AGP), was to convey awareness about the armed service and reshape the negative perceptions produced by other media sources. This rationale also introduced the concept of serious games into the official U.S. Army game.</p> <p>This thesis will analyse various elements and components of the game project from an interdisciplinary perspective. The AGP will be situated to a larger context of the military-entertainment complex, which refers to cooperation and common research agendas between military and private industry. The treatise will also deal with game-related websites and brand extensions. In addition the persuasive and educational functions of the game will be thoroughly analysed. Furthermore its themes and key messages will be compared to other Army advertisement campaigns, launched to boost recruitment. The verisimilitude of virtual warfare will be analysed through mission settings, character physics and predictability of simulated combat. In this connection the topical subject of media violence will be discussed. The treatise will also treat with explicit and implicit in-game communication from the perspective of level design, representation, political context and objectification.</p> <p>The present Master´s Thesis will provide multi-dimensional look on the development of an adverggame from a strategic communication tool into a technological platform, which acts as a basis for military and civilian computer applications.</p>	
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<b>Tiivistelmä</b> <p>Viime vuosina Yhdysvaltain armeijalla on ollut vaikeuksia värvätä korkean potentiaalin omaavia uusia sotilaita palvelukseensa. Nämä vaikeudet ovat pakottaneet armeijan laajentamaan näkökulmaansa strategisen viestinnän ja värväysohjelmiensa suhteen. Vuonna 2000 MOVES Instituutti aloitti kehittämään ilmaista verkossa jaettavaa FPS –peliä, <i>America´s Army (AA)</i>. Virike Army Game Project (AGP) -peliprojektin takana oli levittää positiivista tietoa asepalveluksesta, sekä muokata median luomia negatiivisia mielikuvia. Nämä pyrkimykset toivat myös ns. vakavien pelien konseptin osaksi Yhdysvaltain armeijan virallista peliä.</p> <p>Tutkielma analysoi AGP:n erilaisia osa-tekijöitä ja elementtejä tieteidenvälisestä perspektiivistä. Peliprojekti sijoitetaan ns. sotilaallis-viihteelliseen kompleksiin; termi viittaa asevoimien ja yksityisen sektorin yhteisiin tutkimusohjelmiin uusteknologian saralla. Tutkimuksessa tarkastellaan myös AA:n erilaisia verkkosivustoja sekä brändilajennuksia. Työssä perehdytään pelin moninasiin tehtäviin mainonnan, propagandan, sekä sotilaskoulutuksen näkökulmasta. Pelin teemoja ja avainviestejä verrataan Yhdysvaltain armeijan muihin mainoskampanjoihin, jotka on luotu tehostamaan värväystä. Virtuaalisen sodankäynnin näennäistodellisuutta tarkastellaan pelitehtävien lähtökohdista, pelihahmojen fyysisistä ominaisuuksista sekä simuloitujen taistelujen näkökulmasta. Työ ottaa myös kantaa ajankohtaiseen keskusteluun väkivaltaviihteestä. Lisäksi tutkimus analysoi AA:n eksplisiittistä ja implisiittistä viestintää. Aihetta käsitellään muun muassa kenttäsuunnittelun, poliittisen kontekstin sekä objektifikaation perspektiivistä.</p> <p>Tämä pro gradu -tutkielma on laaja-alainen katsaus mainospelin kehityksestä strategisen viestinnän välineestä teknologiseksi alustaksi, joka toimii pohjana niin sotilas- kuin siviilisovelluksillekin.</p>	
<b>Asiasanat</b> pelitutkimus, <i>America´s Army</i> , FPS -pelit, mainospelit, vakavat pelit, värväys	
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# 1. PREFACE TO WAR

The metaphor of Russian matryoshka doll can be used to describe archetypical game design. Games are constructed of several layers build upon each other, forming together the functional whole. In the centre of this onion-like architecture is the core layer that determines the fundamental rules of the basic gameplay i.e. game mechanics and the overall characteristics of the game. In the middle, the setting layer gives meaning to the actions performed by the player. Without this layer the actions would remain abstract. On the outermost layer is the narrative or story that gives context to the game and creates emotional participation between the player and the product. The number and functions of layers may vary, but the fundamental rule is that each layer is connected towards the core.

In the present Master's thesis, *The Army Game Project – Creating an Artefact of War* diverse elements and components of the official U.S. Army game video and computer game, *America's Army (AA)*, will be analysed through principles of the matryoshka model. The PC version of the game and the overall game development project, named as the Army Game Project (AGP), will be scrutinized through an interdisciplinary looking glass, by employing selected array of theories from various fields, such as game studies, cultural studies, military sociology, and marketing. The AGP has been a controversial source of discussion since its debut release, *America's Army: Recon*, in 2002. The previous research and debate on the subject has produced plenitude of data – in form of literature, documentaries, articles, and theses – to which the findings of this work will be reflected on. For additional points of reference I recommend the reader to familiarize with works of Zyda et al. (1997; 2003a; 2003b; 2004), Padilla and Laner (2001; 2002), Li (2003) and Nieborg (2005; 2006). Along with literature and articles the major bulk of data for this study consist of the game, online advertisements and assorted websites.

Aim of this case study is to continue and deepen the discourse encompassing the official U.S. Army game and examine digital games as mode and platform of one-to-many communication. Methods of the research have been qualitative content analysis and participant observation through long-term online play, which can be classified as

quantitative to a certain extent.<sup>1</sup> The thesis is targeted towards audience informed with the conventions of first-person shooter (FPS) genre, as the detailed analysis of the game characteristics, core mechanics, and their comparison to other popular contemporary shooters will require previous knowledge about the genre and the specific gaming culture surrounding it. Furthermore the reader should possess background information on the ongoing operations in the Global War on Terrorism (GWOT). The official marketing slogan of the game, “the most authentic military experience available”, requires the simulated combat missions, settings and level design choices to be reflected to Operation Iraqi Freedom and Operation Enduring Peace, the two major theatres of the GWOT. Because of the volley of military acronyms and jargon, apparent in the thesis, I have included a list of abbreviations (see Appendix D).

Objective of this treatise is threefold; this division naturally determines the overall structure of the work. The thesis will move from larger and wide-ranging whole (chapter 2 and 3) towards more detailed analysis (chapter 4 and 5). The first intention is to provide a general review on the development of the AGP. Chapter 2 will situate the game project into larger context of the military-industrial complex (MIC) by summarizing the history of military modeling and simulation (M&S) from early board games to contemporary interaction between defence and entertainment industry, ominously named as the military-entertainment complex (MEC). This section will also introduce the reader to the basic elements of the America’s Army Public Applications (AAPA) game version and its brand extensions; these themes will be minutely analysed in later parts of the thesis. Third chapter will analyse multidimensional functions of the Army game. These functions will be divided into two main categories: persuasive and educational. Second and third chapter will provide a look on an advergaming – a game based simulation that hosts argumentation about military service – that evolved from a strategic communication tool into a technological platform for cost-effective training, prototyping and visualization applications. The second objective is to investigate the verisimilitude of simulated warfare through critical reflection of game mechanics. Chapter 4 will treat with the dichotomy between realism and playability through concept of engaging realism. Furthermore the

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<sup>1</sup> I have played the game since the release of *America’s Army: Operations (Bridge SE)* v1.7 in April 2003. At the moment I have two registered game accounts. My primary account has 64 points of Honor and it has been tracked by ArmyOps Tracker for over 1600 days. My game time per day is 0.4 hours. I was a member of a Finnish gaming clan for 2 years and participated to competitive tournaments and matches. During the writing process of this thesis I intentionally retreated into the background and limited my gaming hours to assure adequate level of objectivity towards the game; during this time I mainly familiarized with innovations introduced in certain patches.

question of video game violence is handled in this chapter. The third objective is to identify various types of persuasive messages, ranging from the specific moral codes of the warrior culture to representation and objectification of the enemy. This array of explicit and implicit messages constitute a specific ideal and image of the U.S. Army and soldiering profession for the support of strategic communication and indirect recruiting. The metagame level, in form of assorted websites and brand extensions, has integral role in this analysis, as the messages have been scattered on different applications and manifest outside the actual game environment. From these messages we can determine the arguments behind the core media strategy of the official U.S. Army game. Finally the themes and intended messages of *America's Army* will be reflected on historical military recruiting trends.

## 2. THE ARMY GAME PROJECT

Aim of this chapter is to provide theoretical background to the present thesis by situating the official U.S. Army Game to the historical continuum of military modeling and simulation (M&S), ranging from earliest examples of reductionism to a phenomenon known as the military-entertainment complex (MEC). Following chapters will also handle with development of the Army Game Project (AGP), the rationale behind *America's Army*. Furthermore different elements of the game will be analysed, from game level to metagame level. Game level refers to overall game characteristics and gaming modes. The metagame level includes assorted websites and brand extensions, such as America's Army Real Heroes program and Virtual Army Experience (VAE), created to serve various strategic communication purposes.

### 2.1 From Koenigspiel to the Military-Entertainment Complex

The history of military modeling and simulation precedes the computer era. The earliest known examples of M&S are Sumerian and Egyptian clay figurines, dated 2500 BC. The figurine warriors were used to simulate manoeuvre and formations of armies (Little, 2006). The military wargames have been evolved from games played for entertainment. The Chinese strategic board game, Wei Hai ("encirclement"), emerged circa 3000 BC. The successor of the game, Go, has also a history of more than 4000 years; it was developed around 2000 BC. The Indian Chaturanga, regarded as the earliest form of chess, has been played since the 6<sup>th</sup> century. The game was first to introduce two essential game mechanics, familiar to later chess variations: different pieces had different attributes and victory condition depended on the faith of one piece. The Chaturanga featured a king and a general, infantry, war elephants, cavalry and chariots.

The era of modern wargaming begun in 1664 with *Koenigspiel* (the King's Game), developed by Christopher Weikmann. Wargaming, the informal term for military simulations, enables testing and refining military theories without actual combat. *The Department of Defense Dictionary of Military and Associated Terms* defines a wargame as "a simulation, by whatever means, of a military operation involving two or more opposing forces using rules, data, and procedures designed to depict an actual or assumed real life

situation.” (p. 575) Pioneer wargame designer, James F. Dunnigan (1992) characterized wargames as “an attempt to get a jump on the future by obtaining a better understanding of the past.”<sup>2</sup> He continues that “the object of any wargame (historical or otherwise) is to enable the player to recreate a specific event and, more importantly, to be able to explore what might have been if the player decides to do things differently.”<sup>3</sup> Although *Koenigspiel* was the first game to adopt the concept of reductionism – attempt to explain complex systems by dividing them into smaller constituents – *Kriegspiel* (Wargame), developed by Baron von Reisswitz in 1811, is considered as the first wargame used for military training and origin for the field of M&S (Little, 2006). In 1824, a Prussian army lieutenant Georg von Reisswitz, introduced his own version of his father’s work and published the first set of rules, *Anleitung zur Darstellung militärische manöver mit dem apparat des Kriegsspiels (Instructions for the Representation of Tactical Maneuvers under the Guise of a Wargame)*, including topographical maps and rigid rules to quantify the effects of combat (Gray, 2008). Field General Marshal von Moltke avidly promoted the use of wargaming, which led to a number of rule set variations. In 1876, German Colonel von Verdy du Vernois introduced his “free” version of the *Kriegspiel*. Von Reisswitz’s version was deemed as rigid *Kriegspiel*. Distinction to rigid and free versions can be considered as the first genre division within the field of wargaming.

After Germans success in the Franco-Prussian war (1870-71) other countries became interested of wargaming. U.S. Army Major W. R. Livermore and Lieutenant Charles Totten are regarded for bringing wargaming into the United States. In 1880, Totten published his book, *Strategos: A Series of American Games of War*, and patented his system in 1884. Totten’s version featured different levels of warfare: tactical, operational and strategic. The game included the first example of hierarchy in modeling (Little, 2006). Livermore introduced his version of the game, *The American Kriegspiel - A Game for Practicing the Art of War on a Topographical Map*, in 1882. The game introduced new attributes to wargaming, such as fatigue and logistics. By 1887 wargaming had become integral part of the U.S. Naval War College’s curriculum.

The First World War made semi-rigid wargames as a standard for military simulation. For instance Germans based their troop mobilization plans to wargamed scenarios and the

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<sup>2</sup> James F. Dunnigan: *The Complete Wargames Handbook* (1992). Chapter 1. – What is a Wargame? Available online: [http://www.hyw.com/Books/WargamesHandbook/1-what\\_i.htm](http://www.hyw.com/Books/WargamesHandbook/1-what_i.htm)

<sup>3</sup> *ibid.*

British developed equations to codify firepower relationships. The victorious powers of the WWI were quite abeyant in utilizing wargaming activities, whereas in Germany it was concerned as principal training aid, much because of the Treaty of Versailles prohibited the size of their army and therefore made large scale training exercises impossible (Grey, 2008) At the eve of WWII, Japan wargamed its campaigns on Chinese soil. The Empire was also responsible of creating the first Live Virtual simulator as it wargamed the attack to Pearl Harbor (Little, 2006). During the Second World War simulator units became general. The Link Trainers, which used pneumatic motion platforms, are the most known electro-mechanical flight simulators used during the WWII. The Link Trainer demonstrated the value of flight simulation. Based on the results gained from the Trainer, the Navy commissioned the Massachusetts Institute of Technology (MIT) to develop a computer, starting the progress which eventually led to the creation of graphics technology (Macedonia, 2001).

The beginning of the computer era revolutionized the concept of wargaming and military simulations. Commercial computers also marked the proliferation of M&S. The impetus for modernization was the Cold War (Little, 2006). Advanced Research Projects Agency (ARPA) was one institution born of this competition; it was established in 1958 in response to the Sputnik launch. In 1972 the organization was renamed as Defense Advanced Research Projects Agency (DARPA). The agency is responsible of developing new technologies and innovations for military use. “DARPA’s work is high-risk and high-payoff precisely because it bridges the gap between fundamental discoveries and their military use” (DARPA, 2007:4). As a technological engine it has also funded development of many technologies, such as precursor of graphical user interface (GUI) and computer networking. The agency launched the creation of ARPANET, the predecessor of Internet, in 1969. The first public demonstration of packet switching took place in 1972.

Based on the concept by Air Force Captain Jack Thorpe, DARPA initiated the SIMNET (Simulator Networking) program in 1983. Experiments with the system were conducted between 1987 and 1988, and it was fully operational in 1990. SIMNET was groundbreaking innovation concerning military simulation. Earlier simulators of the 1970s, which strived for high fidelity in terms of representation, were extremely expensive compared to contemporary military simulators. Cost of a high-end and stand-alone simulator of the 1970s was twice the price of the actual vehicle it aimed to simulate; a tank

simulator could cost \$18 million and an advanced pilot simulator as high as \$30-35 million (Lenoir & Lowood, 2003). The SIMNET project was the first step in developing cost-effective, networkable and realistic simulators to train collective warfighting skills. The most famous SIMNET scenario is the recreation of the Battle of 73 Easting.<sup>4</sup> The battle was fought on February 26, 1991, during the Gulf War, between the U.S. 2<sup>nd</sup> Armored Cavalry Regiment (ACR) and Iraqi 12<sup>th</sup> Armored Division and Tawakalna Republican Guard Division. The 2<sup>nd</sup> ACR was outnumbered, but better equipped, and during six hours of fighting in extreme conditions it lost only one M3 Bradley and one soldier. The Battle of 73 Easting has become the most accurately documented and recorded combat of history (Sterling, 1993). In over a 10-years time the Army and DARPA invested approximately \$300 million in the SIMNET technology (Cosby, 1999). In the mid 90s the Naval Postgraduate School's NPSNET project enabled DARPA's SIMNET and the follow-on protocol DIS (Distributed Interactive Simulation) simulations to be played on \$60,000 workstation (Zyda et al., 2004). With NPSNET the U.S. military took another important step towards cost-effective computer simulations; a NPSNET unit cost over four times less than a standard SIMNET unit (\$250,000/station). In addition the NPSNET project replaced graphic technology of 1980s with off-the-shelf graphic workstations.

The U.S. military has demonstrated interest in commercial off-the-shelf (COTS) games since the late 1970s, as James Dunningan's *MechWar '77* (1975) was introduced to the Army War College (Macedonia, 2001). From the perspective of military simulation the field of recreational board wargaming had already achieved adequate level of realism in the 1950s, as Charles S. Roberts, the founder of Avalon Hill, published *Tactics* in 1953. The game is credited as the first board game with actual military strategies and scenarios.<sup>5</sup> The sequel, *Tactics II*, was published in 1958. Experiments with computer game modifications started few decades later. Army experimented with a modification of *Battlezone* (Atari, Inc.), *The Bradley Trainer*, in the 1980s, demonstrating the potential of first-person shooters. In 1996 the FPS genre was introduced to the world of military training as the Marine Corps Modeling and Simulation Management Office (MCMSMO) adapted their modification of *Doom II* (id Software, 1994) using shareware editor tools. *The Marine DOOM* is considered as the first 3D game used for training purposes.

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<sup>4</sup> See: Sterling, 1993; Herz, 1997; Lenoir & Lowood, 2003.

<sup>5</sup> *Little Wars* (1913) by H.G. Wells offered similar rule set, but *Tactics* is considered more sophisticated (Dunnigan, 1992; Lenoir & Lowood, 2003). Roberts and Avalon Hill pioneered many modern wargame concepts, such as hexagonal grid, zones of control (ZOC) and combat results table (CRT).

Following year the USMC hired MÄK Technologies to develop *Marine Expeditionary Unit 2000*, the first game born out of cooperation between the commercial game industry and the DoD. Since those days the COTS games and their modifications have become standard issue training simulators. One of the most used courseware of virtual military simulators are *Operation Flashpoint: Cold War Crisis* (Bohemia Interactive Studio, 2001) derivatives, *VBS1*<sup>6</sup> (2002/2004) and *VBS2* (2007) training systems, utilized around the world. *VBS1* is extensively used throughout the U.S. military, whereas *VBS2* is currently used by the Marine Corps and the Army Special Forces at Fort Bragg. Another potential courseware based on the Real Virtuality game engine is *ArMA: Armed Assault* (2006/2007). The game engine provides high quality virtual battlefields, with large scale terrain areas. Games, based on the Real Virtual engine, represent the apex of realistic shooter games. Contemporary FPS games that are initially designed for entertainment-only purposes have also been used to modify training systems. For instance Saab AerotechTelub licensed the technology behind *Battlefield 2* (Digital Illusions CE, 2005) to develop simulators for the Swedish Defence.

The U.S military has been actively involved in game design, because the cooperation with entertainment industry, leading producer of innovative M&S technologies, offers many benefits. Building a network of trusted partnerships and functional relationships will definitely be an asset concerning the development of future military training simulations. For instance the USMC co-funded and provided their expertise to the creation of *Close Combat: First to Fight* (Destineer Studios, 2005), but did not officially endorse the game. The case of *Full Spectrum Warrior*<sup>7</sup> (Pandemic Studio, 2004) is an example that the aims of the entertainment and defence industries do not always meet. The Army and the Institute for Creative Technologies (ICT) funded the production of the third-person shooter with \$5 million. Although the game was praised by media outlets and awarded as “Best Original Game” and “Best Simulation Game” at the Electronic Entertainment Expo (E3) 2004, *Full Spectrum Warrior* did not meet the expectations set by the Army. The game could not be used for its initial training purpose<sup>8</sup>, because it did not simulate MOUT<sup>9</sup> combat to demanded accuracy (Adair, 2005). Using digital COTS games and their modifications as

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<sup>6</sup> VBS stands for Virtual Battlespace System.

<sup>7</sup> The project was originally titled as “C-Force”.

<sup>8</sup> Two versions of the game were developed: one for the Army and one for commercial use. Adair’s article speculates that the project benefited only the Army’s partners, Pandemic Studios and Sony Pictures Imageworks, because *Full Spectrum Warrior* was a commercial success.

<sup>9</sup> MOUT is an acronym of Military Operations in Urban Terrain.

military training simulators has meant similar shift as the transition from stand-alone simulators of the 1970s to the SIMNET technology. Through the COTS mods the military is able to leverage the game technology already in use for only a fraction of the cost it would take to develop such software from the ground up. DARPA and DARWARS sponsored website, The Department of Defense Game Developers' Community,<sup>10</sup> lists 26 different COTS games used by the U.S military service branches – the Army, the Navy, the Air Force and the Marine Corps – for training purposes.

The military-entertainment complex (MEC)<sup>11</sup> is the progeny of the military-industrial complex (MIC), born in the 1990s. The term MIC refers to conjunctive relationship between military establishment and private arms industry, including their political and commercial interests. The term became popular after President Eisenhower used it in his farewell speech<sup>12</sup> in 1961. DARPA VLSI (very large systems integration) and RISC (reduced instruction set computing) programs, which started in the late 1970s, were one of the most critical points that marked the beginning of the transition from the MIC to the MEC. The motif of the programs was to “revitalize and tap creativity in the academic community.” (Lenoir, 2000:301) After the Cold War the defence research funding was refocused, benefiting both the defence and entertainment industry. (Lenoir & Lowood, 2003). State and federal funded of university research and laboratories, including both hardware and software development, are manifestations of the new military-entertainment complex. Lenoir and Lowood (2003) label the MEC as the training ground for the post-human warfare.

The Institute for Creative Technologies (ICT) at the University of Southern California is a perfect contemporary example of the marriage of entertainment, academic and defence industries. ICT was established in 1999, in response to U.S. National Research Council (NRC) 1997 report, with a multi-year contract from the U.S. Army to act as an umbrella organization for creative talents of academic research, game industry, military and Hollywood, concerning the field of artificial intelligence (AI), computer graphics and immersion. The objective of the \$45-million research program was to revolutionize learning in the field of education and training through development of engaging and

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<sup>10</sup> The Department of Defence Game Developers' Community website: <http://www.dodgamecommunity.com/>

<sup>11</sup> In his article, War is Virtual Hell (1993) Bruce Sterling refers this phenomenon as the virtual military/industrial complex.

<sup>12</sup> “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.” – President Dwight D. Eisenhower, 1961.

immersive interactive media. ICT projects feature the fields of games and simulation, narrative and storytelling, graphics, virtual humans and learning sciences. The interactive programs are used in cognitive learning, therapy, and training cultural awareness, leadership, and negotiation skills. In 2004 the founding contract was prolonged with a five-year agreement.

The development and popularity of Internet has extended the cooperation between private sector, academia, and military into new directions. The Army Game Project (AGP), is an example of this new collaboration in the field of strategic communication. More initiatives are also set in motion. In 2008 the Defense Science Board's (DSB) Task Force for Strategic Communication recommended the creation of congressionally mandated, non-partisan and non-profit organization, Center for Global Engagement (CGE), to enhance government-private sector collaboration in support of strategic communication. The DSB report suggested that the Center should be modelled after Federal Funded Research and Development Centers (FFRDC), such as the RAND Corporation and the National Endowment for Democracy (NED). Its role would be a provider of information and analysis on issues vital to U.S. national security, including global public opinion, media trends and influences on audiences, and information technologies. The report also acknowledged the potential of the Internet and other products of digital technologies in transforming civil society, media, markets and warfare. According to the new paradigm of warfare, the media are decisive theatre of operations. "Virtual conflict and "perceptual damage" are as important as real conflict and real damage." (DSB, 2008:24) The Defense Science Board outlined six critical areas to which the CGE would perform functions. Aims and objectives of the AGP particularly tally with the fifth area of operations. DSB recommended working "with the commercial and academic sectors for the development of a range of products and programs that communicate strategic themes and messages to appropriate target audiences. [...] Examples of products would be a children's TV series; video and interactive games." (DSB, 2008:90)

## 2.2 Development of the Army Game Project (AGP)

In 1997, the NRC published a report, *Modeling and Simulation: Linking Entertainment & Defense* (Zyda & Sheehan, 1997), which identified games and interactive entertainment as the main technology drivers for networked virtual environments and immersive technologies. The paper outlined a joint research agenda for the entertainment and defence industry concerning modeling and simulation initiatives (Capps et. al, 2001). In the fall of 1999, the Army Game Project (AGP) originated from the negotiations between directors of the Modeling, Virtual Environments, and Simulation (MOVES) Institute and of the U.S. Army's Office of Economic and Manpower Assessment (OEMA). In May 2000, the Assistant Secretary of the Army for Manpower and Reserve Affairs (ASAMRA) and the Naval Postgraduate School (NPS) entered into a memorandum of agreement that the MOVES Institute would develop a state-of-art PC game under Army's supervision. The MOVES institute started to build a development team by hiring game industry experts from corporate giants like Sony and Electronic Arts. The MOVES faculty and graduate students from different service branches dealt with the technical issues surrounding the project. The Army provided practical support to the AGP, which was essential in creating the atmosphere of authenticity, such as subject matter expertise and access to equipment and training facilities (Zyda et al, 2003a). Originally, the MOVES Institute proposed development of two games, *America's Army: Operations* and *America's Army: Soldiers*. *Operations* was designed as a regular action oriented FPS game, whereas *Soldiers* intended to give more realistic and profound representation of the soldiering profession and its career possibilities. The game was supposed to mark the AGP's step into the world of role-playing games (RPG) with unique game characters and dynamic story engine (ibid.). In April 2003 *Soldiers* became vapourware as its development was cancelled. Official reason for this was never announced.

Development team, directed by Professor Michael Zyda, emphasized the cost-effectiveness of the AGP in various publications. *America's Army* cost \$7 million to develop, price tag of 420 recruits who drop out during the basic training period (Zyda et al., 2003b). In other words a game as a tool for strategic communication not only saves money in recruitment costs, but is worth \$92,000 per recruit that it attracts to enlist. Situated into the Army's annual recruitment budget of \$2.2 billion the development costs of the game were marginal,

about one-third of one percent (Davis et al., 2004). Although the Unreal Engines (UE), that power the Army game, are relatively cheap Zyda et al. (2004) pointed out that the Department of Defense needs to develop its own open-source game engine, instead of using commercial engines that require constant licensing. According to Zyda et al. (2004) license for UE game engine cost about \$300,000.<sup>13</sup> Technical support and maintenance is about 33% of the cost of the engine, in case of UE approximately \$100,000 per year. A game engine is usable for three years, before the next generation of the engine comes out. Furthermore development costs varied from \$2 to \$2.5 million per year and annual operational costs are \$1.5 million. Yearly costs from game engine vary from \$3.8 to \$4.4 million (Zyda et al., 2004).

First version of the AGP, titled *America's Army: Recon* (v1.0.0) was released at the Electronic Entertainment Expo (E3), in July 4, 2002. The game received favourable reviews and collected number of trophies. On July 5, 2002 the initial version of *America's Army: Operations*—series was released. Version 1.0.0b did not introduce new training simulations or game missions, but it made possible for individuals and third party companies to host servers and added the Official Server classification for Leased Official and U.S. Army Official game servers. Second phase of the AGP began as *America's Army: Special Forces (SFAS)* (v2.0.0) was introduced on November 6, 2003. In March 2004, Naval Postgraduate School received a memorandum from the Army citing allegations of mismanagement. Soon after OEMA took responsibility of the game development and the project was withdrawn from the MOVES Institute. The last version developed by the MOVES institute was *America's Army: Special Forces v2.0.0a* (Sandstorm). The development team defended itself and put the blame of the takeover on differences between MOVES and Army management (Zyda et al., 2004). In August 2005 DoD Office of Inspector General released a report, *Development and Management of the Army Game Project (D-2005-103)*, that confirmed the allegations with three specific findings. Finding A was the improper charges to project orders. The institute made 45 improper charges, worth nearly \$500,000, to the AGP and an Air Force Project.<sup>14</sup> For instance it did not charge customers with proper amount for services and overcharged the AGP for software licences to benefit other projects. Finding B related to capability to perform project orders.

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<sup>13</sup> According to Department of Defense Office of Inspector General report D-2005-103, the MOVES institute paid \$200,000 for the license for six projects, including the AGP. Later the license was upgraded for unlimited number of projects with extra \$100,000. The technical support cost additional \$100,000 (Office of Inspector General, 2005:5).

<sup>14</sup> In July 2003, the U.S. Air Force (USAF) provided \$470,000 to the MOVES institute to develop a convoy force protection simulator for training purposes (DoD Office of Inspector General, 2005:1).

NPS accepted the project order from the Army, although it did not have the capability to substantially perform the work ordered in-house, violating the DoD Financial Management Regulation (FMR). Finding C was the weakness in internal control, which resulted in appearance of nepotism and mismanaging of resources.

Coexistent with the AGP other programs were initiated to bolster the Army's recruitment efforts. From August 1999 to June 2000 management-consulting firm McKinsey & Company conducted a research, *War for Talent: Department of Defense and Private Sector Battle for Survival* (2000), as a part of the Secretary of Defense Corporate Fellowship Program. The SDCFP report outlined problems and convergent challenges of military and private sector concerning recruitment of talent. "It is essential for the Defense Department to identify appropriate talent pools to attract, recruit and retain the kind of men and women necessary to operate within the complexities of the modern battlefield, and the battlefield of the future, while at the same time engaging the most technologically advanced weapons and command and control systems mankind has ever known." (McKinsey & Co., 2004) Among other things the report recommended creation of a new public relations campaign to raise the awareness and educate the country about the U.S. military. In January 2001 the legendary "Be All You Can Be" recruitment slogan was replaced as the Army launched \$150 million advertisement campaign, "Army of One". The campaign, devised by Leo Burnett USA, featured a new logo – a white star with gold and black edging – a new web site, GoArmy.com and series of television commercials that were "intended to appeal to the individualism and independence of today's youth" (Dao, 2001). However the "Army of One" slogan was considerably short-lived compared to its predecessor; in 2006 the Army launched another multimedia advertisement campaign, "Army Strong", developed by McCann Worldgroup. The overall five-year contract with communications firm is valued at \$1 billion, with the first two years guaranteed at \$200 million annually (Burns, 2006).

### **2.3 America's Army – The Official U.S. Army Game**

The latest official version of the game, subtitled *AA:SF Overmatch* (v2.8.4) was released on October 9, 2008.<sup>15</sup> The patch included Every Soldier a Sensor (ES2), which helps situational awareness and information gathering during combat. V2.8.4.0 patch also added

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<sup>15</sup> On 6<sup>th</sup> December developers released Champlain Map Pack (v2.8.4), created in cooperation with the Champlain College students. The map pack featured two new maps, *District* and *Canyon*.

a new training scenario (ES2 MOUT McKenna), a new and multiplayer co-op map (ES2 Border), and fixed number of gameplay bugs. Currently the official U.S. Army game features 27<sup>16</sup> game releases including 17 training simulations<sup>17</sup> and 47 online game missions.<sup>18</sup> The third phase of the AGP commences with *America's Army v3.0*, originally rumoured for a September 2008 release. In 12<sup>th</sup> January the release of AA3 in 2009 was officially announced. Following the popularity of the PC version the brand has been introduced to multiple platforms. Ubisoft published the console versions, *AA: Rise of a Soldier* (2005) for the Xbox and *AA: True Soldiers* (2007) for the Xbox 360. The mobile phone version, *AA: Special Operations* (Gameloft) was released on February 2007. The game brand has also pushed its way into the arcade markets. In 2007, Global VR unveiled the “green label” coin-operated version of the game. A tour event, Virtual Army Experience (VAE), was launched in 2007. VAE is based on the *Overmatch* game version. The *America's Army* brand is also expanded beyond the game environment. The brand extensions vary from accessories, apparels and collectible toys. *AA Real Heroes* action figures, manufactured and distributed by Jazwares Inc and Radioactive Clown, are based on the four original soldiers of the Real Heroes program. The following chapter will exclusively concentrate of the PC version of the official U.S. Army game.

### 2.3.1 The Game

Definitions are elusive. In this thesis *America's Army* (AA) is defined as “squad- and objective-based light infantry online multiplayer first-person shooter”. The term of tactical is left out intentionally, although many definitions (c.f. Li, 2004; Nieborg, 2005) underscore the concept. One could argue that the concept of tactical shooters has become an outdated to a certain degree, since almost all of the contemporary FPS games fall into this category. Tactical level is a generic characteristic in both offline single and online multiplayer games; an axiom. In general, gaming as an activity is always a tactical one. Team-oriented gameplay demands individual players to cooperate; to use series of tactics to carry out the objectives set by strategy. Furthermore the usage of the concept insinuates that other gaming modes, such as the classical deathmatch, nowadays used only in few “bazooka tag” FPS games, like *Unreal Tournament 3* (Epic, 2008), would demand less

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<sup>16</sup> See: Appendix A: America's Army Version History.

<sup>17</sup> See: Appendix B: America's Army Training Simulations.

<sup>18</sup> See: Appendix C: America's Army Game Missions.

tactical skills. To generalize: in both modes, whether they prefer individual or team-based tactics, players learn and exploit mechanics and rules of the game world and use different types of tactical solutions accordingly. We can also attach certain subgenres of serious games, such as edutainment, simulation game, and advergaming, to the overall definition. These sub-genres will be analysed at length in later chapters of the present work.

*America's Army* follows the traditional first-person shooter paradigm: a player-controlled avatar navigates through three-dimensional game space, encountering and eliminating a varying number of enemies – controlled by other players or non-player characters (NPCs) – with different types of ranged weapons. Interactions between these elements and other contextualized game tokens are rendered from the visual viewpoint of first-person perspective. The Army game borrows and mixes different characteristics of the genre and offers its own version of them. The actual gameplay is based on a model, introduced in *Counter-Strike* (Valve, 2000). Teams have opposite objectives, one side attacks as the other defends.<sup>19</sup> Game rounds are relatively short, ranging from 5 to 10 minutes. Each player has only one spawn per round and power-ups to restore health are not available; when injured medics can only reduce bleeding. Victory condition mechanics in the game are twofold: completing mission objectives or eliminating the enemy forces will produce a winning game state. If the limit runs out, the game ends in a stalemate. Unique swapping paradigm limits the subjectivity of the players. Because of the paradigm players explore the game world from the exclusive perspective of a U.S. soldier; only playable non-American character class is the Indigenous Forces (IF). This feature distinguishes the Army game from other contemporary first-person shooters.

Imitating the Army hierarchy and chain of command the players form a squad of 9-13 soldiers, led by staff sergeant as a Squad leader. Each squad is divided to 1-4 fire teams, led by sergeants. Players are able to choose from nine different military occupation specialties (MOS): Special Forces Weapons Sergeant (18B), Infantryman (11B), Health Care Specialist (68W), and Indigenous Forces (IF). The 11B MOS has multiple roles: squad leader, fire team leader, rifleman, automatic rifleman, grenadier, and advanced marksman. Availability of different MOS depends on each mission and completed training missions. The interface to the three-dimensional game space, the Heads-Up Display (HUD) follows traditions of the FPS genre. Elements displayed in the HUD are: 1) Chat

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<sup>19</sup> In certain Special Forces missions, such as *SF Extraction*, *SF Dockside*, and *SF PCR*, both teams have the same objectives.

icon; 2) Messages; 3) Situation Awareness Indicator (SAI); 4) Objectives; 5) Rank/Time/Location; 6) Inventory; 7) Combat Effectiveness Meter (CEM); 8) Stance and health indicator; 9) Grenade inventory; 10) Weapon status inventory; and 11) Crosshair.



Fig. 1: Elements displayed in the HUD.

The official U.S. Army game has also introduced certain innovations to the genre and FPS gameplay. The most visible innovations are Combat Effectiveness Meter (CEM), Honor System, and the Rules of Engagement (ROE). The game also introduces a new gaming mode, MILES<sup>20</sup>, but it can be consider more of an updated version of “non-fatal” game modes, familiar from other FPS games.<sup>21</sup> The CEM is one of the most successful attempts to simulate emotional and physical state of a game avatar. CEM level (zero-low, moderate and high) has an effect on player’s fire control ability and movement capabilities. The meter also simulates the effect of enemy fire on game character’s performance. Honor System is one of the first cumulative rewarding systems of FPS genre that was directly embedded into the game design itself.

<sup>20</sup> MILES stands for Multiple Integrated Laser Engagement System.

<sup>21</sup>For instance SWAT 3: Close Quarters Battle (Sierra Northwest, 1999) featured paintball game mode.

In an article, *The Game Impact Theory* (2006) Chief Technology Officer Roger Smith of the U.S. Army PEO STRI<sup>22</sup> emphasised the importance of a persistent game world. He stated that “An alternate society that is not mundane and in which a player can create a persistent identity is a powerful attractor for long-term players and long-term customers” (Smith, 2006:9). Since *America’s Army* does not employ role-playing game elements that would allow the evolution of characters and game world, the Army has solved the need of persistence and continuity with a rewarding system. Honor reflects both time spent (experience) with the game and actual ability (skill) of a player. Honor is directly related to the points scored; players score points by winning rounds, completing objectives, demonstrating good leadership (squad leaders and sergeants), killing the enemy, and giving first aid (medics). The Honor System point scale is as follows:

- 01-10 Honor : 500 points to next level
- 11-20 Honor : 1,000 points to next level
- 21-30 Honor : 2,500 points to next level
- 31-40 Honor : 4,000 points to next level
- 41-50 Honor : 6,000 points to next level
- 51-60 Honor : 9,000 points to next level
- 61-70 Honor : 13,000 points to next level
- 71-80 Honor : 23,000 points to next level
- 81-90 Honor : 43,000 points to next level
- 91-99 Honor : 83,000 points to next level

The Rules of Engagement is a set of rules based on the U.S. Army code of conduct. Violating ROE by detrimental actions such as injuring or killing a civilian or fellow team members will cause a penalty deducted from player’s score. If the ROE limit of a server is exceeded the player will be removed from the server and sent to virtual cell in Fort Leavenworth military prison. *America’s Army* is marketed as "the only game to embed social responsibility into its development by enforcing the laws of land warfare and socially appropriate behaviors" (Chambers, 2002). Where other first-person shooters have mainly community-enforced rules for accepted social conduct, the ROE were implemented into the game design itself to control conduct on online servers.

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<sup>22</sup> PEO STRI: Program Executive Office for Simulation, Training and Instrumentation.

Like most of the contemporary first-person shooter games, *America's Army* employs two game modes: single- and multiplayer. Single-player mode refers to the training simulations. The game provides six successive training tours: Basic Combat Training (BCT), Advanced Marksmanship (Adv. Mkshp), Medic Training (Medic), Advanced Individual Training (AIT), Airborne School (Airborne) and Special Forces Training (SFAS). Players' introduction to the game world can also be considered as didactic one. The approach of training missions act as a watershed for many players to invest more time to the official U.S. Army game. Enthusiasm of casual users may fade as they are bombarded and overburdened with instructive, factual, and/or otherwise "educational" information, sometimes to the detriment of a player's enjoyment. The combat medic classroom training including three simulated lectures with exams, airway management, control bleeding, and shock treatment are good examples of this. Although they do teach players certain life saving skills, they do not have any function in the gameplay.



Fig. 2: Weapons Familiarization is part of the BCT.

Completion of the BCT is the minimum requirement to play the online multiplayer missions with a registered game account.<sup>23</sup> Completing training simulations will unlock other simulations. BCT is prerequisite for airborne, field medic, advanced marksmanship, and advanced individual training. Airborne school is prerequisite for SF training. All of the training simulations must be completed to play every MOS and game mission available. For instance players are required to pass the SFAS and have at least 15 points of Honor in order to play the SF missions as an American green beret instead of an IF soldier. Combat medic training must be completed, before players are able to select the MOS or treat themselves with a field dressing when injured. Snipers are required to pass the advanced marksmanship training.

Training missions play central part in initiating and internalizing players to the game world. Although they may seem toilsome to a certain extent, they are extremely useful for beginners. Simulations teach the basics of gameplay from movement to weapon handling, significantly reducing the time it would take to learn and master these skills in online environment, where a round might end in matter of seconds. One can also argue that training missions start the indoctrination process of potential recruits, as they offer a virtual demonstration on how the U.S. Army soldiers train in reality.

*America's Army* currently offers 46 multiplayer game missions, which cover wide array of topographical environments from desert missions to wetlands and urban combat to wooden areas. Missions are divided into five different tour categories: Infantry, 75<sup>th</sup> Ranger, 82<sup>nd</sup> Airborne, Special Forces, and User Created. There are three mission types available: MILES training, Live Fire and Live Fire (Cooperative).

### 2.3.2 The Web

The AA related websites are part of the metagame level. I will shortly introduce few assorted websites, both official and unofficial. These websites are: GoArmy.com (recruitment), America's Army Special Forces homepage (gaming), America's Army Mission Depot (modifications) and America's Army Tracker (statistics). The number of

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<sup>23</sup> Explore The Army (ETA) game servers, released in v2.7.0, allows unregistered players to test the game, but they are not able to accrue experience or Honor points. Version 2.8.3 introduced Instant Action mode, which allows players to play missions, except Special Forces, without completed BCT. In this game mode players are able to accumulate experience points and Honor points up to 20.

AA community sites is simply too vast to be treated in this chapter; over 1000 fan, clan and tournament websites have been submitted to the database on AA:SF homepage.

### GoArmy.com

GoArmy.com<sup>24</sup> is the official recruitment website of the U.S. Army, established during the “Army of One” campaign in 2001. The website was updated in 2004 and 2006, when the sixth generation Army advertisement campaign, “Army Strong” began. GoArmy.com is a complete multimedia recruiting centre, including extensive library of dramatized videos narrating the challenges of soldiering profession, and delivering information ranging from benefits to different military occupational specialties (MOS) and life in and after the service. Visitors are welcomed with a video that follows the rhetoric set in the “Army Strong” campaign.

“Welcome to GoArmy.com. You have taken the first step to becoming stronger than you ever imagined you could be. Here you discover adventure. The chance to give back something to your country and the kind of training that truly prepares you for the future. Now hear what it is like to be a soldier from real soldiers and explore over 150 careers. There are strong and then there are Army strong.”

The opening video of Army Strong TV suggests that GoArmy.com is not just a form one-to-many communication, but the information is delivered to individuals by other individuals, real U.S. Army soldiers, instead of the faceless institution. GoArmy.com also employs one of the most natural methods of communication and interaction for the “wired generation”; a chat room, where potential recruits can directly communicate with a recruiter and ask questions about the service. The concept of cyber-recruitment has originated from popularity of the chat room and functionality of web environment. The site also aims to reach potential recruits through their influencers and social marketers i.e. parents. For Parents –tab feature slogan “You made them strong. We'll make them Army strong.” the slogan is used throughout “Army Strong” campaign. There is also a downloadable discussion tool kit available,<sup>25</sup> which gives advices to parents how to discuss about the Army career with their children. The strategy to outreach the target influencers

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<sup>24</sup> The official U.S. Army recruiting website, GoArmy.com: <http://www.goarmy.com>

<sup>25</sup> A discussion toolkit for parents: [http://www.goarmy.com/assets/downloads/discussion\\_toolkit.pdf](http://www.goarmy.com/assets/downloads/discussion_toolkit.pdf)

during the time of war is as important as directly reaching teens and young adults who consider career in the armed service, because of their input on key decisions is valued.

### America's Army: Special Forces Homepage

The AA:SF homepage<sup>26</sup> has two major functions: to act as a database and information source for players and direct visitors to GoArmy.com. In 2002 28% of GoArmy.com hits came from AA homepage (Gegax, 2002). The site is constructed of eight different tabs: Game Intel, Real Heroes, Downloads, Community, Support, Media, About, and U.S. Army. Especially the Game Intel and U.S. Army tabs have been saturated with links to the official recruiting site, usually providing more information on the subject in question. These tabs mostly deliver information about the AGP and the game, but the U.S. Army tab is an exception. The tab contains information on different Army careers, such as U.S. Army Medical Department (AMEDD) and National Guard Special Forces Group (NGSF). The tag also includes video testimonials from soldiers about their life in the Army. The AA:SF home page is also a base for recruiting programs and videos, such as the Real Heroes program. Furthermore it distributes detailed background information that is not necessarily present in the game environment itself, such as situation descriptions of game missions. In other words the site has central role in contextualizing and creating the game's background story.

### America's Army Mission Depot

AA Mission Depot (AAMD) website<sup>27</sup>, powered by Army's software partner Pragmatic Solutions, is a database for user-created AA maps. AA Map Editor (AAME) mapping application was introduced in v2.8.0 (*Coalition*). The website is marketed with a slogan "Next Mission Could Be Yours". There are both developer- and player-created tutorials available on the game manual website (GMW).<sup>28</sup> To a certain degree user-created missions seem to empower the AA community, but on the other hand it is only a looming. Creative power of the users is harnessed to maintain and reinforce the given viewpoints, not to model the game world according to their own perception or produce multiple interpretations. The developers are extremely careful when it comes to emergence; the

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<sup>26</sup> America's Army: Special Forces home page: <http://www.americasarmy.com>

<sup>27</sup> America's Army Mission Depot: <http://www.aamissiondepot.com>

<sup>28</sup> AAMD tutorials at the GMW: [http://manual.americasarmy.com/index.php/America%27s\\_Army\\_Mission\\_Editor](http://manual.americasarmy.com/index.php/America%27s_Army_Mission_Editor)

brand is strictly controlled and protected from controversial and disputed expression and representations. “All files submitted to the AA Mission Depot are subject to a short review process to ensure content submitted does not have any objectionable content, and that uploads also adhere to core values of the US Army and does not disparage the US Army or represent it poorly in any manner.”<sup>29</sup> Therefore the user-created missions do not transform AA into a bottom-up structured game; the empowerment is only seeming as the top-down relationship of power concerning the game content remains. The use of user-created material is inhibited in AAMD rules; mapmakers can only make use of AAME’s default asset library. Since *America’s Army* is an advergaming this operations model is unquestionably the only reasonable practice from the perspective of brand management. Without these limitations the Army would willingly expose itself to different type of criticism that could lead to negative consequences concerning the brand and its value. Currently AAMD features over 340 user created scenarios, of which 108 are approved maps. Approved status has three levels: Not Mission Capable, Mission Capable, and Fully Mission Capable. Maps with Fully Mission Capable status are playable on both official and leased official Honor servers.

### America’s Army Tracker

AA Tracker<sup>30</sup>, also known as ArmyOps Tracker, is a third party application – created in 2002 by German computer engineer known in the game community as [GA] Homey – that tracks game sessions by scanning the AA game servers every ~30 seconds. Tracker is perhaps the most popular game-related service and website among AA players with over 550,000 registered members. Total number of active tracked players is over 400,000 and total number of clans is over 9400 (with approximately 85,000 players).<sup>31</sup> Currently the User- and Clan-Toplists directories list over 36,000 players that have played the game in last two months for more than 50 hours and over 2200 registered clans. During its peak the User-Toplist featured over 50,000 players. One can argue that statistics is the fundamental reason of playing for many gamers, because of its competitive and social elements. The gathered statistics include for instance total time played, longest session, clan membership, fragrate (calculated from kills and deaths), Honor and score points, and map stats. Statistics are collected into a community website with forums and image galleries. Forum at

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<sup>29</sup> AAMD FAQ: <http://www.aamissiondepot.com/faq>

<sup>30</sup> America’s Army Tracker: <http://aaotracker.com>

<sup>31</sup> See ArmyOps Trackers statistics: <http://aaotracker.com/trackerstats.php>

ArmyOps Tracker website differs from the forum in AA:SF home page when it comes to discussion topics. Tracker forum is more freeform and uninhibited covering miscellaneous topics, creating controversy and polemic. Criticism towards the game and developers is quite usual. Discussion on AA:SF forum is more game related and formal.<sup>32</sup> Since the application is not endorsed by the Army players need to create and register a separate account to get tracked. ArmyOps Tracker has remained extremely popular among the AA gaming community, although the official player statistics system was released in v2.7.0 (*Overmatch*).

### 2.3.3 The Brand Extensions

The brand extensions, another example of the metagame level, are extremely important in disseminating explicit and implicit messages to the player community. The extensions are used as external factors to transcend the brand beyond the supposed environment set by the game. This chapter will handle three metagame level extensions concerning recruitment purposes; America's Army Real Heroes, Virtual Army Experience, and the Army Experience Center.

#### America's Army: Real Heroes

AA Real Heroes program is Army's attempt to give a face to people who serve in the military. Certain nostalgic longing or aura surrounds the program. It aims to reinstate the social status that soldiers and war heroes used to have by making them part of the popular culture. In an article, which puffed the release of AA:SF (*Overmatch*), Col. Wardynski reflected the contemporary relationship between the military and the American youth. "They can name their favorite football player, baseball player, but they can't name the guys on the front lines defending them. [...] The idea is to put that real face on the soldier." (Brinkley, 2006) In another article (Snider, 2006) Wardynski continued his contemplations on the subject: "Pop culture is where people form their life course choices. If you are not in that setting, then you are not really relevant."

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<sup>32</sup> There are of course exceptions. When v2.8.4.1 was released, the new America's Army Deploy Client software distribution system, developed by Practical Solutions, caused an avalanche of intense criticism towards the company and developers. The first AADC version was extremely bugged and downloading the new version was virtually impossible. These types of outbursts are quite rare on AA:SF forum.

Currently, the Real Heroes program features nine awarded U.S. Army soldiers who have fought in Afghanistan and Iraq: SFC John Adams, Maj. Jason Amerine, SGT Monica Brown, SFC Robert Groff, SGT Jason Mike, SSG Timothy Nein, SGT Tommy Rieman, 2Lt. Gerald Wolford, and SSG Matthew Zedwick. AA:SF home page defines Real Heroes as “people of distinguished courage or ability, admired for their brave deeds and noble qualities. The *America’s Army Real Heroes* program puts a face on some of the exceptional Soldiers who are at the forefront in the defense of freedom.”<sup>33</sup> The online Real Heroes profiles include stories, biographies, service related material, such as skill badges, personal and unit awards, photo albums, and videos. In addition SFC Adams, SGT Mike and SGT Rieman write personal blogs that mainly treat with Army’s promotional and recruiting events. A member of Real Heroes has been acknowledged outside the game environment; actions of SGT Rieman, of which he was awarded with Silver Star in 2004, were mentioned in January’s State of the Union Address 2007 by President Bush. In December 2008, SGT Rieman visited on Deal or no Deal –game show.

Developers use certain hooks to guarantee maximum number of spectators for the Real Heroes videos. Players are encouraged and persuaded to watch the videos, found from game’s Virtual Recruiting Station, with the promise of experience points bonuses for each video. For more experienced players, who need to score 20,000-80,000 points to gain an Honor level, this opportunity is too good to be passed. Although the citations and awards of the Real Heroes are constantly underlined, the developers strive to portray them as all-American soldiers, representatives of the people of United States and its ideals; as someone that the potential recruits can identify with. The videos repeatedly convey the same message: the Army is made out of people; it is not just a name of a faceless institution. In a Navy Times interview one of the original Real Heroes; 2Lt. Wolford stated that, “our part is to get the story out of our soldiers and the people we served with, to push the message that we are normal people.” (Snider, 2006) Interestingly SSG Matthew Zedwick’s story is the only specific reference in the AGP that directly points out the ultimate sacrifice of war, to the fact that soldiers die in the line of action. Otherwise the whole subject is avoided and unmentioned in game related recruitment material. The over 4100 casualties sustained by the U.S. military during the Operation Iraqi Freedom are totally absent. The absence of these service personnel, who have died for their country, unintentionally creates a feeling that only the living heroes are real heroes.

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<sup>33</sup> America’s Army Real Heroes: <http://www.americasarmy.com/realheroes/>



Fig. 3: Real Heroes advertisement banners.

The four original Real Heroes, Maj. Amerine, SGT Rieman, 2Lt. Wolford, and SSG Zedwick appear as game characters in the Virtual Recruiting Station and in-game instructors in certain training missions. The program is a conscious attempt to blur the border between the real world and game world. In his canonized work, *Homo Ludens*, Johan Huizinga described gaming as an experience relating to escapism; something that is separated from daily routine and reality. It is an activity that takes place outside the boundaries of the common world, within a magic circle. Salen and Zimmerman (2004) revised the term as a new reality "created, defined by the rules of the game and inhabited by its players." In *America's Army* extending the magic circle to reality is in accordance with the rhetoric of "the most authentic military experience available." It conveys a message of a game which is so authentic that even its characters are real. The program allows a contact to be made between a game character and player demography and that contact can be expanded to real life if players visit an event were a Real Hero character makes an appearance. In other words a contact or mental image that originates from virtual environment can be harnessed for recruiting purposes.

The Real Heroes also visit in schools, sport events, exhibitions, and other promotional occasions, such as the Virtual Army Experience. In terms of recruitment the public gaming events are extremely important opportunities for the Army to encounter possible recruits. For instance SFC Robert Groff, who also works as a recruiter, made an appearance in the 2008 Chicago Summer Lan event to discuss with the AA gamers who had gathered to compete in a cash prize tournament. Real Heroes are also a theme for a series of action figures, developed by Jazwares Inc. and Radioactive Clown.<sup>34</sup> The collectible figures, based on the original heroes, allow the Army to extend the awareness of the brand to

<sup>34</sup> *Real Heroes* is the second series of official U.S. Army action figures. The first series was based on Special Forces.

younger members of the target demography, Generation Y, the cohort of people born after the mid 70s. At the U.S. ToyFair 2005, deputy director for the AGP, Maj. (R) Christopher Chambers stated that “*America’s Army* action figures offer a unique venue for the Army to connect with people of all ages. [...] These action figures are a very tangible means of connection, especially when coupled with a variety of intriguing information. We will offer insights concerning Soldiers and Soldiering in today’s Army along with the action figures, as well as in our game, and on our website.”<sup>35</sup> Marketing of the figures follows the same rhetoric that echoes throughout the Army Game Project; manufacturers have closely cooperated with the Army to ensure authenticity and accuracy of the figures and their equipment.

### Virtual Army Experience (VAE)

The Virtual Army Experience (VAE) is an awarded mobile public relations event, marketed as the virtual test drive of the U.S. Army.<sup>36</sup> “The VAE highlights key Soldier occupations, Army technologies, operating environments and missions, within a fast-paced, action packed, information-rich experience that immerses visitors in the world of Soldiering. Participants employ teamwork, rules of engagement, leadership and high-tech equipment as they take part in a virtual U.S. Army mission.”<sup>37</sup> Alongside with the Real Heroes program the VAE is one of the most essential recruitment endeavours of the AGP. The main attraction of the 19,500-square-foot exhibition is naturally the simulator, constructed of multiple video screens and six mock-up HMMWVs, utilized with M4 assault rifles and M249 Squad Automatic Weapons (SAW), and other weapon systems, such as CROWS<sup>38</sup> and ITAS.<sup>39</sup> A mock-up of UH-60 Black Hawk helicopter provides air cover for the ground task force. Up to 50 participants can partake to the 20-minute experience, assigned to eight fireteams. The software behind the life-size simulator is based on *AA:SF (Overmatch)*. The VAE was launched at Daytona 500 in 2007.

The history of the Virtual Army Experience includes two playable scenarios. According to a promotional video at the VAE website the scenarios are based on actual Army missions.

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<sup>35</sup> Source: ActionFigures.com: <http://www.action-figure.com/index.php?name=News&file=article&sid=14086>

<sup>36</sup> In 2007 Event Design Magazine awarded the VAE with Bronze Medal for Best Outdoor Consumer Environment. In 2008 the VAE was nominated as Largest Traveling Game Simulator by Guinness World Records.

<sup>37</sup> The Virtual Army Experience Fact Sheet: [http://vae.americasarmy.com/pdf/vae\\_factsheet.pdf](http://vae.americasarmy.com/pdf/vae_factsheet.pdf)

<sup>38</sup> CROWS is a acronym for Common Remotely Operated Weapon System.

<sup>39</sup> ITAS stands for Improved Target Acquisition System.

The initial scenario simulated coordinated air and ground assault and extraction of a High Value Target (HVT), a key al-Qaeda lieutenant who is mastermind behind embassy and civilian bombings in several countries. A video<sup>40</sup> of VAE event, shot at the Langley Air Show 2007, reveals that the scenario is far from the unforgiving nature of AA; it is like the god mode version of the game, suitable for people who have not necessarily familiarized themselves with FPS games. The HMMWVs seem to take hits from enemy RPGs and improvised explosive devices, but they do not hinder them in any form. The current scenario is situated to a fictional country of Nradreg. References to al-Qaeda as the adversary have been replaced from the scenario description with anonymous and ambiguous genocidal enemy faction that threatens a group of humanitarian aid workers.<sup>41</sup>

The VAE consist of different elements and activities, not just of the game session on the simulator. There are possibilities to play different multiplayer versions of AA, ranging from the PC version to consoles. Briefings and debriefings of the simulator sessions are hosted by soldiers familiar from the Real Heroes program, who hand an action figure to the highest scoring participant. Everybody receives a copy of the official U.S. Army game. In selected locations the participants have an opportunity to operate Packbot Robot through an agility course. Naturally there are recruiters present in the event to interact with the visitors.



Fig. 4: In-game screenshot of virtual replica of the VAE simulator in the VRS.

<sup>40</sup> Video available online: <http://www.youtube.com/watch?v=8rAEtv7UtX0>

<sup>41</sup> See: The scenario description from the VAE fact sheet.

The VAE has also been introduced into game environment. Game version 2.8.2 (*Overmatch*) featured a Virtual Recruiting Station (VRS). This game mode has been solely designed for recruitment purposes. The show rooms are filled with different types of recruiting material, ranging from posters with Soldier's Creed quotes and advertisement videos. "Real Missions. Real Soldiers. Real Heroes" and "Are You Army Strong?" posters underline the authenticity of the experience. In this virtual space the *Real Heroes* characters are introduced to the players. In addition the VRS includes a virtual replica of the VAE simulator, demonstrating developers' fascination to simulate simulators as it was the case with MILES training system. However players are not able to test the simulators; instead they are occupied with virtual characters who shout aloud their excitement. Comments, such as "this is awesome", "great shot man" and "dude we have to play this again" fill the darkened room, underlining the immersive and engaging aspects of the real VAE. The VRS encourages players to visit the actual VAE events i.e. deepen the relationship between them and the Army.

#### Army Experience Center (AEC)

In August 2008, the Army opened Army Experience Center (AEC) in Philadelphia. The facility is the centrepiece of Army Experience Pilot Program, created to evaluate experimental marketing strategies. The 14,500-square-foot AEC features a number of simulators and interactive educational tools informing about the Army careers. Activities include Apache, Black Hawk and HMMWV simulators, career navigator, global base locator, and lounge area where visitors meet Army personnel and watch service-related videos. In Tactical Operations Center (TOC) visitors can participate on a squad-based simulation and operate different types of unmanned vehicles and missile systems. There is also a gaming area in the premise that features multiple military video and computer games. Furthermore the AEC hosts different types of events.

### 3. FUNCTIONS OF THE AGP

*America's Army* is a serious game. It has been designed and published with other motives in mind than entertainment or profit making. Because of these goals, rather than autotelic objectives, it is an allopoietic game; instead of being an end in itself the game has external objectives. The game has been released to brand, educate and persuade, although the aspect of entertainment plays an essential part in making the game appealing for the gamer community; matter which ultimately decides the success of the Army Game Project. In addition the game has evolved into a technological platform for governmental training applications, further corroborating the argument. The director of USC GamePipe Laboratory and the former development director of the AGP, Michael Zyda defined serious games as:

“A mental contest, played with a computer in accordance with specific rules that uses entertainment to further government or corporate training, education, health, public policy, and strategic communication objectives (2005: 26).”

The Wiki network of Nordic Serious Games (Nsg) project defines the concept in a very similar manner:

“Games and game-like interactive systems intended for a purpose, not only entertainment. They can be entertaining, but usually they teach the user something. [...] As part of interactive media industry, the serious games field focuses on designing and using digital games for real-life purposes such as education, health care, safety, public policy, and business development.”<sup>42</sup>

The concept of seriousness in game design is used to create an opposition to triviality and frivolity (Bogost, 2007), rhetoric frequently associated with games. The official U.S. Army game uses the term to compensate for the lack of ultra-realistic game simulation and unparalleled gameplay in order to maintain the argument of “the most authentic military simulation available”. Labelling the game as serious and educational also helps the Army to outmanoeuvre and evade a certain degree of criticism that unavoidably surfaced after they chose to use the medium of digital games for recruiting purposes. Analyses and research on entertainment-only games usually concentrate on possible negative effects, whereas

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<sup>42</sup> Nordic Serious Games (Nsg) project: <http://nsg.jyu.fi/>

edutainment is usually analysed from more positive perspective. *America's Army* is multidimensional computer game, which incorporates various subsets of serious games. It is a synthesis of simulation games, advergames, persuasive games and edutainment. Training simulations, realistic weapon animations and simulations of simulations, such as MILES training scenarios, which aim to mimic the aspects of reality as faithfully as possible, are elements of simulation games genre. Branding and other strategic communication purposes, intended to raise the awareness of American youth about the Army and soldiering profession, are definitely objectives of an advergame. Idealization of military culture through specific moral rhetoric, such as the seven Army core values and Warrior Ethos, are traits of persuasive games. Multi-dimensional nature of the game requires it to be analysed and conceptualized from multiple perspectives. In this chapter I will treat with the persuasive and educational functions of the AGP and *America's Army* by employing four overlapping and interrelating game dimensions, the advergame, propagame, edugame and test bed dimensions, originally coined by David B. Nieborg (2005).

### **3.1 The Persuasive Function**

The advergame and propagame dimensions form the basis for the persuasive function. These two dimensions use combination of similar communication strategies of advertising, rhetoric and propaganda. The persuasive function relates to AA's raison d'être: strategic communication in support of recruiting. Strategic communication differs from ordinary public relations and affairs campaigns. As such, strategic communication refers to "long-term strategic", whereas public relation is more "short-term tactical" (Defense Science Board, 2008). The seven year mandate of the AGP demonstrates that the project is long-term strategic campaign. The indirect recruiting (through strategic communication) has been game's principal motive since its conceptual starting point; a fact acknowledged by representatives of media and the target demography, Generation Y, although majority of players observe *America's Army* firstly as a game for entertainment and only secondly as a recruiting tool. The AGP can be considered as a supportive public relations campaign, which reinforces and maintains the brand image created in other advertisement campaigns, "Army of One" and "Army Strong". One of its primary functions is to generate traffic to the official recruiting site, GoArmy.com. This is carried out by creating and disseminating

positive awareness and perception of the Army. Developers state that “the game is designed to substitute virtual for vicarious experiences. It does this in an engaging format that takes advantage of young adults’ broad use of the Internet for research and communication and their interest in games for entertainment and exploration.”<sup>43</sup> These aspirations can be analysed through rhetoric of play as progress.<sup>44</sup> Developers emphasize the adaptation and socialization of individuals through act of gaming, which is used to develop a relationship between players and the Army or reshape possible negative perceptions towards the armed service. Public relations initiative of the U.S. Army is not aimed only towards the domestic audience. The Army encourages gamers all over the world to enjoy their largesse; “we want the whole world to know how great the U.S. Army is.”<sup>45</sup> However the end-user licence agreement (EULA) of the game imposes certain limitations to the distribution. The software or the underlying information cannot be downloaded, used or exported or re-exported by a national or resident of a country which the United States has embargoed goods. Countries specified in EULA are Cuba, Libya, North Korea, Iran, Syria, and Sudan. However monitoring distribution of a free web-deployed game can be quite difficult.

### *3.1.1 America’s Army: Advergame*

Dissatisfaction with the value delivered by traditional media has forced advertisers to seek alternative communication channels (Vedrashko, 2006). Digital games represent one of these new channels of marketing communication. At the moment in-game advertising or advergaming is still at the rims of marketing budgets, but its share is steadily rising; alongside with mobile advertising, video game advertising is one of the fastest growing media segments with estimated growth of 100% in 2008. In fiscal 2008 videogame advertising has market share of 0.7% with \$1.142 billion, surpassing the total share and budget of cinema advertising. In fiscal 2009 the total budget is estimated to grow to \$1.828 billion (Myers, 2007). Although the medium of digital games is an innovative solution for

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<sup>43</sup> AA:SF homepage: Frequently Asked Questions (FAQ): <http://www.americasarmy.com/support/faqs.php?t=9>

<sup>44</sup> In his book, *The Ambiguity of Play* (1997), Sutton-Smith defines seven rhetoric of play: 1) progress; 2) fate; 3) power; 4) identity; 5) imaginary; 6) self; and 7) frivolous. Sutton-Smith applies these rhetorical categories to traditional games, but they can also be utilized when studying digital games, especially on those games that are remediation of older game mediums. Eskelinen (2005) states that Sutton-Smith’s taxonomy is usable tool, because it groups game, playing, and gaming into fairly distinct concentrations. He continued that values of these rhetorical categories have temporal and cultural variations, to which the game industry and its operational environment, with the field of game studies and R&D, are inevitably tied.

<sup>45</sup> America’s Army Frequently Asked Questions (FAQ) - Miscellaneous: <http://www.americasarmy.com/support/faqs.php?t=3>

strategic communication – and shows certain amount of out-of-the-box thinking from Army’s behalf – using them can also be a laborious task that will require constant investment of resources. Competition of market share and of players, whose brand loyalty is wavering at best, is an incessant process. The Army must constantly evolve and improve their product in order to compete with commercial game industry that has massive marketing structure and distribution channels at their side.

Branding the Army is undoubtedly the most important step in achieving the vicarious recruiting objective of the AGP. In order to define the *America’s Army* game brand, we must first examine the ethos of “Army of One” and “Army Strong” campaigns. Main part of *America’s Army: Operations* and *Special Forces* were developed during “Army of One” campaign and its development has continued during “Army Strong” campaign. Therefore basis for its brand elements, such as name, logo, slogan, and aesthetic presentation were also established during these campaigns. USAREC defined the key messages of “Army of One” campaign in following manner:

“An Army of One is 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.” (USAREC, 2001)

Let us compare these key messages to campaign ethos behind the “Army Strong” brand.<sup>46</sup>

“Being Army Strong is about much more than being physically fit. It is mental and emotional strength. It is the confidence to lead. It is the courage to stand up for your beliefs. It is the compassion to help others. It is the desire for lifelong learning. It is the intelligence to make the right decision. It is making a difference for yourself, your family, your community and our nation.

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<sup>46</sup> The campaign was launched in November 2006 with series of television ads with following message: "There’s strong and then there is Army Strong. It is not just physical strength; it is emotional strength. Not just the strength to obey, the strength to command. The strength to build and the strength to tear down. The strength to do good today and the strength to do well tomorrow. There is nothing on this green earth that is stronger than the U.S. Army. Because there is nothing on this green earth stronger than a U.S. Army Soldier. ARE YOU ARMY STRONG?"

Army Strong is also the kind of strength that endures. It is the strength that comes from challenging training, teamwork, shared values and personal experience. A Soldier's time in the Army may come to an end, but he or she will always be Army Strong because the lessons learned and values gained are timeless. They will serve as a springboard to life beyond the Army and will last long after physical strength fades." (USAAC, 2006)<sup>47</sup>

The primary themes and rhetoric surrounding the renewed value propositions have remained the same, only the articulation of the message and the slogan were changed. Both campaigns underscore uniform attributes: mental and physical strength through self-improvement, role of individual soldier and their training, leadership, unity and patriotism. The only clearly noticeably emphasized quality in the 2006 campaign is the permanence of the Army training and values. The opening intro of the official U.S. Army game merges and refashions the previous messages into a game brand. In the intro a silvery star, on which images of soldiers are reflected, spins to the center of the screen where foundations of the logo is forming. The star symbolizes the U.S. Army, made out of individual soldiers. Voices of the soldiers intermingle with a military themed music sounding on the background. Name of the game, *America's Army*, appears to the screen. It is followed by the official slogan "Empower Yourself. Defend Freedom", which refers to physical and mental strength, manifesting itself with a sound effect of a rifle being loaded. Although the game brand mainly borrows and remediates key messages and themes of other advertisement campaigns, it adds its own core message to the overall U.S. Army brand by aiming to represent the Army as an innovative high-tech organization. At the eve of the initial game release, Maj. (R) Chambers (2002), the deputy director for the AGP, stated in an article, that:

"For Gen Y, technology is the defining element of their lives. Unfortunately, the Army runs last among the services in Gen Y's perception of technological sophistication. If the Army is to have any hope of increasing its fair share of high potential recruits, it must present itself as a cutting-edge organization in terms of technology. If the Army is to have any hope of increasing its fair share of high potential recruits, it must present itself as a cutting-edge organization in terms of technology."<sup>48</sup>

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<sup>47</sup> "Army Strong" campaign key messages: [http://www.usaac.army.mil/sod/launch/downloads/campaign\\_key\\_messages.doc](http://www.usaac.army.mil/sod/launch/downloads/campaign_key_messages.doc)

<sup>48</sup> Chamber's article, The Army Project, (2002) in AUSA Army Magazine:  
<http://www3.ausa.org/webpub/deptarmymagazine.nsf/byid/ccm-6ccs4d>

Chambers remarks on attracting technologically savvy high potential recruits to join the ranks treats with problems concerning recruiting. NPP (2008) reports that the U.S. Army is struggling to meet its 90% benchmark for the educational attainment of recruits.<sup>49</sup> In fiscal 2007 only about 79% of recruits held high school diplomas. The NPP report also pays attention to the rising number of drop outs. The Army notes and takes seriously the challenges facing the AGP and recruitment purposes in general. Maj. Gen. Bostick of the U.S. Army Recruiting Command (USAREC) postulated recruitment during protracted war at the official homepage of the U.S. Army. "Today, parents and influencers are less likely to encourage their family members and other young adults to join the military. [...] Propensity -- the desire to enlist in the armed forces -- is at its lowest point in two decades." (Lopez, 2008)

The AGP's advertisement efforts can be labelled as public service advertising campaign, because of its non-commercial objectives. Army employs number of marketing techniques, based on the demands of marketing mix, to achieve the overall strategy. Creating an attractive brand is not enough. Marketing through interviews and articles is extremely useful in online environment. Different game-related media outlets and their interest in the first officially endorsed U.S. Army game have acted as free mouthpieces for the developers. This type of marketing is directed towards two target audiences. The Army Game Project is marketed to the military community by highlighting the recruiting efforts, popularity of the game brand and serious game aspects i.e. governmental applications based on the software. Second audience is naturally the gaming community. Developers aim to situate their game into the sphere of popular culture through rhetoric that has close connection to persuasive advertising. Army strives to separate its game from other commercial products by highlighting the authenticity of the gaming experience. Team-based gameplay is also heavily emphasized. These kinds of promises are redeemed by introducing innovations to the game genre, such as the Combat Effectiveness Meter (CEM) and the Rules of Engagement (ROE). Although Internet is the primary channel of communication for the AGP, it has not completely displaced the oldest form of human interaction. Face-to-face marketing is utilized in form of the VAE, which allows creating new contacts and maintaining existing relationships, generated through activity of gaming. Word of mouth approach has a dual function; it enables the Army to maintain and reinforce their game brand and meet potential recruits and "customers" who are not

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<sup>49</sup> See: <http://www.nationalpriorities.org/militaryrecruiting2007>

familiar with the game. Unpaid i.e. mouth to mouth advertising is also extremely important in providing exposure for the game. Online networking, which is the most integral and cohesive part of the gaming culture, is extremely effective platform for this type of advertising. In the online environment news of a new (and free) first-person shooter will spread like a wildfire among the aficionados of the genre within days, simultaneously creating attention to the Army brand. In other words a player who has received the message will relay it to other set of reactors in their social formations, such as clans or circle of friends. This fact has been acknowledged by the Army as Chambers' article (2002) reveals. It is also quite interesting that in search for the ultimate authenticity the Army has injected covert advertising of third party corporations, in form of product placement, to their game. In *AA Special Force* green berets wear different types of Oakley sunglasses and carry Randall knives, although unusable, because they are part of "preferred" SF equipment in real life (Davis, et al, 2004). Other militainment games have also used similar tricks to enhance the feeling of aesthetical authenticity and realism. For instance the Oakley sunglasses appear in *Tom Clancy's Ghost Recon Advanced Warfighter (GRAW)* (Ubisoft, 2006).

*America's Army* can be considered as a second generation advergaming, which cannot be distinguished from conventional computer games when it comes to technical qualities and budget. The official U.S. Army game incorporates three levels of product integration found in advergaming; coined by Chen and Ringel in their article, *Can Advergaming be the Future of Interactive Advertising?* (2001; cited through Winkner & Buckner, 2006): associative, illustrative, and demonstrative. Associative approach refers to brand awareness, which is achieved by associating the brand with a lifestyle or activity simulated in the game. In the case of *AA* the brand is associated with soldiering profession and the Army lifestyle. The illustrative level means that the product is integrated directly into the gameplay. Since the game advertises an institution, instead of a product, this approach is utilized by mimic representation of the U.S. Army, ranging from equipment to jargon and hierarchy. Demonstrative integration is the highest level of brand incorporation (ibid.). This level is employed for instance in training simulations, which allow players to experience how the U.S. Army soldiers train. The game also combines successfully the four dimensions of "experience realms framework" (Kleeberger, 2002). These dimensions are educational (training simulations), aesthetic (photorealistic game design), entertainment (gameplay), and escapist experience (engagement and immersion with the magic circle). Kleeberger

argues that the framework activates and provides emotional stimuli for the target audience to receive the messages sent.

### 3.1.2 *America's Army: Propagame*

The propagation purpose of the official U.S. Army game is more ambiguous than the advertising dimension, leaving room for various interpretations (c.f. Li, 2003 and Nieborg, 2005). Developers use periphrases to avoid the questions of propagation: “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 definition of the concept of propaganda is also elusive and unclear. In the Western societies the concept has very strong negative connotation, because of the WWI and WWII, although it is basically a neutral term. The term “propaganda” usually refers to political context, but is also in close connection with advertising and public relations campaigns, since they share same techniques. *The Department of Defense Dictionary of Military and Associated Terms*<sup>50</sup> (2001) defines the concept of propaganda as “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.” *The Oxford English Dictionary – Second Edition* (1989) defines propaganda in similar fashion as the DoD dictionary, but does not underline the national objectives of the propagandist. The strong implicit point of view of propaganda is emphasized. The dictionary defines the concept as “the systematic propagation of information or ideas by an interested party, esp. in a tendentious way in order to encourage or instil a particular attitude or response. Also, the ideas, doctrines, etc., disseminated thus; the vehicle of such propagation” (p. 632). When analysing the propagame dimension of *America's Army* the institutional level of propaganda should also be added to the equation; the aim of the AGP project is to spread ideas, information, and allegations to further Army’s recruiting initiatives and programs. The concept of propaganda is divided into three separate categories, according to the source and nature of the propagated message. The classifications are (The DoD Dictionary of Military and Associated Terms, 2001):

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<sup>50</sup> The DOD Dictionary of Military and Associated Terms (2001) as amended through 26 August 2008. Available online: <http://www.dtic.mil/doctrine/jel/doddict/>

1. Black propaganda: propaganda that purports to emanate from a source other than the true one.
2. Gray propaganda: propaganda that does not specifically identify any source.
3. White propaganda: propaganda disseminated and acknowledged by the sponsor or by an accredited agency thereof.

The concept of rhetoric should also be defined in the context of propaganda. The classical rhetoric is generally understood as the technique and art of persuasion through visual, written or oral language, used traditionally in public and political arenas, whereas the contemporary definition of the concept emphasizes its interdisciplinary nature. In his book, *The Ambiguity of Play* (1997), Brian Sutton-Smith specified the concept as "a persuasive discourse, or an implicit narrative, willingly or unwillingly adopted by members of a particular affiliation to persuade others of the veracity and worthwhileness of their beliefs" (pp. 8). The official U.S. Army game can be characterised as 21<sup>st</sup> century agitprop, a portmanteau word of agitation and propaganda, which refers to propagated messages disseminated through various channels of media.<sup>51</sup>

As an advergame *America's Army* uses techniques of white propaganda to idealize military culture. The game definitely does not fall into the category of black propaganda, simply because the source does not disguise itself or purport to be other than the true source. The source of information is the U.S. Army and the simulated game missions are based on a real military campaign, the Global War on Terror (GWOT). In addition the U.S. Army does not aim to fabricate sheer political falsities or spread disinformation with its game; certain aspects of soldiering profession are emphasized and constantly repeated, whereas other undesirable matters, such as death and violence, are only implicitly addressed or suppressed. This approach explains the need to control the message and the content, which is evident in the AAMD, in order to safeguard the game brand. Particularly selected units construct the completeness of the game world. Implicit and explicit messages, with connotations to vaguely defined terms of democracy and GWOT, are present, but the game does not specifically disseminate any political doctrine.<sup>52</sup> In addition the game cannot be

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<sup>51</sup> The term "agitprop" has been traditionally connected with pro-communist propaganda of the Soviet Union and socialism in the Great Britain during the Cold War era. Proliferation of branded entertainment during the Internet era makes it a topical concept to describe products that propagate certain political world view or institutional standpoints.

<sup>52</sup> In this case the concept of doctrine refers to "a statement of official government policy, especially in foreign affairs and military strategy" (The American Heritage Dictionary of English Language (2000). Bush Doctrine, which states that United States can unilaterally and aggressively defend itself from countries harboring terrorism, is a good example of such policies.

situated to the category of gray propaganda, because the propagated messages have clearly identifiable source. Furthermore the game rhetoric does not aim to build straw man fallacies, a definitive characteristic of the classification.

*America's Army* employs a set of classical rhetorical and propaganda techniques, such as transfer, glittering generalities, and testimonial, originally identified by the U.S. Institute for Propaganda Analysis (IPA) in 1938-1942.<sup>53</sup> These techniques are also utilized in marketing and advertising. Transfer is probably the most obvious rhetorical and propaganda technique used in the game. The authority of the U.S. Army and reverence for the country has been implemented to the game through patriotic imagery and textual means. It forms the base on which other rhetorical messages are built upon. Glittering generalities is a technique that refers to the use of positive and commonly valued, but still indefinite, concepts. It appeals to ideals that are beyond objection. For instance concepts of "freedom" and "democracy" that appear regularly in the game rhetoric are extremely difficult or even impossible to deny. This approach is also utilized in the game slogan "Empower Yourself. Defend Freedom". Who would not want to develop themselves mentally and physically or defend freedom, the imperative for Western societies? One can object that it should not be settled with arms, but one cannot claim that it should not be defended. Another good example of glittering generalities is the division of the belligerents into good and evil. It would be more troublesome to underscore the higher morals or justify the use of force without demonizing the enemy to a certain extent. This type of rhetoric and terminology resembles Frank Capra's *Why We Fight*, a series of seven propaganda films, filmed in 1942-1945.<sup>54</sup> First episode, *Prelude to War* (1942) examined fight between a slave world of fascism and a free world of democracy. What is different in *America's Army* is the term that is used to describe enemy's ideology, but both of them share similar connotation.

The rhetorical technique of using personal experiences to convince is known as testimonials. The method is common in both propaganda and advertising. Video interviews on the AA:SF webpage narrate the economic and material benefits of the service, whereas the Real Heroes program is a testimonial of the challenges and adventures of the Army lifestyle. This method is also used to emphasize Army's role in civilian crises, such as natural catastrophes. In *America's Army* testimonials are used to strengthen the bandwagon

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<sup>53</sup> See Source Watch Encyclopedia for more information of the Institute for Propaganda Analysis (IPA): [http://www.sourcewatch.org/index.php?title=Institute\\_for\\_Propaganda\\_Analysis](http://www.sourcewatch.org/index.php?title=Institute_for_Propaganda_Analysis)

<sup>54</sup> *Why We Fight* (2005) is also a title of Eugene Jarecki's documentary film about the military industrial complex.

technique. The bandwagon method makes use of the willingness and wish to join the winning side. This type of propaganda must not be too obvious since it operates on the axis between herd mentality and individualism. Nationalistic sentiments in the Soldier's Creed, used in loading screen illustration, proclaim that the players are (virtually) fighting for legitimate cause against global terrorism. We can also conclude that the method has been implemented through game mechanics. The shift paradigm, limiting the subjectivity of players, automatically situates them to the winning side, which in *America's Army* is naturally the U.S. Army. The paradigm is utilized to underscore the appeal of the world's premier land force.

### **3.2 The Educational Function**

Expectations of representing the Army as “a cutting-edge organization in terms of technology” embedded the rhetoric of military transformation into game design and marketing of *America's Army*. Military transformation refers to the profound change within the United States Armed Forces ranging from leveraging technological applications, and equipment to organizational level. The purpose of transformation is convert the military designed for the Cold War purposes to meet the challenges of 21<sup>st</sup> century warfare. The new form of warfare and conflict has many definitions and taxonomies: information warfare (IW); network-centric warfare (NCW); command-and-control warfare (C2W); intelligence-based warfare (IBW); electronic warfare (EW); and cyberwar to name a few (Libicki, 1995). The common nominator for the definitions is the central role of technology. They also represent the nature of unconventional warfare (UW) and asymmetrical warfare, which refers to belligerents with uneven military power, such as in case of terrorism. Networked simulations and immersive technologies, which digital games are innovative examples of, and other digital game-based applications concerning modeling, simulation and analysis (MS&A) have been recognized as central factors in the transformation (Keller-McNulty & Weidman, 2006). The military transformation impacts education and training of future soldiers; the network-centric warfare of the 21<sup>st</sup> century requires adaptation and revision of learning methods according to the needs of the upcoming challenges and information era. Dr. Michael Macedonia, the Chief Technology Officer for the US Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI) argues that the interactive and simulational media frequent by

the Generation Y has fundamentally affected the skills and attitudes of its members compared to older generations. These skills and attitudes include: 1) multiprocessing; 2) attention span variation exhibiting fast context switching; 3) changes in information navigation; 4) shift in focus of learning from passive listening to discovery-based experimental and example-based learning; 5) shift in type of reason from deductive and abstract to the concrete; and 6) community of practice emerging from sharing tasks including tacit and explicit knowledge (Macedonia, 2001:158). The U.S. military has historically been forerunner in using games for training and educational aims. The civilian and public sphere has also started to harness the power of games as learning tools, especially through phenomenon of serious games. Games are seen as an opportunity to break the “tell-test” paradigm, which governs the traditional model of education (FAS, 2006). In other words edutainment offers a practical choice to use simulation-based learning, instead of narration-based.

The edugame and test bed dimension, correlating with educational function, relates naturally to edutainment elements within the public version of AA and governmental applications based on the game software. Governmental training applications, which repurpose the entertainment research and development (R&D), bring game technology a full circle, as its development was originally funded by the Department of Defense (Herz, 1997). This process also exemplifies the cooperation between private defence contractors and military; in the second chapter of the present thesis this phenomenon was referred as the military-entertainment complex (MEC). Traditionally military simulations have strived for highest possible level of realism, because they are used to train service personnel to war, whereas the objective of entertainment industry has aimed mainly to entertain with its products. Contemporary gaming culture has learned to enjoy the best of both worlds. First-person shooter (FPS) and real-time strategy (RTS) genre are examples of this evolution. One can also argue that games of these genres have rendered the dichotomy of games, designed for edutainment or for entertainment, useless and elusive to certain degree. Games designed for entertainment purposes can and usually do contain elements and factual information, which can be interpreted as educational, and therefore can be harnessed for pedagogical objectives. For instance SimCity- and Civilization- series have been used as learning tools in schools and universities. The didactic approach of training simulations represents edutainment in the public Army game version. The ambition of an edutainment is to convey knowledge, train and educate through a ludic approach (Alvarez

et al., 2007). AA contains these elements, its primary means of persuasion lie in its ability to entertain the player; factual information about the Army amplifies the feeling of authenticity. Camp Mackall is example of this kind of simulation. Players confront eight members of a Special Forces Operational Detachment Alpha (ODA) who give short lectures of their roles, responsibilities, and required skills. The information is merely narrated in spoken form without any visual aids. In addition the training simulations are more suitable vehicles in bringing forth the message of military transformation, compared to the multi-player game missions, because in single-player mode the game is not bound by questions of balanced gameplay. The training simulations have objectives, which overlap with the advergaming and propaganda dimensions; they educate the player about the Army and depict soldiering professions from interesting and challenging perspective.

In a media environment where news about the effects of games are frequently reported in a negative manner, the case of Paxton Galvanek guaranteed the AGP a boost of positive publicity in a way the Army public relation practitioners could only dream of. In 2007, Galvanek controlled the bleeding of a car accident victim with first aid skills he had learned by playing the combat training simulations of the official U.S. Army game. Colonel Wardynski, the project originator/director for the AGP, stated in a television interview<sup>55</sup> that the Army decided to portray the combat medic training in such detailed fashion to teach both soldiers and civilians life saving skills. What the interview fails to report is that in the online gameplay the use of virtual combat medic skills are reduced to a push of the action button.

### *3.2.1 America's Army Platform Technology*

The original MOVES Institute development team was divided into three sub-teams: America's Army Public Applications (AAPA), America's Army Governmental Applications (AAGA) and America's Army Future Applications (AAFA). AAPA was responsible for launching the official U.S. Army game, *America's Army*. AAGA's mission was to harness educational and training possibilities of the game technology. AAFA, team previously working with military force-to-force simulators, utilized the software in research, development and training purposes, including prototyping and visualisation. With

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<sup>55</sup> The interview is available online: <http://www.aao30.com/?cat=6>

the introduction of America's Army Platform (AAP) technology the number of development groups and businesses multiplied into eight operators, known as America's Army Development Teams (AADT). These teams are AAPA, Picatinny Arsenal, Software Engineering Directorate (SED), Riptide Software, Inc., Virtual Heroes, Inc. (VHI), Pragmatic Solutions Inc., Laser Shot, and Zombie Studios. The success of the public game and UE's technological capabilities to render realistic military scenarios created additional touch points for the Army Game Project. AAP manifests the evolution of *America's Army* from mere strategic communication tool into a government-owned core technology and content infrastructure that provides developers with content library, custom code base and game engine to create simulations and visualization for training and educational purposes. AAP technology functions as a database for web-deployable and cost-effective applications, which can be modified to serve various purposes. Currently the America's Army Platform website lists total of 16 projects, ranging from basic skill training and mission rehearsal to cultural and adaptive leader training tools.<sup>56</sup> Javelin Enhanced Productability Basic Skill Trainer (JEPBST), TOW<sup>57</sup> Improved Target Acquisition System (ITAS) and Common Remotely Operated Weapons Station (CROWS) Basic Skill Trainer (BST), developed by the SED's Applied Imagery Lab (AIL), are being used as an Army virtual reality training devices. The CROWS BST has been fielded for training in Iraq (McLeroy, 2008). At Fort Bragg the Special Forces soldiers use Adaptive Thinking and Leadership Simulation (ATL) to train "softer skills", such as negotiation, cultural awareness and communication through dynamic and instructor-controlled role-play.

After the introduction of the AAP responsibilities and role of the AAPA team remained the same, but AAGA and AAFA teams were united as Picatinny Arsenal, part of Armament Research, Development and Engineering Center (ARDEC) at the U.S. Army RDCOM. Picatinny Arsenal is purposing the AAP technology for the needs of Future Force Visualization and Applications. Their projects include robotics, mission rehearsals, and prototyping new vehicles, weapon and fire control systems. The team has also utilized the AAP technology for visualization and prototyping of XM25 Air-Burst Weapon System and XM307 Advanced Crew-Served Weapon System. Some projects have been implemented into *America's Army*, such as Javelin, released in version 2.7.0 (Overmatch). Utilizing AAP technology for prototyping future weapons systems enables the use of iterative

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<sup>56</sup> America's Army Platform Technology projects: <http://info.americasarmy.com/projects.php>

<sup>57</sup> TOW is an acronym for Tube-launched, Optically tracked and Wire-guided missile systems. The AIL's TOW ITAS simulator uses all generations of the TOW.

design, a methodology based on a cyclic process, which makes possible testing, analyzing and refining the work in process (Zimmerman, 2003). In the game environment the iterative design process manifests itself in playtesting. Testers (in this case the U.S. Army soldiers) are able to provide feedback during the initial design process, which allows designers to create a product that answers the specific needs of the military, not to mention the financial savings directly due to the methodology. According to Nieborg installation of projects that have been originally designed for training and educational purposes into the public application strengthen “the link between the edugame dimension and *America’s Army* as a test bed and tool.” (2005:139).

The SED, an avowed researcher, developer, and acquirer of high technology weapon systems, at the Aviation and Missile Research Development and Engineering Center (AMRDEC) manages the military and governmental applications created with the game technology. OEMA mandated SED’s Applied Imagery Lab (AIL) to develop number of basic skill training applications and devices. Riptide Software, Inc.<sup>58</sup> is a private software and hardware company, which has provided user interfaces (UI) to Future Soldier Training System (FSTS). Virtual Heroes, Inc.<sup>59</sup> is a code and content provider, located in Raleigh, North Carolina. Its area of business is serious games markets. Company’s contribution to AAP has been considerable; in 2004 VHI architected the concept. The U.S. Army was also company’s first major client. For the AAP VHI designs derivative training simulations, focusing for instance on artificial intelligence (AI), physiology engines and damage models. Pragmatic Solutions, Inc.<sup>60</sup> is Army’s technology partner providing database software for the AGP. The company is responsible for the development of AA Mission Depot, Deploy Client software distribution program, Master Browser System, and America’s Army Honor server portal. Laser Shot,<sup>61</sup> a Houston-based provider of force option simulators for military and law enforcement clients, has developed number of training systems that employ the AAP technology, such as the Convoy Skills Engagement Trainer (CSET). The recruiting retention simulators developed by the company are the Future Soldier Trainer (FST) and the Guard Recruiting System (GRS). These modular ranges are designed for training purposes and event marketing to support the needs of U.S. Army Recruiting Command.

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<sup>58</sup> Riptide Software, Inc. homepage: <http://www.riptidesoftware.com/>

<sup>59</sup> Virtual Heroes, Inc. homepage: <http://www.virtualheroes.com/>

<sup>60</sup> Pragmatic Solutions, Inc. homepage: <http://www.pr-sol.com/>

<sup>61</sup> Laser Shot Military homepage: <http://www.lasershot-military.com/>

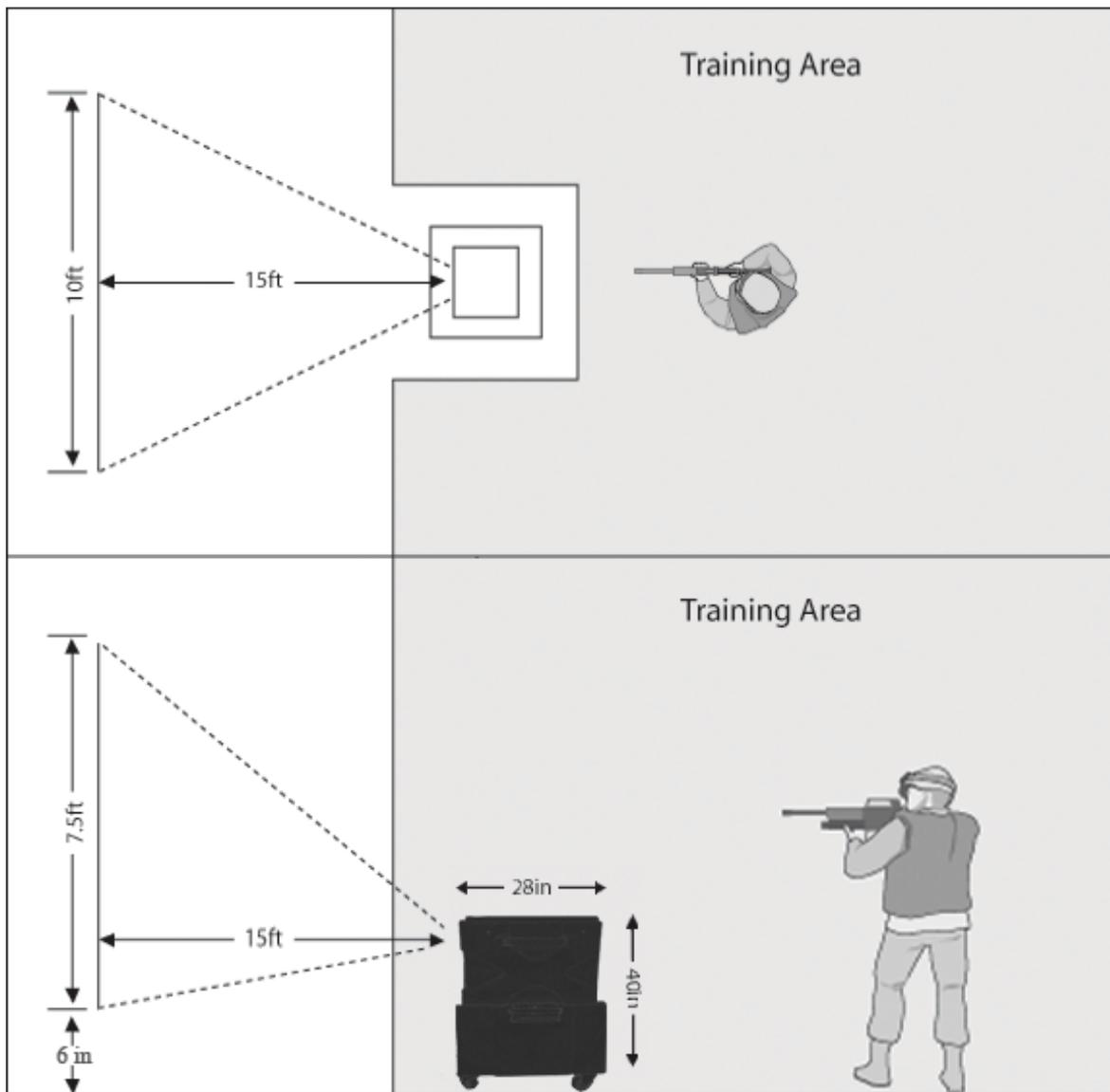


Fig. 5: Footprint diagram of a single screen Future Soldier Trainer (FST).

The FST is an immersive training system that can be expanded from 1 to 3 screens, providing 105 degrees of view. The FST range includes four training scenarios. Currently there are over 460 units in use with the Army Recruiting Command. Simulator has also been deployed in the National Guard units of 11 states. The Guard Recruiting System is a mobile event marketing/recruiting system, which is like a stripped version of the HMMVW simulator, familiar from the Virtual Army Experience. The GRS unit is constructed of a three-screen system with a driving station, including M16/M4 assault rifles with recoil and M249 SAW with pneumatic recoil. The eight AAP development team, Zombie Studios,<sup>62</sup> has co-developed proof-of-concept simulator FSTS for governmental applications team. The program is a performance test for delayed entry

<sup>62</sup> Zombie Studios homepage: <http://www.zombie.com/>

recruits, which aims to clarify whether training with the simulator improves scores prior basic training. The company has also worked with the CSET and the FST.

Additionally the AAP technology is available and being used by other governmental agencies. In 2004, U.S. Secret Service (USSS) Security and Incident and Modeling Laboratory (SIMLAB) started to develop simulated training scenarios for the protective detail teams, counter-surveillance and tactical response units. The USSS training environments project was fielded in April 2005. In September 2008 the gaming platform was introduced into the civilian sphere as AADT teamed up with the Ohio Department of Education and Project Lead The Way (PLTW). The AAP is used to promote interest in the technical fields by developing several applications for PLTW's engineering curriculum, currently utilized in 3000 American middle and high schools. After the initial pilot in Ohio, the partnership and the use of the America's Army Technology Education modules will be incorporated to teacher training programs in academic year 2009-2010 (Fort Leavenworth Lamp, 2008).

### 3.2.2 *Question of Aptitude*

There has been some speculation of *America's Army* being a virtual aptitude test. Gary Webb (2004) wrote in his article, *The Killing Game*, that this supposed aptitude testing has been kept below the radar of media interest and got no publicity. Webb based his argumentation on an article by Michael Zyda (2000), published in 2000 Summer Computer Simulation Conference. Zyda stated that in the development of *America's Army: Operations* and *Soldiers MOVES* wanted to determine whether the game can be instrumented "to be able to determine the aptitude, leadership abilities and psychological profile of the game player." (p.4) Three years later the question of such instrumentation was still open. "With the help of the Army Research Institute, we looked into whether a game player's aptitude for an army career could be computed. The work from ARI looks promising and may appear in a later version of the game. Meanwhile, the conclusion is that the Army won't receive aptitude data unless the player willingly forwards it to the Army." (Zyda et al., 2003a:34-35) Webb's article, which advocated certain technocratic perspective and embraced the omnipotence of computer simulation, was clearly a political one. In the case of *America's Army* he treated the act of gaming from the frivolous and

harmful perspective; the U.S. military has utilized the game technology to pry on personal privacy of anonymous players.<sup>63</sup>

However simulations based on reductionism have practical limitations, no matter how engaging, realistic or immersive they may be. Salen and Zimmerman (2004) pointed out that computer games “can never contain every aspect of the phenomena being simulated” (pp. 442). In case of soldiering profession, which requires number of special skills, mental abilities and peak physical condition, the limitations become apparent. Although physical form can be raised through conscientious exercise, testing mental abilities, such as stress tolerance, with contemporary computer game simulation is a theme of the 1980s science fiction. *America’s Army* as such is not capable to perform the functions of Armed Service Vocational Aptitude Battery (ASVAB) test, which is used to determine suitable military occupation specialties (MOS) for individual recruits. The ASVAB test has four critical areas – arithmetic reasoning, word knowledge, paragraph comprehension, and mathematics knowledge – that affect Armed Forces Qualifying Test (AFQT) score, which determines whether a person is qualified to enlist. Such information cannot be obtained by analyzing gaming statistics. I am not claiming that the public version of the game cannot be used to evaluate certain skills and abilities important in network-centric warfare, mostly relating to situational awareness and management, but it cannot be used as realistic criteria to decide whether a person is suitable for the service or not. Gathering specific information on required abilities would necessitate constant monitoring of individual players, which conflicts with the privacy statement, and even if monitored the Army would need to observe clan matches, as they represent the highest level of tactical military manoeuvres in civilian gaming culture. Game sessions on public servers are light years away from realities of war. The most obvious distinction between clan and public gaming is that public gaming is (in most cases) highly individualistic and does value the meaning of teamwork as clan gaming does.

Furthermore the official statistic tracking system, released in v2.7.0, does not collect data that could be used to construct a psychological profile of the game player. One can also argue that the lusory attitude adopted by player makes accurate profiling impossible, as the players behave differently in-game as they would in real life. To gain relevant data players

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<sup>63</sup> The Army will not have any information about the players unless players purposefully identify themselves and request information. Furthermore the game does not use cookies that would gather information through web browsing.

would have to be informed of the monitoring, so they are able to regulate their behavior according to the norms and rules of actual warfare. Testing someone's suitability for different roles may be practical in a controlled environment, but to survey whether a random online player has aptitude for the armed service by analysing data gathered with the AAPA version is not simply feasible, especially if we take the culture of first-person shooter genre into account.

### 3.2.3 VIRTE and ARI Research Projects

The projects like the Virtual Technologies and Environments (VIRTE) and a research by the U.S. Army Research Institute (ARI) for the Behavioral and Social Sciences exemplify the test bed dimension of *America's Army*. These two studies also reveal that even the action-based games with heavy emphasis on entertainment, such as the public version of AA, can be used as research tools. The VIRTE program – conducted by MOVES Institute's Immersive Audio Laboratory, and sponsored by the Office of Naval Research – stemmed from a viewpoint that emotion is a critical component in learning in virtual environments (Shilling, Zyda & Wardynski, 2002). The use of auditory effects and ambience sounds are the primary ways of introducing emotion into the game environment. To determine the role of audio in terms of creating emotion in videogames the subjects played the Army game with and without the sounds. The use of headphones and the use of a 5.1 sound system were also compared in order to verify whether the sound system with a subwoofer caused a greater emotional response than headphones. As expected the results indicated that sound condition had increased emotional and physiological response, compared to the silent condition. Using headphones or sound system had no significant differences concerning relation between sound reception and emotion. In the second phase of the VIRTE program examined learning differences between low-arousal and high-arousal conditions. In low-arousal condition subjects wandered through *Headquarter Raid* map, released in v1.0.0, without resistance and memorized objects and other contextualized game tokens as they searched for prisoners of war (POW). After completing the mission participants were tested for their memory of objects inside the buildings. In high-arousal condition participants fought their way to the POWs. Findings indicated that the high-arousal condition was significantly more effective in terms of object memorization (immediately after the experience and 24h post exposure) than the low-arousal condition. The findings

also indicated that “simulators used for mission rehearsal should not be dry, emotionless systems, but should elicit an emotional response from the user rather than a purely intellectual response.” (Ibid:3)

In 2005 the U.S. Army Research Institute (ARI) used *America's Army* to assess the motivational instructional features in order to develop guidelines for creating effective training games. Participants completed basic training sections of the game and answered to questionnaires concerning presented information and motivational aspects of the game. The research examined three instructional characteristics: 1) the type of information presented; 2) how the information was integrated into player progression through the game; and 3) how the information was presented. The information presented during the game session was also divided into three sub-categories: a) procedural (what is done); b) episodic (what is observed); and c) factual (symbolic information). Test provided following findings.<sup>64</sup> Procedural information was the easiest to be recalled (78%), closely followed by episodic information (71%), whereas factual information (63%) was the most difficult to memorize (ARI, 2004). According to research team the findings supported the earlier studies made on training methodology. Two categories, relevant (information required or helpful to progress in the game) and irrelevant (information that effect on game progression), were used to estimate the probability of recall based on how the content impacted game progression. Relevant information was recalled more accurately (72%) compared to irrelevant information (59%) (Ibid.). These results demonstrated the importance of embedding relevant learning and training objectives straight into the game play and storyline. Representation of information was categorized into three subsets: a) graphic images; b) spoken text; and c) written text. ARI's findings indicated that graphic image was the most effective mode of representation. Spoken or narrated was second, and textual was last. Finally the researchers identified four motivational features that influenced players to continue playing the game: a) challenge (completing the missions); b) control (interaction with the game environment); c) realism (authenticity of game experience); and d) exploration (discovery and sensory stimulation). Based on their research with the official U.S. Army game, ARI's Advanced Training Method Research Unit (ATMRU) proposed four-point guideline for creating effective edutainment (ARI, 2004:6):

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<sup>64</sup> Percentual figures refer to number of total correct answers in questionnaires.

1. Instructional objectives should be integrated into the game storyline, so that the training material is relevant to the progression of the game.
2. Spoken text and graphic images were found to be more effective presentation modalities than printed text; therefore, printed text should be kept to a minimum.
3. Games should be used for teaching procedures and experiences rather than factual information.
4. Training games should be designed with attention to challenge, realism, control and opportunities for exploration, which influence player motivation.

## 4. VERISIMILITUDE OF WARFARE

The concept of realism is partly a myth created by the game industry; how can we seriously assume that mediations such as computer games could ever accurately represent reality in all its complexity? Since 1664, when Christopher Weikmann introduced reductionism into game design with his *Koenigspiel* (the King's Game) the principle has been the central starting point of modeling and simulation. It is a prevailing tenet in game design even if understanding the nature of complex matters and phenomena by reducing them to the interactions of their parts has its limits. There have been demands for more holistic approach. Realism in the context of games is tied to the contemporary conventions within a genre. The concept is constantly reshaped by different gaming innovations, both technical and cultural. What now constitutes for realistic game mechanics or gaming experience is outdated within few years. For instance in 1996 when the Marine Corps Modeling and Simulation Office (MCMSMO) modified *Marine DOOM* from a shareware version of *Doom II: Hell on Earth* (id Software), it represented the peak of realistic 3D game simulation. The concept of realism is similar to process of remediation as reform of reality, as argued by Bolter and Grusin (2000). The goal of remediation is to refashion older media, which is considered as progress towards better. The new remediation is expected to justify itself by improving on its predecessor and to fulfil the unkept promise of real, guaranteed already by the older media. To put the concept of realism into Spenglerian terms we can conclude that a certain kind of Faustian spirit surrounds the development of realistic gaming simulations. Developers and publishers constantly strive for the unattainable, knowing that the actual goal of real will never be reached. Boundaries of real moves constantly further with introduction of new revolutionary gaming procedures. Total authenticity in video game environment is a state, which probably will be forever postponed.

Concepts of realism and authenticity, which usually are interchangeable, are especially valued among the producers of militainment. Traditionally the first- and third-person shooter games have associated their products with these terms, mainly because of their close-up perspectives and high-level graphical quality. Real time strategy (RTS) games, such as *Company of Heroes* (Relic Entertainment, 2006) and *Total War* –series (Creative Assembly, 2000/2007), have adopted similar rhetoric for their marketing. For instance

*Opposing Fronts* (2007), a sequel to *Company of Heroes*, was puffed with the promise of unprecedented realism and tactical level. One can argue that sophisticated RTS games, which do not solely revolve around resource management, are as authentic military experiences as any contemporary FPS games marketed with the concept. FPS games provide realism on a human scale, whereas RTS games provide realism on a larger scale. *Medieval II: Total War* (Creative Assembly, 2006) is an adept example of this comparison. *M II: TW* provides realistic representation of military units, tactics and operations; end-user modifications further enhance the realism of the game by modifying different attributes. *M III: TW* and other games of the *Total War*- series simulate emotional state of units varying from boosted morale to panic. The central role of environment in combat is assured through accurate simulation of elevation, cover, weather and surface. Furthermore the game employs strategic, political, religious, and historical layers, which affect on game progression.

According to AA:SF homepage *America's Army* "provides player with 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."<sup>65</sup> It is the only game brand that has been exclusively developed by the U.S. Army; from marketing perspective Army's presence and status warrants the level of authenticity, unattainable for the other games of the genre. Its involvement is used as an intangible asset; the world's premier land force, whose business is to fight wars and defend American interests, has used its know-how to create the most authentic and realistic first-person shooter game. According to Maj. (R) Chambers (2002) the game is unique, because it is the only game reviewed by Army subject matter experts for realism. In addition the game developers had access to installations, equipment, weapons, and personnel unavailable for commercial rivals. The rhetoric of uniqueness is also underlined with advertising taglines such as "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 "Created by Soldiers. Developed by Gamers. Tested by Heroes." Army has taken the question of immediacy seriously from accurate basic modeling to different types of design methods. Immediacy i.e. transparency refers to the notion that medium itself should disappear in the presence of

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<sup>65</sup> Source: <http://www.americasarmy.com/intel/features.php>

the represented (Bolter & Grusin, 2000).<sup>66</sup> For instance civilian designers working for the AGP partake on Green Up events to familiarize with the Army way of life, which will help them to make the game more realistic (Schiesel, 2005).

The concept of realism is usually utilized to highlight certain aspects of the gameplay; it has become a generic adjective, employed by all the competitors within a genre. It is used in similar manner as “tactical”, which also promises realistic game representations and cooperative gameplay. I argue that we should examine the tagline of “the most authentic military experience” mainly from marketing perspective rather than extremely accurate simulation of reality and warfare. It is more of a feeling than a tangible and concrete feature. In marketing this immaterial emotion is attached to the product in multiple ways. One of the most popular manners is to combine three-dimensional computer graphics with real or dramatized film footage. For instance promotional trailers of new game patches or brand extensions, such as the Virtual Army Experience (VAE), employ this method. Another good example is the Real Heroes program, which incorporate identities of real soldiers into the game experience. In next sub-chapters different game-related features of *America’s Army*, ranging from premise to core game mechanics, are reflected to characteristics of other popular first-person shooter games. The aim is not to identify and analyse every possible feature, but to concentrate on few selected qualities that are most noticeable. Final sub-chapter includes an analysis of representation of violence and warfare, which is a subject of intense debate among media researchers.

## **4.1 Engaging Realism**

In the present thesis the concept of realism is treated as engaging realism that balances between the questions of realism versus playability. The following sub-chapters will deal with the gameplay and core mechanics of the official U.S. Army and analyse design choices that reveal decisions made to produce appealing and immersive gaming experience, which is both realistic and entertaining. For the AAPA game version the romance of action is more important than aspiration towards ultra-realistic mechanics, simply because the game is first of all a public relations initiative with branding and

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<sup>66</sup> In their book *Remediation – Understanding New Media* (2000) Bolter and Grusin divide the concept of immediacy to epistemological and psychological sense. Epistemological sense refers to transparency and absence of mediation, whereas psychological sense relates to viewer’s feeling that the medium has disappeared and the objects are present to him/her.

recruitment purposes, not a strict military simulation. Let us treat with design choices that fluctuate between the line of entertainment and authenticity by examining dimensions of gameplay setting, weaponry, character physics, and predictability of combat.

#### *4.1.1 Gameplay Setting*

We can conclude that the basic premise i.e. starting points of multiplayer missions is in conflict with realities of modern warfare. Teams engage against equally equipped Opposing Forces (OpFor), which have assumed defensive positions, without assistance of close air support (CAS) or armoured vehicles. In certain maps the absence of close air support is reasoned in mission briefings. For instance in *Bridge Crossing* –map, released in v1.0.0 Recon, adverse weather conditions prevent the use of CAS. In addition it would be quite impossible to seamlessly embed armoured vehicles, artillery or air support into the AA gameplay, because of the level design choices; maps are relatively small compared to other contemporary first-person shooter games, with exclusion to its model, *Counter-Strike* (Valve Corporation), or the missions take place indoor environments. Besides adding tanks, artillery or fighter planes to game's spatial design that focuses on light infantry combat, could have disruptive effects on gameplay. Small gaming space, unsuitable for large-scale military manoeuvres, with maximum of 10 minutes of game time per round is used to intensify element of action and close quarter battle (CQB).

Cooperative maps make an exception to game's general operations model. *Interdiction* and *SF Snakeplain*, released in v2.7.0 (*Overmatch*) introduced moving vehicles into the game world. Non-player characters (NPC), acting as the enemy, control T-62 Main Battle Tank, BTR-80 APC's, and BMP-1 IFV's, whereas players operate the M1114 Up-Armored HMMWV Armament Carriers in *SF Snakeplain*. Regular multiplayer maps do not employ mobile vehicles. In the slow paced winter mission, *SF Arctic* (v2.1.0 – *Downrange*), the defending team is able to man the turrets of two Stryker APCs, but these armoured personnel carriers are considered more as stationary weapons than vehicles, because they are immobile.

These game design choices in multiplayer game mode have been implemented into *America's Army* to maintain balanced gameplay. They also make the representation of the

Army as “cutting-edge organization in terms of technology” difficult. Nieborg (2006) delves on this subject and coins a concept of “the paradox of fairness” that results from merging the logic of warfare and play. “The ironic outcome of the modelling of the two teams fighting head to head in online FPS games 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” (Nieborg, 2006:6). *America’s Army* fails to adequately communicate the message of the technological transformation in the U.S. military, because the contextualized game tokens that represent high-tech weaponry, such as Javelin missile system, the CROWS or the Stryker APCs are not successfully embedded into the game experience. This is not caused by the process of decoding by players, but by the incorrect encoding of the message in the production moment i.e. design.

Because the regular online multiplayer missions are not fit to disseminate the message, it has to be conveyed through single-player training simulations and cooperative missions. The technological innovations are situated to Advanced Individual Training (AIT) section, featuring ES2 McKenna, Javelin Training, HMMWV Driver, and CROWS Gunner. ES2 and Javelin training continues designers fascination to simulate simulations. The impetus for Every Soldier a Sensor (ES2) simulation is that all soldiers must be “point of origin” information collectors and tactical reporters that actively scan and observe their area of operations (AO). In other words the logic of ES2 increases situational awareness of individual soldiers, which is one of the integral steps in achieving information dominance on the battlefield.<sup>67</sup> In Javelin training player familiarize themselves with a virtual replica of Basic Skills Trainer (BST) simulator, before taking a part in live fire exercise. Unfortunately these two game modes are not the best possible platforms to convey the ideal of transformation, since training missions are not usually replayed after being passed and cooperative maps are considerably less popular,<sup>68</sup> whereas players can spend hundreds and hundreds of hours in multiplayer mode. To guarantee the necessary exposure, the message should be incorporated into the regular multiplayer environment.

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<sup>67</sup> In late 2003 the Department of the Army intelligence office (G-2) began developing concepts for Actionable Intelligence, spawning the idea for Every Soldier a Sensor. ES2 is based on a computer-generated simulation prototype ES2Simulation (ES2Sim or ES3) developed by the Institute for Creative Technologies. ES2 was tested by the U.S. Army Training and Doctrine Command (TRADOC).

<sup>68</sup> See Map Stats at ArmyOps Tracker statistics: <http://aaotracker.com/trackerstats.php>



Fig 6: CROWS Gunner is part of Advanced Individual Training. In addition to training simulation the weapon system is available only in cooperative *SF Snakeplain* –map, released in *AA:SF* (v2.7.0).

Maps that prefer CQB are not an excuse to exclude high-tech innovations from regular multiplayer gameplay in order to maintain balance. *Call of Duty 4: Modern Warfare* (Infinity Ward, 2008) is an example of this. Although *CoD*'s multiplayer mode portrays light infantry combat, the game succeeds to convey the feeling of techno-centric warfare through versatile weapon arsenal and high-tech accessories, such as the AN/PEG 2 Target Pointer that works in conjunction with night vision goggles. Furthermore players are able to call airstrikes as performance rewards. Parallel innovations could be realized in *America's Army* gameplay without risking the balance.

#### 4.1.2 Weaponry

Modelling of weapons is perhaps the most notable example of engaging realism in first person shooter genre. The AGP development team have focused lot of efforts on outward appearance and feel of weapons, in form of accurate animation and sound effects. Shell ejection and reloading sequences are depicted with extreme care. Empty shells produce

beautiful metallic ring as they fall to steel floor. True three-dimensional sight systems replaced overlaid 2D sights in *AA:SF* (v2.0.0), offering additional realism to representation. The verisimilitude is finalized with a combination of selected weapon mechanics. Occasional weapon jamming is a unique feature in FPS genre, which adds random factor to fire fights, although jam-clearing with S.P.O.R.T.S<sup>69</sup> is not animated at true speed to keep the game experience fluent.

Controllability of fire is made more difficult with advanced recoil enhancement, which causes recoil with automatic fire mode to increase until it levels out. Enhancement encourages players to use more accurate semiautomatic (1 round/trigger depress) and burst fire (3 rounds/trigger depress) instead of using “spray and pray” tactics. All contemporary FPS games favour the lower fire rate method in shooting, except in CQB conditions. In some cases real life capabilities of certain weapons have been changed to assure fairness. For instance the firing rate of MK12 Special Purpose Rifle (SPR) is reduced due to gameplay concerns. Realism of weapon accuracy was considerably increased as shot patterns and randomized bullet spread were implemented into gameplay in version 1.3.0. In later versions the spread pattern was changed from square to round shaped. *AA:O* v1.6.0 (*Radio Tower*) introduced projectile penetration and projective ricochet into gameplay. Bullets go through penetrable surfaces, such as glass, wood and cloth, forcing players to seek cover instead of concealment. Penetrated materials affect projectile’s speed and force. Shots fired from angle less than 45 degrees can ricochet with altered damage and trajectory depending on the contact material and incident angle.

Albeit these two mechanics enhances realism of fire arms the game lacks ballistic system with bullet drop effect. Instead of ballistics i.e. mechanics that deals with the effects, motion and behaviour of projectiles, the game uses straight vectors as bullet trajectories. For instance with a sniper rifle players are not required to adjust their shots according to distance or movement of the target, because the shots hit the exact spot where the crosshair was targeted; simulation of bullet trajectories are substituted with weapon wavering (Zyda et al., 2004). Virtual gravity is only used with grenade launchers, rocket-propelled grenades (RPG) and other large slow moving projectiles. In comparison, more realistic ballistics were already used in 2001, by one of the pioneers of first-person shooter genre,

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<sup>69</sup> Acronym of S.P.O.R.T.S (Slap, Pull, Observe, Release, Tap, Squeeze) refers to a technique used in clearing and correcting jammed M16 and M4 assault rifles while in a combat operation.

*Operation Flashpoint: Cold War Crisis* (2001) by Bohemia Interactive Studios (BIS). Other first- and third person shooters featuring realistic bullet trajectories include *SWAT 4* (Irrational Games, 2005), *Sniper Elite* (Rebellion Developments, 2005) and *Armed Assault* (BIS, 2007).

One can argue that, although use of ballistic system would add a level of realism into the simulated fire fights, the bullet drop effect would be quite useless feature, because of the level design choices. The maximum effective range of M16A2, game's standard assault rifle, is 550 meters at point targets and 800 meters at area targets. Utilizing ballistics would not have significant effect on CQB maps, situated to urban environments with relatively small game area, but it would increase realism of long-range maps, in which teams can engage each other from distances of hundred meters. In this case realistic bullet trajectories would emphasize different characteristics and functions of weapons and squad roles in more effective way. Without bullet drop effect even automatic riflemen – whose role should be provider of suppressive fire to area targets – can accurately challenge and hit covered snipers with their M249 SAWs over long distances. The AGP development team has confirmed that *America's Army v3.0*, utilizing the Unreal Engine 3, will feature ballistic system,<sup>70</sup> giving more credibility to the promise of “the most authentic military experience available” in terms of simulated combat. The upcoming version will introduce new features to the series, such as mobile vehicles (on regular multiplayer missions) and other weapon systems, such as mortars, which demand larger game area, and therefore also the need of more realistic weapon mechanics is also justified.

Mechanics concerning grenades have always been erratic in the official U.S. Army 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) The single spawn model of the game underscores players' skills to exploit qualities of grenades accordingly in order to survive and complete the mission, especially on CQB situations. The versatile qualities and mechanics, compared to many other FPS games, stem from this fact. The game features four types of grenades with different characteristics: M67 (fragmentation), M83 (smoke), M84 (stun), and AN-M14 TH3 (incendiary). There are two methods to deploy grenades:

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<sup>70</sup> Moderators of the AA:SF website forums have collected news concerning features of AA3 on a thread. See: <http://forum.americasarmy.com/viewtopic.php?t=260588>

throwing and rolling. Throwing range of grenades is approximately 35 virtual meters with 5 meter kill zone and 15 meters damage radius. The kill zone was reduced from the original 10 meters in v2.5.0. Players are able to shield their team mates from grenades by diving on them; ability exploited mainly on competitive matches. Grenade damage for proper falloff of fragments, which cause stun effect when hit, has also been adjusted to achieve more realistic effects. There is also a default yell that warns team mates of live grenades, which must be disabled in vicinity of the enemy, or it will reveal the position and intentions of a thrower. Fuse length has been problematic attribute for the development team. Originally M67 grenades had default fuse length, but it enabled unrealistic precision attacks. From v.1.3.0 (*Mountain Pass*) onwards the fuse varied from 4-5 seconds, making estimating the detonation more difficult and risky. Physic of spinning was also added to grenades.

The limitation of subjectivity, caused by the unique swapping paradigm, produces a visual paradox concerning behaviour of rifles and machine guns.<sup>71</sup> The fact that both teams see themselves as U.S. soldiers and their adversaries as the Opposing Forces (OpFor) extends naturally to weaponry. When a player from assaulting team picks up an AK-47, the equivalent for the M16A2 assault rifle, and discharges it with full auto, the defending team sees the weapon as M16A2 riffle being fired at automatic rate, even though the weapon only utilizes semiautomatic and burst modes. Machine gun paradox is similar: when an OpFor soldier picks up a M249 SAW, normally employing only the automatic firing mode, he is able to discharge the weapon with semiautomatic mode, because he sees himself as a U.S. soldier and the weapon as RPK, which employs both semiautomatic and automatic firing rate. Using foreign weapons causes a penalty to accuracy, because of their unfamiliarity to American soldiers.<sup>72</sup> Indigenous Force (IF) soldiers are not affected by this as they carry similar weapons to OpFor.

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<sup>71</sup> The swapping paradigm creates another visual paradox concerning camouflage and concealment. For instance in winter missions, such as *Mountain Pass* and *SF Arctic*, the white snow camo of the U.S. soldiers does not have any meaning as the opposing teams see each other wearing terrorist camo, which are normally darker and more easily discernible.

<sup>72</sup> Similar decrease in combat effectiveness occurs when players use weapons out of their class. For instance automatic rifleman is not as accurate with sniper rifle as advanced marksman is.

### 4.1.3 Character Physics

The importance of veracity in appearance saturates *America's Army*. For instance the AGP development team used real U.S. Army soldiers as actors and filmed them, rigged with motion-capture sensors, to guarantee highest level of realism in common operations, such as grenade throwing and basic posture. This was performed to simulate the operations according to the official doctrine. Sequence was so detailed that it has been used as a tutorial at the United States Military Academy (USMA) (Davis et al., 2004). Notwithstanding the literalness of bodily stances, the design method is not extended to every aspect of physical abilities, although *America's Army* introduces few procedural innovations.

The Combat Effectiveness Meter (CEM) is a truly innovative and noteworthy step towards authentic military experience, which raises the bar of realism in militainment. We can expect that these types of mechanics, which simulate mix of emotional and physical stress, become common feature in the first person shooter genre. CEM is situated to lower right corner of the Heads-Up Display (HUD) interface, next to stance indicator, providing information on player's ability to engage in effective combat. CEM has three levels: high (50-100%), moderate (25-50%), and zero-low (0-25%). Health of the player has an effect on CEM level and recharge. There are three levels of injuries: green (healthy – normal recharge), yellow (moderately wounded – slower recharge) and red (critically wounded - slowest recharge). High CEM level provides best fire control ability i.e. accuracy and movement capabilities. To obtain highest level player must remain motionless and use bipod and different types of sights when firing. Stance and breathing have integral role in fire control. Prone position gives the highest CEM boost. Weapon sways in sync with breathing. Moderate level occurs during movement, lowering accuracy to average. Zero-low level results from wounds and movement, such as sprinting and jumping. The bullet impact lowers CEM level and causes player's weapon to sway. Binding the CEM levels to movement is an effective way to impede "bunny hopping", movement technique to avoid enemy fire by repeatedly jumping. In the Army game players are not able to fire their weapons while jumping. Furthermore v2.5.0 implemented a stall time between each jump. Repeal of "bunny hopping" separates *America's Army* from other popular games within the FPS genre, such as *Battlefield-*, *Counter-Strike-*, *Call of Duty-*, and *Quake-* series, but there

are examples that use more extreme measures to root out the technique. In *Armed Assault* the avatars are not able to jump at all. Other factors effecting on combat effectiveness are distance to team members and naturally the combat environment. Player receives CEM bonuses in close proximity to the squad leader (high), fire team leader (moderate), and any team mate (small). Additional bonus is acquired if players share the line of sight (LOS) to an enemy combatant. The LOS is displayed in the Situational Awareness Indicator (SAI), which replaced the legacy compass on v2.7.0 (*Overmatch*). CEM level is reduced when a player is fired upon, simulating the effects of emotional stress on avatar's ability to act.

Similarly to weaponry, mechanics concerning movement are both realistic and unrealistic; some features have been simulated correctly, whereas others are sacrificed for the sake of playability. This genre convention becomes evident when comparing sprinting features of *America's Army* and *Battlefield 2*, the top selling first-person shooter game of 2005. In *AA* sprinting does not cause fatigue or stamina reduction, making it possible for a healthy avatar to run endlessly with maximum speed. The only impediment is the momentary decrease in player's CEM level. Matters contributing on the sprinting speed are wounds and type of weapons carried. Injured character is slower than unwounded; mechanic rarely employed by the genre. An infantryman with M16A2 moves quicker than an advanced marksman with massive M82A1 SAMR sniper rifle. In *Battlefield 2* players are able to sprint with full speed for a limited period of time. After the spurt they must wait for stamina to recharge in order to sprint again. Opposite to *America's Army* injuries do not have an effect on movement speed. The comparison demonstrates differences in approach to the realism vs. playability juxtaposition. Both games utilize two different characteristics that define realistic movement, but neither simulates both. Which of these approaches is more "real" or "authentic" depends on the reception of audience. The lack of balance is common for both games. It does not pose any hindrance on movement or fire abilities as a player moves on narrow or slippery surfaces, such as railings or piping. Characters can assume every posture available regardless of material or width of the surface. In addition surfaces do not affect player fire control abilities.

Modelling health and physical damage has always distinguished *America's Army* from other contemporary first person shooter games. The most notable differences are inability to respawn and absence of power-ups, features that are common in all other games of the genre, except in *Counter-Strike*. In *Battlefield 2* medics are able to administer health packs

or recover a fallen players with field defibrillators, whereas in *Call of Duty 4* health automatically regenerates after being injured. In the Army game absences of these features underline the value of a (virtual) “life” and emphasize the message, and at the same time the role, of team-oriented gameplay. Players must adjust their tactics accordingly and come out with a common strategy to complete the given mission. Version 1.9.0 (*Downrange*) introduced a new damage model, which highlighted the role of medics in combat situation. In previous damage model bullet hits caused specified amount of damage to player’s overall health, whereas in the new model the remaining health continues to lower, because of blood loss, until a combat medic staunches the bleeding of an injured player before. If the bleeding is not controlled player bleeds to death. The role of combat medic was reduced after v2.8.2 (*Overmatch*) as all medic qualified players were able to treat themselves with a single field dressing.

Different types of injuries have different effects on game characters body. Falling and fragmentation grenades have stun effect on avatar, which slower player’s ability to react. Bullet impacts cause avatar’s weapon to waver horizontally and vertically, underlining the importance of the first hit, as the player hit cannot immediately return to enemy’s fire with maximum accuracy. In CQB situations the importance of this feature will be emphasized. The effect of flashbang or M84 stun grenade has disorienting effect on the virtual body, affecting player’s ability to see and hear properly. Direct hit from a flashbang causes temporary blindness, which can last up to tens of seconds, and causes tinnitus that can last for minutes. Stun grenades can also kill seriously wounded player. Simulation of tinnitus impairs overall performance, as player is not able to distinguish sounds made by adversaries from ambient audioscape. Sound is as important element in enemy observation as sight; different surfaces produce different types of sounds, which reveal enemy’s position. Therefore sounds directly alter tactical level of gameplay, as players have to take into account the surface on which they move on and what movement mode they can employ. Observation can be significantly improved with high quality computer hardware. For competitive AA gamer proper audio devices are as important as the amount and latency of RAM, graphic card or high-speed CPU.

#### 4.1.4 Predictability of Combat

The relatively small spatial design is a practical resource to enhance intensity of gameplay, but at the same time it creates negative emergence on the simulated combat. Small game space force fire fights to be fought on certain collision points, making the experience of combat rather predictable and repetitive than dynamic. From this perspective we can conclude that combat in *America's Army* is far from stochastic experience: although we cannot precisely predict the exact course of a round ahead of time, we can conjecture the probable key positions, in which the outcome will be decided. Probabilistic nature of simulated combat emphasizes perfect memorization of map geometry rather than dynamic strategic thinking.

Attitudes and idiosyncrasies of gamers and their communities must be also acknowledged when analysing the predictability of combat in first person shooters. Most of the contemporary FPS games have incorporated statistic tracking systems into the game for evaluation purposes. This has led to the fact that the performance driven gaming is highlighted among large number of players as the most integral indicator of enjoyable gameplay, rather than the immersive experience. In the heart of performance driven gaming is of course competition, which is the defining factor of gaming culture. "Competition (formal and informal) is the keystone of videogame culture, and it motivates casual and hardcore gamers alike to hone their skills and evolve new strategies" (Herz, 2002:93). Although competition is generally a positive driving force in gaming culture, it can also create unwanted and negative effects on the gaming experience itself, such as extensive bug exploiting. These effects become painfully evident on public servers. Competing with game statistics, such as frag rate and experience points, can (and usually does) reduce the amount of risks players are willing to take. Because of this behavioural manner players tend to concentrate and familiarize themselves with limited number of maps in order to gain maximum Honor points and kill/death ratio. Same strategies and tactics are repeated, making the rounds seem almost identical.

Mastering the crucial collision points of the maps enables accurate spamming fire to foreordained targets, especially in open range maps, such as *Bridge Crossing* (v1.0.0). In *Bridge Crossing* experienced players can fire deadly spam shots on various locations from

the other side of the map without the hindrance of fog of war. These positions are known as spamspots. Other experienced players are able to evade these situations, because they know the firing positions, but for newcomers (read: n00bs) this type of firing poses a serious problem. Furthermore experienced players tend to team up on the same side in order to score more points; this activity is sometimes referred as “honor whoring”. Attempts to manipulate statistics are also common; certain group of players leave servers immediately, if they are killed on the first round without frags of their own, in order to maintain their fragrate. ArmyOps tracker needs few seconds to collect the data. In this way the death will not affect the overall rate. The perfect memorization of map geography and bug exploiting, rife in the online gaming, are examples of degenerate strategy. According to Salen & Zimmerman (2004) "a degenerate strategy is a way of playing a game that takes advantage of a weakness in the game design, so that the play strategy guarantees success." (p. 271)

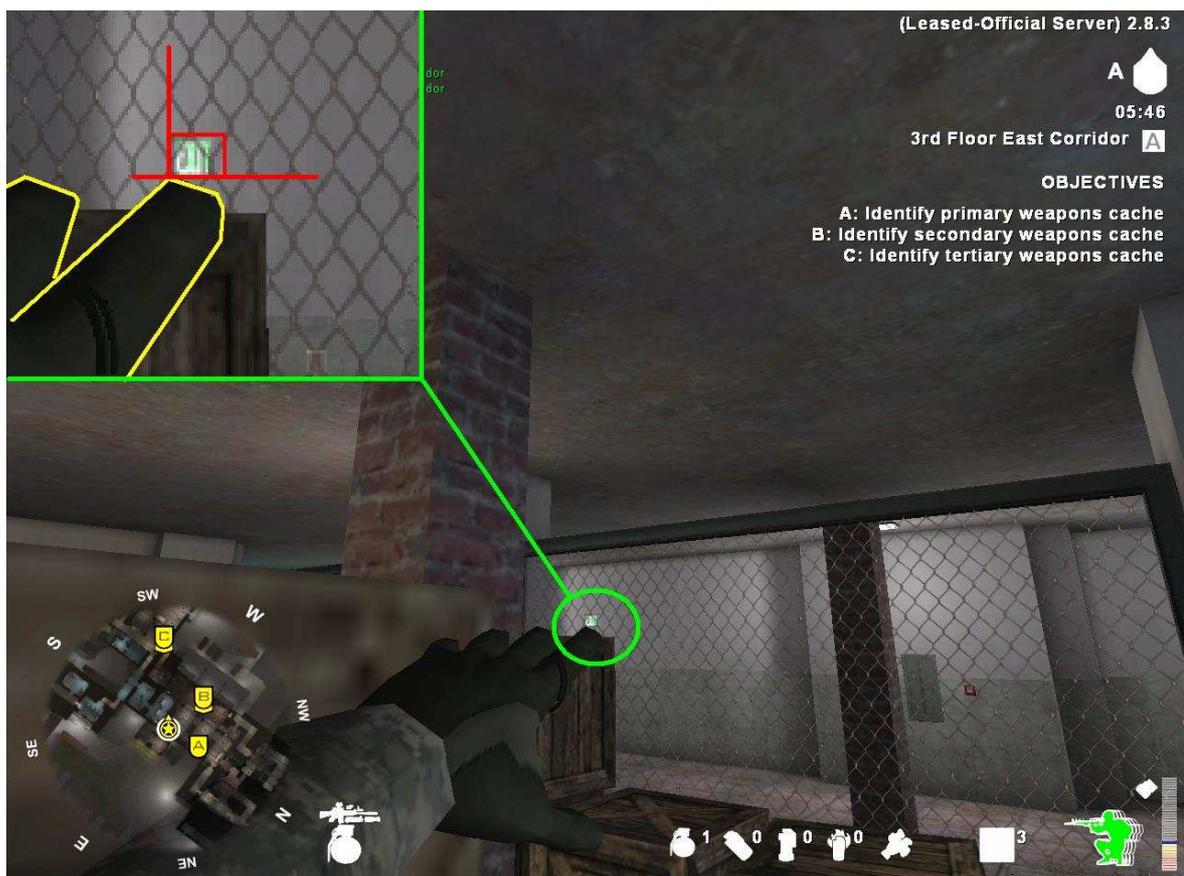


Fig. 7: ArmyOps Tracker has several tutorials, posted by users, which teach players how to exploit certain points in map geometry. The present screenshot is a visual tutorial of how to throw a grenade to a doorway leading to primary objective room on *Weapons Cache SE*- map.

One can argue that competitive nature of gaming culture follows the rules of bandwagon technique; everyone wants to join on the leading side even if the balance of gameplay suffers. I am sure that many AA gamers will disagree with this notion, but unfortunately few rounds on a public server will prove the argument right. Map rotation mode is perhaps the most practical design solution to disassemble the static nature of combat in the Army game. Enhanced Map Rotation mode was introduced in v2.5.0 (*Direct Action*), which allowed server administrators to define themed rotation sets. The mode encourages players to explore larger number of maps and in the process improve their tactical and strategic repertoire. However the mode proved quite unpopular and only handful of Enhanced Map Rotation servers remain. In addition developers should consider implementing a team balancing option – based on amount of experience points per team – into public servers to further promote meaningful gameplay. This could create additional, but solvable problems, as clan members would be situated to different sides when the teams are equalised.

Developers have introduced few innovative procedures, concerning spatial design and mechanics that govern them, to evade the problem of combat predictability and thus making the game experience more dynamic. Innovations concerning the game mechanics: Random spawns etc. were introduced to make the game experience seem more dynamic. AA:SF v2.4.0 (*Q-Course*) introduced four SF multiplayer missions, *Courtyard*, *PCR (Precious Cargo Recovery)*, *Blizzard* and *SF Water Treatment* featuring random spawn and objective points, making them perhaps the most versatile maps of the game. After the release of *Q-Course* several new missions have employed these procedures, including maps such as *SF Extraction* (v2.5.0), *SF Dockside* (v2.5.0), *Steamroller* (v2.7.0), *SF Refinery* (v2.8.1) and *SF Old Town* (v2.8.1). Random spawn points and objective locations increase the level of replayability favouring strategy over predictability in gameplay. Furthermore the negative impact of exploits, such as grenade and M203 spamming, is considerably reduced since the enemy placement and routes have become more difficult to predict. Random objective locations force both teams to search for them and to adjust their strategies and tactics accordingly to given situation. Nieborg (2006) correctly points out that because of these innovations "America's Army players can no longer take the spatial design of the game's most recent maps for granted and gamers fighting a virtual war in an emergent game space have to refocus their attention" (p. 9). The nature of combat also changes as both teams try to complete the same mission, instead of the traditional defence and assault division. *Q-Course* also introduced new inventory objective type in which

transportable objectives must be delivered to specific or random extraction points. If a player carrying the objective dies, other players must retrieve it in order to complete the mission. Certain maps, such as *Border*, released in v2.6.0, have multiple extraction points, balancing effect on defence and assault teams. The basic notion in *AA* is that defending team has an advantage in their side, because assaulting team is expected to make the initiate actions, to which the defending team is able to response from better cover. Multiple extraction points complicate the mission of the defending team and in the process increase the need of tactical thinking and team work.

#### 4.1.5 Levels of Strategy

As the analysis of game settings and mechanics has highlighted, the major disruptive factor concerning absolute realism in military games lies in the impossibility to simulate all the realities of war; hence the concept of engaging realism. Another good example of the concept is the absence of strategy in its complexity and multilevel edifice. Albeit the game is authentic in its level of appearance it does not convey information concerning the plan of actions that govern the operations and objectives of the protagonist, U.S. Army. In his book, *Strategy – The Logic of War and Peace* (1987), Edward Luttwak specified five different levels of strategy, which pervade the realm of conflict: 1) technical; 2) tactical; 3) operational; 4) theatre; and 5) grand strategic. Nieborg (2005) correctly pointed out that *America's Army* is able to employ only two levels of Luttwak's model: technical and tactical. Traces of other levels are present, but they are too vaguely expressed in order to be defined as truly existing strategic levels.

The lowest level of strategy, technical, refers to questions of technology from mechanical working of the weapons to communication. Tactical level can be defined as fighting with a certain kind of military units that have relevant tactical training and aptitude. Tactical level requires skills “to make good use of the terrain and the weapons at hand within the particular context of each encounter.” (Luttwak, 1987:83) In first person shooters, such as *America's Army*, which portray light infantry combat without vehicles, tactical and technical dimensions of strategy are partially interlocked. Tactics, which affect the final outcome of simulated combat, includes choosing right class and weapon in particular combat situations i.e. the technical level. For instance automatic riflemen with M249 SAW

provide supportive fire to gain fire superiority or are used as spearheads in CQB situations. Perhaps the most used real life Infantry Movement Technique (IMT) in competitive AA matches (or in FPS genre in general) is the leapfrog procession of bounding fireteams; when a squad moves towards an objective one fire-team provides suppressive fire as the other fireteam advances. As the advancing team in the front arrives to a suitable position, it forms the base of suppressive fire allowing the rear fireteam to advance (Larsen, 2005). In virtual theatres of war similar IMT is used also on fireteam and “battle buddy” level. However tutorials for IMTs, such as bound by fire-team tactic, are not present in *America’s Army*; there are no training simulations that would pass this type of information to the players. Instead players have learned them while playing or use appropriate tactics based on their earlier experiences with FPS games. When reflecting this notion to Army’s pre-development requirements of authenticity it becomes clear that some of these demands are more of marketing ideas than actual imperatives bearing significant meanings.

Operational level seeks “to attain the goals set by theatre strategy through suitable combinations of tactics.” (Luttwak, 1985:175) Therefore this middle level of strategy stands between tactical and strategic. Operational level cannot exist in the official Army game as the two final levels of the hierarchy are absent. The theater level strategy is a spatial one, which disregards “the political, economic, and moral character of the territory in question, treating cherished national lands rich in resources or production exactly on the same footing as alien desert.” (Luttwak, 1987:113) Three factors define this level of strategy: 1) who are the enemy; 2) where are they engaged; and 3) how to define victory. In the official U.S Army game all these dimensions are dismissed or implicitly expressed, leaving plenty of room for the trap of intentional fallacy. Identity of the enemy has become more ambiguous as the game series has evolved.<sup>73</sup> Missions, which according to developers are modelled after real military operations, can only be situated to particular geographical regions by interpreting signs used in level design. Victory is not a state which can be truly achieved, because of game’s infinite teleology.<sup>74</sup> According to Luttwak the theater of war is a self-contained military whole, not just a part of a larger whole.<sup>75</sup> In

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<sup>73</sup> Evolution of the enemy will be minutely discussed and analysed in next sub-chapter, 5.1.2 The Opposing Forces.

<sup>74</sup> See: Espen Aarseth’s (2003) multi-dimensional typology of games in virtual environments in Level Up Conference Proceedings. M. Copier and J. Raessens (eds.). I argue that *America’s Army* employs both finite and infinite teleologies, depending whether the game is played on public server or as competitive match. Generally in AA servers do not use map rotation mode, which makes definition of a true winning state impossible, as the game can continue as long as the map is not changed. In competitive matches teams play given number of rounds and the winner is the team who wins the most. In addition there is no clear end in multiplayer games, compared to single-player games, as they continue as long as there are people playing the game.

<sup>75</sup> We must note that Luttwak wrote his book during the Cold War, when the front lines between the enemies were more easily distinguishable.

asymmetrical warfare of the 21<sup>st</sup> century, which GWOT is a perfect example of, belligerents are not bound by geography; they operate on multiple fronts, which impose difficulties in defining the theatre of war as there are no established lines. The conflict is global instead of local.

The level of grand strategic includes the core objectives and interests behind any military campaign. Luttwak described the highest level of the hierarchy as follows:

“For at the level of grand strategy, the interactions of the lower, military levels, their synergism or contradictions, yield final results within the broad setting of international politics, in further interaction with the non-military transactions of states: the formal exchanges of diplomacy, the public communications of propaganda, secret operations, perceptions of others formed by intelligence officials and unofficial, and all economic transactions of more than purely private significance.” (p. 179)

In AA goals of represented conflict are only ephemerally expressed: to destroy the enemies of American way of life (life, liberty and the pursuit for happiness) and those who aim to subdue the democratic form of governance. Like with the theater-level definition of the grand-strategic level of the game requires players to make loose “between the lines” interpretations of the intended meaning. One can argue that rationale behind this approach is to attach player’s individual perception of what the GWOT is about to the common narration shared by other players, and of course to avoid criticism that would follow if the official version of game world’s grand strategy would be revealed.

Finally we can also infer that the gaming culture itself has part in this distortive process as the use of degenerate strategies and bandwagoning tendency demonstrates. In order to produce more authentic synthetic theatres of war for entertainment purposes the gaming culture must mature and evolve with the technology. Military training simulators do not have similar problems; it is in the best interest of soldiers to act as in reality, instead of trying to exploit the bugs within the training system, as they train for real life combat situations, where rushing and bunny hopping are not an option. In games the players must also beat the system in order to beat their virtual adversaries, who strive to exploit the same software bugs. In recent years there has been gradual development of gaming phenomenon known as tactical realism or military realism, in which clans and other social formations strive to imitate the realities of warfare, from strategies to hierarchy, to their best abilities.

## 4.2 Representation of Violence

The academic debate concerning negative effects of video game violence is a highly controversial topic, polarized between two dissenting perspectives. One side aims to link the consumption and exposure with media violence to aggressive and violent behaviour, whereas the other contests such causality. One side argues that a clear consensus on the effects has been reached, whereas the other denies its existence. Gentile and Stone (2005) point out that the effect of video games should be conceptualized through dimensions of amount, content, form, and mechanics. These dimensions would allow “researchers and the public to move beyond the dichotomous thinking that has too often characterized the debate around video games, in which the discussion is reduced to a question of whether video games are good or bad.” (p. 355)

Media violence researchers usually support and justify their argument with the General Aggression Model (GAM). The GAM is used to analyse a cyclical pattern of interaction between the person and the environment i.e. how situational and personal variables influence person’s internal state. According to the model variables can affect behaviour, decision and meaning making processes in three primary ways: by influencing current cognitions, affective state and physiological arousal (Carnagey & Anderson, 2005). Some argumentations also seem to follow the hypodermic needle model, the “magic bullet” principle in media theory. The principle derives from a notion that the mass media effects and intentional messages are directly received and wholly accepted by the audience without criticism or choice. The hypodermic model of audience response insists that the meaning is injected into our minds (Barker, 2003). Craig A. Anderson and Karen E. Dill (2000) exemplify this trend of ideas in their analysis on the video game violence:

“Each time people play violent video games they rehearse aggressive scripts that teach and reinforce vigilance for enemies (i.e., hostile perception bias), aggressive action against other, expectations that others behave aggressively, positive attitudes towards use of violence, and beliefs that violent solutions are effective and appropriate.” (p.774)

Their argument asserts that exposure to game violence automatically influences the players and their meaning making processes, activating the tendency to imitate. Players’ comprehension of the line between play and reality – between simulated and real violence

– is less significant factor in the equation. The lucid approach to violence shape stances and attitudes by default. Obviously, they do not claim that game violence would turn all players of such games into violent criminals. Game worlds are considered more powerful objects of identification than the traditional visual mass media, because of the interactivity and active roles that the players adopt (Salokoski, 2004). Professor Brad Bushman of Institute for Social Research at University of Michigan follows similar train of thought. He divides television viewers and gamers into two separate categories: the viewers may or may not identify with the message or characters in films or programs, whereas the gamers automatically identify with the violent characters, because their control them, in other words are them (Bushman, 2004). The array of narrative and dramaturgic means used to deepen the identification process should not be passed over. In films and television programs, antiheroes and antagonists are as common main characters in cinema and TV series as they are in digital games. These techniques are employed seldom by first-person shooter genre that usually attracts the players with action and online game environment, not with great narration. His claim includes an assumption that the gamers are in an exclusive position, when it comes to identifying with the message sent and accepting it as positive and appropriate behavioural model. His notion is a direct opposition to a viewpoint presented by ludologist Jesper Juul (2005). Juul argues that players “do not automatically assume that the actions of a protagonist are “good” or "right" (p.191).

Analogy between smoking and media violence has also been made. In an article for the “American Psychologist” journal, Bushman and Anderson (2001) described media violence as an addiction, in which repeated exposure reduces the anxious effects and leaves the player/viewer wanting stronger doses of violence, just like with cigarettes. Lt. Col. Dave Grossman and Loren W. Christensen offer one of the most radical commentaries concerning the subject. In their book, *On Combat* (2004), they characterize violent video games as “murder simulators” that teach children to commit mass murder; the proper usage of these games are the military and law enforcement training purposes. The authors argue that senseless acts of juvenile violence are manifestations of skills and conditioned reflexes, learned in the game environment, in practice. Grossman and Christensen predict that as video game technology is distributed to third world countries, and become commonly available, the U.S. military will face opponents that are trained with these

“mass murder simulators”. Grossman, a West Point psychology professor and Professor of Military Science, is also the founder of a new scientific field termed as “killology”.<sup>76</sup>

Criticism on the causal connection between media violence and aggression usually concentrates on the methodological and theoretical problems to challenge the accepted norms in media studies and psychology. Jonathan Freedman of the Department of Psychology at University of Toronto reviewed volumes of media violence studies. In *Evaluating the Research on Violent Video Games* (2001) he pointed out number of methodological and theoretical problems concerning the media violence research. According to Freedman the studies produced inconsistent and even contradicting evidence. He writes that although there is some evidence that people who like and play violent video games tend to be more aggressive than those who like and play them less, the evidence is far from being overwhelming and definitive. Freedman argues that these findings are purely correlational and do not explain whether playing violent games actually causes aggression. There is also slight evidence that immediately after playing violent video games there is an increase in aggressiveness, but he continues that the findings are weakened by the limitations in the research providing alternative explanations of the effect. Furthermore Freedman points out that there is no evidence available that violent games cause long-term increase in aggressiveness or violence. He concludes that further research may be needed to indicate violent games as harmful to children and adults; current work does not show that such games constitute a public health risk.

In an article, *Do Video Games Kill?* (2007), Karen Sternheimer examines how video games have become contemporary folk devils, accused of posing a serious threat to children’s well being. She postulates that politicians, media coverage and other moral crusaders use video games as convenient culprits in trying to explain senseless and random occurrences of violence. For instance, *Doom* and *Quake II* were linked to the school shootings in Paducah, Kentucky; Springfield, Oregon; and Littleton, Colorado. Sternheimer situates the ongoing media panic about video game violence into a larger context. She draws a parallel between the current media panic around video games and older dismays that have emerged with the appearance of new technologies in youth and popular culture. Sternheimer names the attempt to decontextualize violence as the biggest problem of media violence research. Such approach exonerates the effect of environment

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<sup>76</sup> Killology Research Group: <http://www.killology.com/>

to aggressive behaviour, such as unemployment, family violence and poverty. Last, but not least: statistics of victimization rates, gathered by the U.S. Department of Justice, do not support the claims of media violence researchers. National Crime Victimization Survey Violent Crime Trends 1973-2005, demonstrates that number of victimizations per 1,000 population (age 12 and over) has considerably decreased. If the exposure to video game violence, in a society saturated with similar media, would pose a public health risk the curve would have an upward trend.

Effects of video and computer game violence have been studied by analysing different elements of the game content. Following factors have been considered to be significant for the analysis (Mustonen, 1997, 2001; Salokoski, 2002 in Salokoski, 2004:198).

- The quantity of violence presented in the game and how predominant it is for the gaming experience (amount of violence).
- The brutality and realism of the game violence (intensity of presentation).
- The idealization and criticism of violence in the presentation (attitude towards violent content).

Militainment refers to entertainment that celebrates the military and its institutions. In a documentary, *Militainment, Inc. – Militarism & Pop Culture* (2007) by Roger Stahl, the concept is defined as “war packaged for pleasurable consumption.” *America’s Army* is a perfect sample of militainment: it commends the U.S. Army and is developed and published i.e. controlled by the same institution. As an artefact of war, produced by the military-entertainment complex, the game naturally depicts warfare – violent conflict between two belligerent forces. In such game world the use of force is the predominant method of interactivity between adversaries; it is a mean to an end that players employ in order to achieve objectives. It is an imperative for meaningful gameplay.<sup>77</sup> The contemporary FPS games are surely entertainment, which glorifies warfare and soldiering profession, but does not feast on the graphical depiction of violence itself. Games like *Battlefield II* or *Call of Duty 4*, portraying the magnificence of techno-war, do not use highly detailed simulation of violence as a hook; their appeal lies in team- and objective-based gameplay. *America’s Army* follows this genre convention. Simulation of physical

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<sup>77</sup> Katie Salen and Eric Zimmerman (2004) state that meaningful play consists of three elements: design, system and interactivity. Design dictates the set of rules. System refers to the complex whole with elements and rules. Interactivity points to the relationship between the player, the system, and other player.

trauma is extremely sanitised and clean. Weapon inventory does not include melee weapons that would make the act of killing seem more up close and personal. When a player is shot the bullet impacts are depicted with small puffs of blood. The impacts and fragments of grenades and RPGs do not dismember or disfigure avatar's body; only traces of death are the closed eyes. The implementation of the Karma Physics Engine in *AA:O Downrange* (v2.1.0) replaced the static death animations with a type of procedural animation known as ragdoll physics.



Fig. 8: U.S. soldier takes down an OpFor sniper with his M16A2 in *River Village* -map.

The Army has also implemented a host of parental control options that allow parents to determine the gameplay settings; for instance they can select whether game missions are playable in normal or MILES mode. Controls are locked with a password. In MILES mode the game character is not killed: when a player is tagged the avatar just takes off his helmet and sits down. The Entertainment Software Rating Board (ESRB) rates *America's Army* suitable and appropriate for teen audience. Games rated with T (Teen) title "have content that may be suitable for ages 13 and older. Titles in this category may contain violence, suggestive themes, crude humor, minimal blood, simulated gambling, and/or infrequent

use of strong language” (ESRB, 2006). Army’s attitude to whether children 13+ should know what the U.S. Army does is as follows: “Young adults can see how our training builds and prepares Soldiers to serve in units in defense of freedom. [...] In elementary school kids learn about the actions of the Continental Army that won our freedoms under George Washington and the Army's role in ending Hitler's oppression. Today they need to know that the Army is engaged around the world to defeat terrorist forces bent on the destruction of America and our freedoms.”<sup>78</sup>

Press and other critical commentators of the game have criticised its sanitary representation of violence and human suffering. They accuse the Army game for not teaching the players about the true horrors of war. Inattention to the consequences of warfare has very practical reasons. The purpose of the official U.S. Army game is not to teach the possible recruits the realities of war, but to represent soldiering profession as appealing career choice. Realistic representation of physical trauma, with severed limbs and screams of the dying soldiers, would hardly inspire players to enlist and serve the recruitment purpose of the game. Furthermore raising the level of presentational realism would cause the game to be rated as suitable for mature audiences alone.<sup>79</sup> Mature (M) rating would significantly decrease the size of the game’s target demography; the Army could not legally approach members of “wired generation” below recruiting age of 17. From this perspective one cannot assume that the Army would deliver deathblows to its own public relations initiative. Moreover the hyper-realistic simulation of warfare, including every imaginable aspect ranging from emotional to physical trauma, would not be developable, let alone playable. Representation of violence puts the Army between a rock and a hard place; developers are faced with a choice between two unsatisfactory options. Realistic illustration would harm the recruiting purposes and glazing over the consequences of war exposes the AGP to vigorous criticism. In his analysis of AA Ian Bogost (2007) argues "the decision to avoid graphic violence and dismemberment more likely underscores the creator’s concern for its critics than its beliefs about the real consequences of war (p. 79)."

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<sup>78</sup> America’s Army Frequently Asked Questions (FAQ) – Parents Info: <http://www.americasarmy.com/support/faqs.php?t=9>

<sup>79</sup> Games with M-descriptor include content that may be suitable for persons ages 17 and older. Titles in this category may contain intense violence, blood and gore, sexual content and/or strong language. See: ESRB Game Ratings and Descriptor Guide: [http://www.esrb.org/ratings/ratings\\_guide.jsp](http://www.esrb.org/ratings/ratings_guide.jsp)

When comparing the representation of violence in *America's Army* and *Soldier of Fortune II: Double Helix*<sup>80</sup> (2002) – one of the most gore-soaked games in FPS genre – the focal point of simulated combat in the official U.S. Army game becomes evident. According to Juul (2005) violence in video games can be a part of a message or a cheap trick for increasing sales and attention. In the case of *SoF II* it is definitely used to catch attention, whereas in *AA* the use of force is usually justified with greater cause. One can argue that the main attraction and innovation of *Soldier of Fortune II*, rated for mature audiences, is exuberant engorgement of gore and dismemberment. The game employs the GHOUL 2.0 damage model engine that features 36 different hit zones, making possible the extremely detailed depiction of gore. In comparison *America's Army* has 10 hit zones. A video gaming website, GameSpot, described *Soldier of Fortune II* accurately as “a well-made meat-and-potatoes shooter with a keen eye for the forensic pathology of head wounds.”<sup>81</sup>



Fig 9: Gore effects with the GHOUL 2.0 damage model engine in *Soldier of Fortune II: Double Helix*.

<sup>80</sup> The Marine Corps has used the first installation of the series, *Soldier of Fortune* (2000), for training purposes at its Infantry Cognitive Skills Lab.

<sup>81</sup> *Soldier of Fortune II – Double Helix* review by Game Spot: <http://www.gamespot.com/pc/action/soldieroffortune2dh/review.html>

Simulation of bloodshed and physical trauma can also impinge behaviour of certain players and thus shape the gaming experience itself. It is a common activity on *SoF II* servers for players to further mutilate and mangle the fallen adversaries with melee and projectile weapons. Such behaviour can be considered as an example of short-term aggression, but whether it is a manifestation of long-term aggression and desensitization to violence is another matter. This kind of demeanour can be regarded as general mischief, a known form of “recreation” in online gaming environment. It is performed to annoy and provoke the fallen player in question. Similar activity is practiced quite rarely on *America’s Army* servers, since firing at dead enemy does not have any graphical impact. In certain first-person shooters this kind of conduct is related to core game mechanics. For example in *Wolfenstein: Enemy Territory* (Splash Damage, 2003) players inflict additional damage on fallen enemies to prevent them from being healed by medics.

### 4.3 Representation of Warfare

The initial motive and authorization of using force in *AA* is the Global War on Terror (GWOT), initiated by the Bush administration after the terrorist attacks on September 11, 2001. The GWOT also defines the idealization and criticism towards the use of force and violence. In 2006, President Bush gave a speech in the Johns Hopkins University, in which he compared the War on Terrorism to the Cold War.

“While there are important distinctions, today's war on terror is like the Cold War. It is an ideological struggle with an enemy that despises freedom and pursues totalitarian aims. Like the Cold War, our adversary is dismissive of free peoples, claiming that men and women who live in liberty are weak and decadent -- and they lack the resolve to defend our way of life. Like the Cold War, America is once again answering history's call with confidence -- and like the Cold War, freedom will prevail.”<sup>82</sup>

These remarks can be reflected on the concept of Manifest Destiny, which underscores certain themes: 1) the virtue of American institutions and people; 2) the mission to spread these institutions; and 3) the destiny or providence from God to accomplish this mission. In the contemporary usage of the concept the territorial expansionism has been replaced by interventionism. The post 9/11 threat has strengthened the idea that the benign power of the United States is needed to overcome the chaos and violence in the Hobbesian world, full of

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<sup>82</sup> Remarks by President Bush on the Global War on Terror: <http://www.state.gov/r/pa/ei/wh/rem/64287.htm>

omnipresent evildoers dedicated to destroy the American freedom and democracy (Boggs & Pollard, 2006). *America's Army* does not employ all the themes of Manifest Destiny as such; only the themes of virtue and mission are present. Rhetorical terms such as “American way of life” and “freedom” are used to justify the virtual warfare. For political correctness the theme of providence is absent from the rhetoric.

The defensive and legitimate use of force is emphasized through wide array of explicit and implicit messages. Certain messages echo through the AGP, from game level to metagame level. Situation descriptions and briefings render The Opposing Force (Opfor) as the aggressor and the U.S. Army as the defender and liberator. For instance in *Radio Tower* – map, released in *AA:O* v1.6.0, the objective of assaulting team is to liberate international aid workers from the hands of Taliban fighters and the mission of defence team is to repel counter-attack and defend the aid workers while waiting for extraction. This kind of approach is used to assert the blame for initiating the violence and hostilities on the aggressor. It also helps to distinguish the noble and rational principles of the defender. The dichotomy between aggressor and defender is further emphasized by underlining the inhuman nature and unlawful actions of the enemy combatants that forces the U.S. Army to react. Parallels to past real-world events are also used to authorize the use of force in the game world. The mobile version of the game, *America's Army: Special Operations* (Gameloft), is located to a fictional country, but the situation resembles circumstances before the First Gulf War in 1990, when Iraq invaded the state of Kuwait.

“The unruly state of Corbalia has just invaded the nearby land of Liberty and is threatening to conquer the entire region. After negotiations with Corbalian leaders to no avail, the international community has decided to vote for a resolution to stop the invasion. The U.S. Army will participate in the operation.”

The marketing slogans are also harnessed to support the rhetoric of defensive action. In 2003, *America's Army* was marketed with slogan “Citizens. Countries. Video Games. The US Army keeps them all free.” The official game tagline, “Empower Yourself. Defend Freedom”, conveys similar idea. The tagline implies that we must engage ourselves in armed combat in order to defend democracy from totalitarianism. This kind of textual rhetoric is used to represent the U.S. Army as a institution committed to uphold the ideal of peace. The recruitment purpose of the game, which romanticizes the warrior culture,

shapes the attitude and approach towards violence and use of force. The use of force by U.S. Army is also portrayed as extremely effective, as the swapping paradigm limits players' view point to American perspective (see 2.3.1). The Army wins every round and achieves its objectives, but at the same time the swapping paradigm creates an unintentional paradox; the OpFor also wins every round, locking the belligerent parties into a perpetual struggle, in which the winner is never really sort out.

## 5. SENDING EXPLICIT AND IMPLICIT MESSAGES

This chapter treats with the two belligerents, U.S. Army and the Opposing Forces, which battle in the virtual theatre of war, and the politics that govern this environment. In addition the chapter aims to provide thematic background to the official U.S. Army game by reflecting its dominant themes and ideas to recurrent and traditional trends in Army's recruitment advertisements. I acknowledge that I may fall into the trap of intentional and affective fallacy; I can only assume the true meaning intended by the author and the emotional effects the game has on its players. Furthermore games as a form of interactive entertainment leaves room for variety of interpretations and different readings of the same ergodic artefacts<sup>83</sup>. I employ the method of content analysis to identify certain explicit and implicit messages that are used to construct a persuasive and monochromatic view of the world and warfare. Dimensions of appearance, game avatars, level design and ideology are examined by analysing the style of their representation.

The act of representation is one of the central practices in culture production and the form to which meaning is encoded. Hall (1997) discusses the relationship between representation and meaning making. "We give things meaning by how we represent them – the words we use about them, the stories we tell about them, the images of them we produce, the emotions we associate with them, the ways we classify and conceptualize them, the values we place on them." (p. 3) Meaning is always a social construction, targeted to a particular audience. The Army uses a free Internet-deployable FPS game as a representational system to replace vicarious experiences about the institution with virtual one. An array of symbols and signs, such as sound effects, textual elements and computer-generated simulation, is utilized to convey conceptions and value systems to a third party i.e. players. As a channel of communication digital games are extremely effective, as they have become one of the most popular forms of recreation that exceeds the boundaries of gender and age groups.<sup>84</sup>

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<sup>83</sup> Espen Aarseth (1997) defined texts that need non-trivial effort from the reader as ergodic. Although the concept is mainly used in context of interactive narratives and cybertexts, its usage in this case is justifiable, because of the explorative and configurative user functions of digital games.

<sup>84</sup> According to Entertainment Software Association's (ESA) report, *Essential Facts About the Computer and Video Game Industry – 2008 Sales, Demography and Usage Data*, the average age of American game players is 35. 65% of American households play computer or video games. The gender distribution is 40% female and 60% male.

## 5.1 The Belligerent Parties

The fictional version of the Global War on Terror (GWOT) features two antitypes. To state the obvious, the protagonist of the game world is the U.S. Army, representing authority that defends legitimate order, power relations and common ideals of the civilized world. Naturally the principal character of any “drama” requires an antagonist that sets the chain of events into motion and underlines the characteristics of the protagonist. The proponents meet on a synthetic battlefield, which portrays an ideological conflict between totalitarianism and democracy, war between freedom and fear.

In AA the objectification of the subject is created through “us” and “them” division. The propaganda technique of glittering generalities is extremely practical way to create particular representation of characteristics and moral values of the protagonist. Correspondingly representation of the antagonist is produced through formulaic and one dimensional portrayal, with inverse ideals. Such binary opposition is perhaps the most simple, yet effective, method of objectification. As J.C. Herz stated in her often quoted book, *Joystick Nation* (1997): “you can’t humanize the enemy, even in sim” (p. 203). Together these two antitypes construct a system of differentiation, a set of functions known as “dividing practices” (Foucault, 1982).

### 5.1.1 U.S. Army

The initial idea behind the design of *America’s Army* was to construct a virtual copy of the U.S. Army for strategic communication purposes. Before the development Army placed detailed requirements on their game’s appearance:

“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).

Developers aim to reflect realities that construct the U.S. Army by focusing on external aspects of organizational structures, values and appearance. Players choose their positions

and adapt roles imitating real infantry squad organization. Military terminology, acronyms and jargon saturate the textual mode of expression from mission and situation descriptions to in-game narration, forming a common language between the author and the subject. Representation of the U.S. Army soldiers is meticulously portrayed. In-game communication with hand signals demonstrate how the U.S. Army soldiers communicate in close range engagement operations. Hand signals feature eight different signs: “stop”, “move out”, “ready”, “negative”, “double time”, “look”, “affirmative”, and “get down”.<sup>85</sup> The hand signals are more of an aesthetical gimmick, modeled to enhance authenticity, than practical means of communication. The intent is good, but its realization and incorporation to gameplay is proved quite unsuccessful as the signals are mainly used to amuse other players. Furthermore third-party VoIP (Voice over Internet Protocol) software, such as TeamSpeak or Ventrilo, has rendered in-game communication useless to a certain extent, especially on competitive level. On public gaming it still has a function.

Needless to say that modelling of the current U.S. Army weapons, combat gear and other equipment are extremely detailed. *America's Army* is the first game to feature the new Army Combat Uniforms (ACU)<sup>86</sup> with pixelated camouflage pattern, known as “digital camo”, Interceptor body armour, Modular Lightweight Load-bearing Equipment (MOLLE) and MICH (Modular/Integrated Communications Helmet) with NOD (Night Observation Device) attachment. The state-of-art Camelback hydration systems have substituted canteens in character models. Perhaps the most paramount reflections of the basic reality in the game are the training simulations. The simulations are utilized to educate potential recruits about the Army; they demonstrate how the Army trains and where these drills take place. As a result the AADT has strived to model the training grounds to the smallest detail to convey highest level of authenticity possible. During the pre-development phase designers visited in nineteen different Army posts – including Ft. Benning, Ft. Polk, and Ft. Lewis – documenting the grounds and shooting motion-capture footage for animations and kinetics (Davis et al., 2004) Currently the game features three modeled Army posts and training centers: Ft. Benning, Brooke Army Medical Center, and Ft. Bragg.

The Rules of Engagement (ROE), Army Core Values, and Soldier's Creed constitute set of rules and Army values that the service personnel are encouraged to follow. These three

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<sup>85</sup> See America's Army Manual: [http://manual.americasarmy.com/index.php/Combat\\_Communications](http://manual.americasarmy.com/index.php/Combat_Communications)

<sup>86</sup> Army Combat Uniform (ACU) replaced the Battle Dress Uniform (BDU) and Desert Combat Uniform (DCU) worn since the 1980s and -90s.

moral pillars are extremely important for in-game indoctrination process as they define the expected code of conduct of a soldier and emphasize the Army as value-laden organization. The pillars demonstrate how textual mode of expression is explicitly utilized for strategic communication between the author and the user. Furthermore they set the right tone in gameplay in order to avoid complete 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.” (Davis et al., 2004:9) The ROE determines how, against whom, when and where force can be used. In *America’s Army* this complex set of regulations that enforce the laws of land warfare and socially appropriate behaviour have been reduced into two simple rules: 1) player cannot injure or frag fellow team members; and 2) player cannot injure or kill civilians and informers. Bogost (2007) argues that "the direct mapping of in-game behaviour to the very ability to continue playing serves as a convincing procedural rhetoric for the chain of command, the principal structure new recruits must understand immediately." (p.77) The Seven Army Core Values, adopted in the mid 90s, describe traits that soldiers are expected to emulate. These values are:

1. **Loyalty:** Bear true faith and allegiance to the U.S. Constitution, the Army, your unit, and fellow Soldiers.
2. **Duty:** Fulfil your obligations.
3. **Respect:** Treat others as they should be treated.
4. **Selfless Service:** Put the welfare of the nation, the Army, and your subordinates before your own.
5. **Honor:** Live the Army Values.
6. **Integrity:** Do what’s right, both legally and morally.
7. **Personal Courage:** Face fear, danger, or adversity, both physical and moral.

The Army values, forming an acronym LDRSHIP, are effectively incorporated into the gameplay. In addition that they appear on AA:SF homepage’s animated banners and on game’s loading screens, the values offer loose foundation for the unique Honor system. Albeit simplified, players are rewarded by complying with the guidelines. Of all factors effecting point scoring, winning rounds, completing objectives, demonstrating leadership, killing the enemy, and administering first aid relates indirectly or directly to the Army values.

The Soldier’s Creed (see fig. 10), also known as Warrior Ethos, is inculcated to recruits during the Initial Entry Training (IET), which includes Basic Training, One-Station-Unit-

Training (OSUT), and Advanced Individual Training (AIT). Compared to the Army values the in-game usage of the creed is limited; it is mainly used as a textual effect in loading screens.

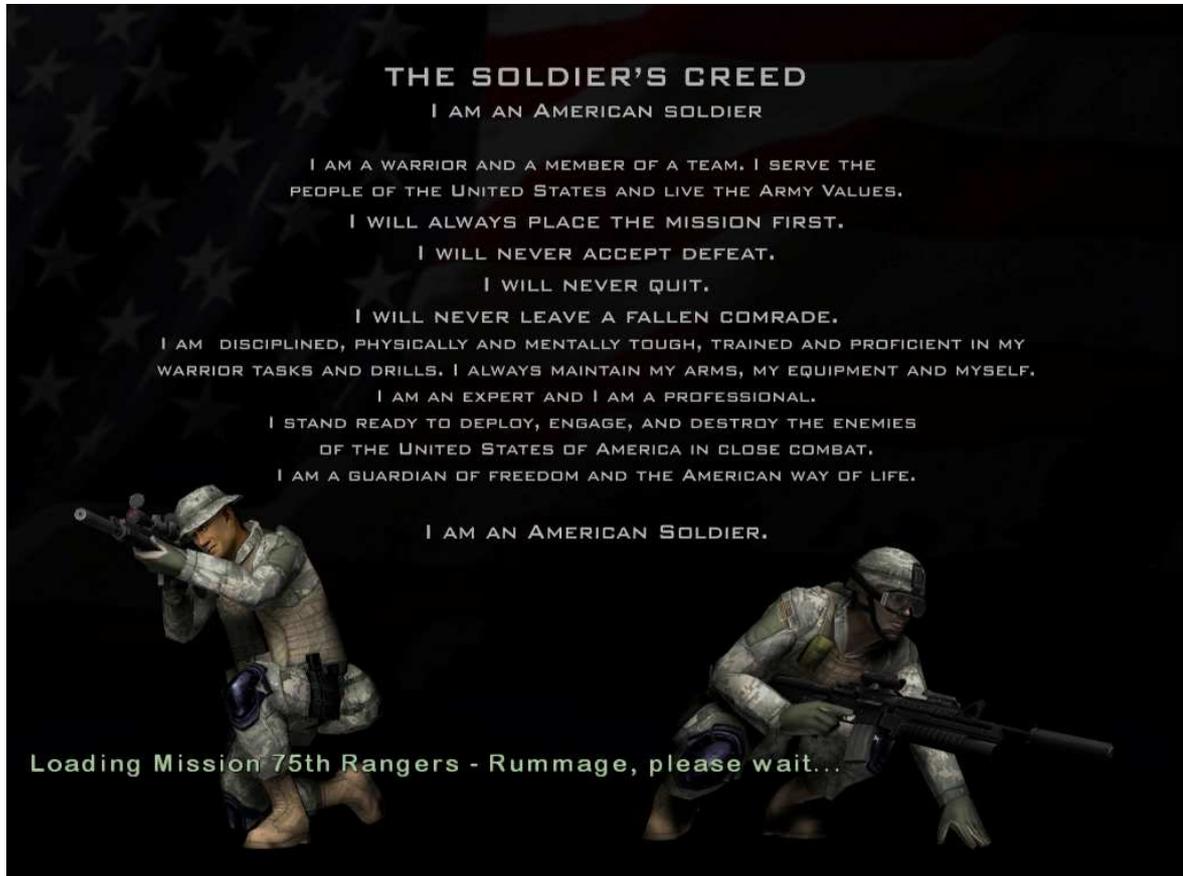


Fig 10: The Soldier's Creed appears on game's loading screens as part of illustration.

One central impetus behind the Real Heroes program was to make the Warrior Ethos more visible in the game environment. Stories of the eight paragon soldiers exemplify how they followed these principles in the line of duty. The official Army game enables the "soldierization" process to commence even before the actual enlistment, although the scope of internalization is extremely hard to measure. As Nieborg (2005) points out players will generally choose winning over keeping along the line of Army values or Warrior Ethos. Multiplayer missions, training simulations, and other game elements relating to outer appearance compose the external layer of the persuasive representation of the soldiering profession, whereas the rules and moral disciplines construct the internal layer. Creation of positive perception about the service demands that players affiliate themselves with at least one of these layers.

### 5.1.2 *The Opposing Forces*

The Opposing Forces (OpFor) is a general enemy militia that symbolizes antiauthority and insurgency within the magic circle. The OpFor is manifestation of global resistance against the institution of power, the U.S. Army, and against a form of power, democracy. Promotional video of v2.2.0 (*Vanguard*) defined the antagonist as “the enemies of freedom” that players are called to subdue. Scenario description of the Virtual Army Experience determined the enemy as “well-armed genocidal faction.” that has rejected all diplomatic efforts. In short the Opposing Forces represents bad guys and evil-doers, coiled to strike at the ideals of freedom and democracy, against the Western way of life.

From the initial release to the current game version, representation of the enemy forces has evolved from headdress wearing Arab combatants and generic hoodlums to more stereotypical illustrations of contemporary terrorists with ski masks and load bearing vests; image, which is more than familiar from other sources of popular culture and media. In the name of political correctness references to Islamic jihadist or extremists as adversaries are avoided; separate connections to the Muslim world are the Sunni Islamic movement Taliban and Afghanistan, in *Insurgent Camp* and *Radio Tower* mission descriptions, and a reference to the Middle East in *Canyon*. In certain CQB maps unmasked OpFor combatants wear civilian clothes instead of “basic terrorist uniform” with snow or urban camo. There are also Caucasian terrorists with blue eyes in some missions. To make the concept of adversary even more ambiguous and obscure, descriptions of the enemy were removed from the AA:SF website and online game manual. In addition “Enemy” has replaced “OpFor” prefix in online player and server messages.

One can argue that the transition to formulaic representation of masked terrorist with Kalashnikov variant has two objectives. First, and the most important, goal is to disengage *America’s Army* from the political context to which it was situated by the earlier versions that openly specified the enemy and to ensure that the Army is not explicitly involved in any specific political discourse. Second goal is to use ambiguity and anonymity to amalgamate the heterogeneous concept of terrorism under generalized term of Enemy; this procedure is generally utilized by mainstream media, which represents al-Qaida as formal organization, instead of loose brand name. Objectification towards the homogeneous image

of enemy threat is more effective than representing it as a hydra. This operations model enables representing all hostile movements, paramilitary forces and regimes as the enemy even if they are not in open and direct conflict with the United States. The OpFor can simultaneously refer to the Taliban movement, al-Qaida, Sunni and Shia insurgency in Iraq, or even to the Syrian and Iranian regimes that seem to be in collision course with the Western powers. Identification and meaning making process relies on player's interpretation.



Fig. 11: Various representations of the OpFor combatants in *Dusk*.

Changes in the representation of the enemy do not mean that references to Arab ethnicity have been completely removed from the game. Adversaries wearing civilian clothes are of same ethnic group as the Indigenous Forces (IF) who assist the Green Berets in combat situations. IF soldiers are clearly depicted as Arabic and they carry similar weapons than the OpFor combatants. In American popular culture Arabs have long traditions of playing the part of rogues for Hollywood cinema and television entertainment (Kellner, 1995). When reflecting this tradition of representation to news and press reporting of ongoing conflicts in Palestine, Iraq and Afghanistan, it is not a surprise that in the FPS genre in

general the word “terrorist” connotate with people of Middle Eastern origin. However online racism in form of using pejorative and dyslogistic terms, such as towelhead or raghead, is quite uncommon; antipathies and feelings of aversion are targeted towards players on opposite team, not on the textures of their avatars as Hodes and Ruby-Sachs (2002) keenly insinuated in their article *‘America’s Army’ Targets Youth*.

As mentioned earlier, certain conclusions about the ethnicity of the Opposing Forces can be drawn from their weaponry. Weapons, such as RPG and Kalashnikov variants, are familiar from real theatres of the GWOT, for example from Iraq and Afghanistan. Players are able to recognize these weapons from films and news broadcasting. Different background stories of the GWOT, presented in other media sources, are harnessed to reinforce the intended message of the enemy’s identity; “readers bring previously acquired cultural competencies to bear on texts, enabling them to generate an array of meanings.” (Barker, 2003: 39) In certain missions the OpFor weapon arsenal includes improvised explosive devices (IED) that are one of the most notorious arms of guerrilla tactics. However in the game the use of IED is quite limited compared to real life usage; its main function is door breaching, instead of ambushing soldiers passing by. Undoubtedly the weapon that carries the biggest symbolic and cultural meaning is the AK-47. In *AK-47: The Story of the People’s Gun* (2007), Michael Hodges outlines the history of the famous assault rifle designed by General Mikhail Kalashnikov. The AK-47 has established its iconic position as one of the most recognizable brands in the world; its distinctive silhouette is a symbol for resistance, anti-colonialism, and revolution (Hodges, 2007). In some parts of the world the AK-47 symbolizes the antithesis of U.S. military hegemony. In the current media climate it has fortified its status as the brand leader of terrorism. The symbolic juxtaposition between M16 and AK-47 has long roots in history that stretches from the Cold War era to modern asymmetrical conflicts – from Vietnam to Iraq and Afghanistan. In militainment games this conflict continues in virtual environment.

Development team also created language for the enemy, released in v1.5.0, in cooperation with the Defense Language Institute. “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., 2004:26). Behind this

political correctitude is the actuality that the OpFor language<sup>87</sup> is a sensory device, which is designed to further the construction of the “other”.

## 5.2 The Synthetic Theater of War (STOW)

In this sub-chapter the term Synthetic Theater of War (STOW) refers to aesthetics in level and mission design. In military terminology the concept pertains to immersive virtual environments used in military training simulations.

To examine certain explicit and implicit messages sent through virtual environment I will use a model of interactivity, presented by Mark Stephen in *Pause & Effect: The Art of Interactive Narrative* (2003). Stephen separates interactivity into two layers: “inside-the-skull” and “outside-the-skull”. The inside-the-skull interactivity refers to the world of player’s imagination and meaning making processes. This level of interactivity extends to what the player already knows. Alternatively the outside-the-skull interactivity is the technical level of interactivity. It refers to the empirical or experimental level of gaming experience. Both of these layers have three dimensions that interact with each other on three axes: 1) feel (I) and look (O); 2) experience (I) and design (O); and 3) meaning (I) and symbol (O). In case of persuasive interactive products, such as advergames, the success is tied to designers’ ability to work with both levels of interaction and seamlessly unite them, especially if they have strong thematic connection to real world events as *America’s Army* does.

After 9/11 and current conflicts in Afghanistan and Iraq, not mentioning the media coverage that surrounds these events, it is rather self-evident the GWOT portrayed in the official U.S. Army game refers to these Middle Eastern theatres of war. However the Army does not explicitly state the obvious. As the Army game progressed and matured into *Special Forces* -series, the depiction of mission locales and the enemy become more and more nuanced and implicit, compared to older *Operations* -series, in which the mission and situation descriptions were more specifically expressed. As mentioned in previous chapter, *Insurgent Camp* (v1.0.0) and *Radio Tower* (v1.6.0) missions are situated to Afghanistan and the OpFor is identified as the Taliban movement, whereas *Pipeline* (v1.0.0) portrays

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<sup>87</sup> See Combat Life Savers’ OpFor Dictionary: <http://www.combatlifesavers.us/afiles/opfor/opfordictionary.htm>

domestic counterterrorism operation, fought in Alaska. Of the *AA:SF* –series maps *District* and *Canyon* of the Champlain Map Pack depict combat operations in Europe and the Middle East, but do not specify the locations more accurately. Similar vagueness surrounds the new Virtual Army Experience scenario, which is situated to nonexistent country of Nragreg and the enemy is an anonymous faction. In the first VAE scenario participants hunted a key al-Qaida lieutenant. Similar operational model will continue in *America’s Army v3.0*, in which the U.S. Army is cast against a host of factions in a fictional region of Odporzhia. In the mobile version, *AA: Special Operations*, coalition led by the U.S. Army liberates land of Liberty from invader state of Corbalia.

If the actual mission locations are left ambiguous, implicit associations and messages are needed to stimulate audience’s imagination. Even if the newer game versions mainly portray the OpFor as anonymous and faceless terrorists, without any specific racial identity, ethnicity of the enemy can be made perceivable by implicitly hinting to certain geographical locations through scenario descriptions, mission briefings and level design. As Barker (2003) argues, audiences will construct a range of meanings in the context of the wider circumstances of their lives. References to real world combat operations will usher players’ interpretations and understanding of the implied narration. Symbols, graphical units, and modeled objects are scattered around maps to generate array of meanings; they create context for the virtual combat missions depicted in the game. Similar methods are utilized outside the virtual game environment. Promotional trailer videos, marketing the brand, connect the game to actual conflicts in Iraq and Afghanistan, by combining authentic film footage with game graphics.



Fig. 12: Advertisement poster from *Dusk* and screenshot of an OpFor combatant wearing civilian clothes in *SF Hospital*. Same poster appears also in *Rummage* mission.

Game features many maps that can be situated to Western countries, such as *Weapons Cache*, *Pipeline*, *Mountain Pass* and *District*, but the general design trend in urban missions is their connotation to Middle Eastern region. In addition to IF soldiers and VIP in *SF Hospital* and *Dusk*, the unmasked OpFor combatants, clad in civilian clothes, share similar ethnic features with figures seen in various advertisement posters used as textures. In addition to posters, certain maps have modelled oil refineries on the background or walls with symbols resembling Arabic writing.

MOUT missions, *Rummage* and *SF Extraction*, contain unique pieces of imagery, a graffiti portraying two children reaching their hands towards a U.S. soldier holding a M249 SAW. In popular culture the graffiti is a statement, associated usually with various underground subcultures. In this case it is used as an expression of power, marking a territory. The word on the street is that the U.S. Army is in command. It conveys the message that the Army is needed to maintain peace and freedom of the indigenous civilian population. It also justifies the presence of foreign armed forces; level design choices, such as architecture and vehicles, of these maps clearly connote that the missions take place in Iraq or Afghanistan.



Fig. 13: The graffiti from *Rummage* and a photo of Iraqi children greeting an American soldier share similar connotation and are used to convey the similar message. Photograph by Ceerwan Aziz, Reuters.

Images, like the graffiti, are familiar from military public relations material representing the peaceful relationship between the occupier and the occupied. The disseminated message is used to humanize the U.S. soldiers and reinforce the image of the Army being an institution following high moral standards and code of conduct. The graffiti can also be considered as subliminal messages, which are traits of advertising and propaganda. Graffiti are commonly used textures in the urban maps, but they usually are abstract or neutral, acting merely as ornaments. They may depict animals and comical characters or imitate Arabic writing and symbols, but the graffiti in question is the only one conveying such a specific message of power relationship. The graffiti are also placed on peripheral locations that are not directly on player's view. These types of messages, hidden on the walls, may pass below player's normal limits of perception and influence the subconscious. They also act as a perfect implicit message sent through the official U.S. Army game.

Considering these fairly distinct textures and units of significance in context to ongoing military conflicts in which the U.S. Army is part of, general locations of the implied STOW is easily perceived and interpreted. Audience will couple the visual information provided by the game experience to the images and narrations they see and hear in other media outlets and popular culture, and form their conclusions that may or may not correspond with the intended message sent.

### 5.3 Political Context

Prussian military theorist General Carl von Clausewitz, who also fathered concepts such as absolute war and the fog of war, presented the often quoted notion that “war is a mere continuation of policy by other means”<sup>88</sup> in *Vom Kriege*, published posthumously in 1832. This famous notion is an antithesis to another claim, presented in the same treatise, that “war is nothing, but a duel on an extensive scale.”<sup>89</sup> By using dialectical method, in which two opposing views confer in order to find common principles, Clausewitz argued that warfare cannot be accurately defined by using merely either of these claims. He inferred that warfare is composed of a “wonderful trinity” of violence, chance, and rationalism.<sup>90</sup>

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<sup>88</sup> Clausewitz, Carl von. *Vom Kriege*. 1832. *On War*. Book 1: On the Nature of War – Chapter I: What is War? Thesis 24. J.J. Graham (transl.). 1883. Available online via Project Gutenberg: <http://www.gutenberg.org/files/1946/1946-h/1946-h.htm>

<sup>89</sup> Ibid. Thesis 2.

<sup>90</sup> Ibid. Thesis 28: “The first of these three phases concerns more the people the second, more the General and his Army; the third, more the Government. The passions which break forth in War must already have a latent existence in the peoples. The range which the display

The official U.S. Army game strives to reject the Clausewitzian trident and depict the virtual GWOT as politically decontextualized conflict of utmost use of force. This is quite interesting approach from a game that according to marketing draws its inspiration from real combat operations. Galloway (2004) pointed out that “it is important to make a distinction between games that are modelled around real events and ones that actually claim to be an extension of real life struggle.” In terms of grand strategy, which politics is integral part of, *America’s Army* belongs clearly to the second category.

Lundblad and Frank (2002) distinguish games with political themes into two categories: politically infused and politically tendentious games. First type refers to games that contain political statements or presuppositions. Second type relates to games with political statements that aim to convey coherent political theory instead of scattered messages. It is safe to say that *America’s Army* is politically infused computer game. It’s themes can be reflected to the U.S. foreign policies after 9/11, but they do not specifically convey any political doctrine. Furthermore one can argue that almost every militainment game released after the WTC strikes can be analysed from this perspective. Although players are called to defend democracy and American way of life, with connotation to capitalism, these ideals are not simulated into game experience in any way. They are just ideals behind the official, politically correct, background story. The Army tries to evade explicit political statements, but cannot (and will not) control the images and interpretations produced by design and content, which automatically creates implicit messages. The ensuing paragraphs will introduce and analyse certain game elements and phenomena relating to political nature of AA, ranging from situation descriptions to in-game political communication and commentary.

In the official U.S. Army game, mission briefings and situation descriptions are main sources of implicit political messages, as they construct the narrative behind the simulated combat missions. These game narrations continue the rhetoric about security and terrorism threat set by governmental agencies after 9/11. Office of Homeland Security published a report, National Strategy for Homeland Security in July 2002, characterizing the threat of terrorism in following manner.

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of courage and talents shall get in the realm of probabilities and of chance depends on the particular characteristics of the General and his Army, but the political objects belong to the Government alone.”

“Our enemies seek to remain invisible, lurking in the shadows. We are actively engaged in uncovering them. Al-Qaeda remains America’s most immediate and serious threat despite our success in disrupting its network in Afghanistan and elsewhere. Other international terrorist organizations, as well as domestic terrorist groups, possess the will and capability to attack the United States.” (p. vii)

Portrayal of the enemy threat in the 2002 report is similar with the current depiction of the OpFor combatants (see sub-chapter 5.1.2). The omnipresence and global threat of terrorism is underlined by situating game missions into Western settings. For instance, the wintry *Pipeline*, released in the initial version (*AA: Recon*), takes place within the U.S. soil, in Alaska, where a terrorist organization has captured a pump station with the intent of creating environmental catastrophe. The terrorist group responsible is not identified.

Defense -team briefing in *Weapons Cache* -map, released in v1.2.1 on October 3, 2002, offers interesting contact between in-game and real life global politics:

”Having secured anti-aircraft weaponry and disrupted illegal arms sale to known terrorist organization, your unit was awaiting extraction. Weapons provide proof that a foreign power is involved in acts of terrorism. Reactionary forces have arrived to recover the weapons or destroy the proof.”

The situation description can be perceived as implicit political propagation convincing that Iraqi regime was responsible of sponsoring terrorism. Relationship and cooperation between Saddam Hussein and al-Qaida was one of the reasons used to justify the military operation against Iraq. On October 7, 2002, President Bush provided an assessment of the threat Saddam Hussein's regime posed to the security of the United States at the Cincinnati Museum Center, Ohio.<sup>91</sup> In October 11, 2002 the U.S Senate passed the Joint Resolution (H.J.Res 114), *Authorization for Use of Military Force Against Iraq Resolution of 2002*. President Bush signed the H.J.Res 114 into law on October 16, 2002. Operation Iraqi Freedom commenced in March 20, 2003. It would be quite difficult to imagine that allusion to “a foreign power involved in acts of terrorism” would mean any other country than Iraq, especially when at the time of the release of v1.2.1 extensive media preparations for the war were bombarded through every possible channel.

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<sup>91</sup> President Bush Outlines Iraqi Threat. Available online: <http://www.whitehouse.gov/news/releases/2002/10/20021007-8.html>

The cooperative multiplayer map, *ES2 Border* (v2.8.4), portrays combat operations in ambiguous Middle Eastern setting:

”Intelligence has identified this small border village as a hotbed for hostile activity and the likely source of IEDs used in recent attacks. The local population is a mix of insurgents, sympathizers and pro-democracy civilians. “

In a sense the situation description describes the challenges of the MOUT warfare, faced everyday by the U.S. Army. Population of the fictional mission locale consists of insurgents and civilians who support the importation of democracy to their country. In Operation Iraqi Freedom and Operation Enduring Freedom, the like-minded civilians, as characterized in the description, are in key position as the United States fights for the hearts and mind of indigenous people. Such situations simultaneously underline importance of maintaining the Rules of Engagement and attentiveness of the soldiers, as the enemy can be hiding amidst the civilian population.

Economics have always been part of policy making. Situation description of *SF Refinery* unites objectives of the GWOT with safeguarding foreign targets that have impact on the U.S. economy. The mission is part of map pack (v2.8.1), designed in partnership with Guildhall at Southern Methodist University. This type of open association with war and economic interests is exceptional in generally cautious game rhetoric as the war in Iraq has been popularly acclaimed being a war on oil resources.

“A terrorist cell has announced its intent to capture a high profile petroleum engineer and thereby disrupt petroleum production and the U.S. Economy. U.S. Special Forces must safeguard the engineer from terrorist action.”

Political aspects in computer games naturally raise questions of propaganda. *America’s Army* cannot be classified exclusively as a propagame, because of its multiple functions, but it definitely contains certain elements of this genre. Compared to *Kuma\War 1* (2004) and *Kuma\War 2* (2006) by Kuma Games, *AA* disseminates extremely polished and fine political messages. *Kuma* –series, marketed with slogan “Real War News. Real War Games”, is a free episodic third- and first person shooter with tie-ins to the U.S. military, although it is not officially endorsed by any service branches. The series have become known for its efforts to recreate actual combat missions. The mission list includes

mediations of the killings of Uday and Qusay Hussein and Abu Musab al-Zarqawi, high ranking al-Qaida operative in Iraq. *Kuma\War 1* features remediation of the capture of Saddam Hussein. Developers of the game series portray themselves as reliable provider of information, contesting with news broadcasting: “Kuma War is a series of playable recreations of real events in the War on Terror. Nearly 100 playable missions bring our soldiers' heroic stories to life, and you can get them all right now, for free. Stop watching the news and get in the game!”

*Under Ash* (2002) and *Under Siege* (2005), published by Syrian publishing company Dar el Fikr, and Hezbollah’s *Special Forces* (2003) and *Special Forces 2: Tale of the Truthful Pledge* (2007), which situate players against Israeli Defense Forces (IDF), are examples of propagames that narrate the ongoing armed conflicts from an Arabic point of view. However they are quite unfamiliar in Western militainment culture as the games are targeted mainly towards domestic and Muslim players.



Fig 14: Cover art of *Under Siege*.

Li (2003) discussed the absence of political communication in the official game space, which relates to ephemeral nature of conversation and player demography’s eagerness to open such topics. Compared to other contemporary FPS games that utilize continuous

respawn, the single spawn mode of *AA* creates time and room for even in-depth conversations as “dead” players have to wait their spawn until the ongoing round is resolved and the next one starts. However players are not extremely keen to open political topics; instead they concentrate on game-related discussions or petty quarreling. Players’ disposition towards political communication is best explained through an example. One of the most interesting commentaries of *AA* has been media artist Joseph DeLappa’s *dead-in-iraq* –project<sup>92</sup>, which started in 2006, coinciding with the 3<sup>rd</sup> anniversary of the start of the war in Iraq. In his online gaming performance, which can be defined as counter-propaganda, DeLappe protested the war in Iraq by logging into the game servers and typing the names of American service persons killed during the Operation Iraqi Freedom. However *dead-in-iraq* created more attention to DeLappa than to his cause, as players adopted hostile and sarcastic attitude towards the project as he disrupted their game experience. The fact that DeLappe did not explain his intentions was seen as direct provocation. Furthermore DeLappa did not concentrate his protest on official Army servers, but disturbed gaming activities on leased servers, rented by individual gamers and clans. The project manifested that FPS game space is hardly a practical venue for such demonstrations, because of its escapist nature; players gather to entertain themselves and escape from the routines of their daily lives, not to discuss politics. Gaming forums would be more suitable public space for this type of communication.

Albeit the virtual theatre of war depicted in the official U.S. Army game is beyond dispute a political matter, there are also causes that can explain the absence of explicit political statements to a certain extent. *America’s Army* portrays one of the most extreme states of being imaginable, combat. It is the condition which prevails after diplomacy has failed. Game’s attitude towards politics can be summarized with a quote from Ridley Scott’s *Black Hawk Down*. In a key scene a young and idealistic Ranger asks a veteran whether they should be in Somalia, the character of Hoot replies: “Y’know what I think? Don’t really matter what I think. Once that first bullet goes past your head, politics and all that shit just goes right out the window.” Bogost (2007) argues that correlation between Honor rewarding system and politically decontextualized missions offer a perception into the game’s social reality. “Reward comes not from service completed in the conscious interest of a conflict, but from service completed in the absence of political circumstance. The U.S. Army recruit, one learns from *America’s Army*, is an apolitical being.” (p. 77)

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<sup>92</sup> *dead-in-iraq*: [http://www.unr.edu/art/delappe/gaming/Dead\\_In\\_Iraq/dead\\_in\\_iraq%20JPEGs.html](http://www.unr.edu/art/delappe/gaming/Dead_In_Iraq/dead_in_iraq%20JPEGs.html)

## 5.4 America's Army: Simulacrum

One can argue that the Army has just replaced a simulacrum of itself with another artistic simulacrum while striving towards the real. The concept of simulacrum refers to an image or likeness, which does not represent the whole reality of the original, only parts of it. Jean Baudrillard (1988) divided the process of image-making into four successive phases: 1) reflecting the basic reality; 2) masking and distorting the basic reality; 3) masking the absence of the basic reality; and 4) a pure simulacrum; an image that has no relation to the basic reality. The phase of pure simulacrum is associated with postmodern age. For Baudrillard simulacrum is not a replica of the original as it becomes “real” through process of reproduction, a hyperreal. Before the initial launch of *AA:Recon* Maj. Chambers (2002) postulated the media image of the Army:

“America does not know the real Army. In contrast to previous eras, today’s citizens have relatively few portals of insight into the Army as a profession. Increasingly, youths and those who influence them are in touch with an Army that does not exist, but is instead the product of Hollywood, the media and marketing. Since these perceptions are often negative, Army recruiting suffers.”

However creation of this perception is not as one-sided as Chambers implies. Boggs and Pollard (2006) call relations between motion picture industry and the DoD as Hollywood War Machine, referring to films that directly and indirectly glorify the U.S. military hegemony. In this relationship, that has lasted several decades, the U.S. military acts as funder and provider of equipment and subject matter expertise. In other words the Army Game Project was dispatched to eradicate the negative perception that has been created by the media in partial cooperation from the U.S. military; Department of Defense has been able to influence the content of these products of Hollywood. It goes without saying that Maj. Chambers does not speak of films such as *Saving Private Ryan* (1998) or *Black Hawk Down* (2001), which represent warfare as spectacle and soldiers as dedicated band of brothers. Premise of these war films are build upon the code of duty, honour and bravery. They are products of Hollywood that treat warfare from almost mythical perspective, only superficially addressing or questioning politics and motives behind the story. Furthermore they handle with themes that are beyond criticism or immortalized in cultural discourse, such as the decisive role of U.S. military in the Second World War or acts of selfless

service, like those of MSG Gary Gordon and SFC Randall Shughart<sup>93</sup> depicted in *Black Hawk Down*.<sup>94</sup> Scott's *Black Hawk Down* communicate specific message to the audience; U.S. Army leaves no man behind. This ethos, which is a tenet of the Soldier's Creed, is underlined with multiple key scenes and narrative means. This creed and visual aesthetics of the film have been repurposed and used as a point of reference in MOUT map, *SF CSAR (Combat Search and Rescue)*, released in v2.0.0 (*SFAS*).<sup>95</sup> The assault mission is like a virtual sequel to the film, in which players participate in rescuing helicopter pilot and destroying the remains of downed MH-60 Black Hawk. To summarize: *SF CSAR* can be regarded as a remediation of a remediation.

What Chambers means as sources of negative perception are films like, *Apocalypse Now* (1979), *Full Metal Jacket* (1987), *Jarhead* (2005), *In the Valley of Elah* (2007), and *Battle of Haditha* (2007). The attitude of *Apocalypse Now* and *Full Metal Jacket* towards military and war are legendary in their cynical portrayal of the Vietnam War. *Jarhead*,<sup>96</sup> directed by Sam Mendes, gives a less glorified portrayal of the soldiering profession. In the film, American soldiers battle against seclusion and dullness instead of enemy combatants. *In the Valley of Elah* confronts the audience by treating with controversial themes, such as posttraumatic stress disorder (PTSD) and prisoner abuse. Title of the film refers to the biblical duel between David and Goliath. *Battle of Haditha* is based on Haditha killings in 2005, where 24 Iraqis died after insurgents attacked a convoy, 15 of those killed were civilians. Albeit these films reflect militarism from pessimistic perspective, they do not judge individual soldiers; instead they depict warfare as madness that feeds itself through various forms of human suffering.

Since the Vietnam War armed conflicts have increasingly become media spectacles and sources of entertainment. The crossover of fictional representations and realities of war has also been noticed by the U.S. military officials. General Norman Schwarzkopf, commander of the coalition forces in the Operation Desert Storm, noted in an interview that war is not a Nintendo game, something that is fought by robots.<sup>97</sup> The AGP's quest to provide "the

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<sup>93</sup> Snipers of 1<sup>st</sup> Special Forces Detachment-Delta (1SFOD-D), MSG Gordon and SFC Shughart died defending four critically wounded personnel in the Battle of Mogadishu. They were posthumously awarded with Medal of Honor in recognition for their actions. See: Medal of Honor Recipients: Somalia. Available online: <http://www.history.army.mil/html/moh/somalia.html>

<sup>94</sup> *Black Hawk Down* is a depiction of the Battle of Mogadishu, part of Operation Gothic Serpent, fought on October 3 and 4, 1993. The film is an adaptation of Mark Bowden's book, *Black Hawk Down – A Story of Modern Warfare* (1999).

<sup>95</sup> Recreation of the Battle of Mogadishu has mediated into a game, *Delta Force: Black Hawk Down*, in 2003 by NovaLogic.

<sup>96</sup> The film is based on U.S. Marine Anthony Swofford's memoir, *Jarhead: A Marine's Chronicle of the Gulf War and Other Battles* (2003).

<sup>97</sup> Norman Schwarzkopf interview at Academy of Achievement: <http://www.achievement.org/autodoc/page/sch0int-1>

most authentic military experience available” and intentions to reshape the negative public perceptions about the service can be examined from the perspective of hyperreality. The concept refers to player’s incapability to distinguish reality from representation. An individual playing the official U.S. Army game can start conceiving warfare as something that does not exist in reality. Albeit the fictional representation is not extremely authentic or realistic depiction of armed conflict it can replace the “real” for the player, rendering the reality of war unactual. In general, the commoditization of warfare i.e. militainment and militarization of the civilian culture, through games, cinema and news broadcasting, can constructs a hyperreal image of warfare by portraying it merely as a clean high-tech phantasmagoria, waged with smart bombs and other precision weapons. The armed forces around the world are now training people that grew up playing video games, mainstream media of the digital era. Some of these members of the “wired generation” are already serving their countries in battlefields of Iraq and Afghanistan. Journalist Evan Wright has coined the term “Generation Kill” to describe this cohort of people. From this perspective it is also natural that military has adopted games as training tools to teach and hone certain soldiering skills, such as situational awareness and communication. However one must be careful in drawing definitive conclusions on how wargames shape and influence players’ comprehension of warfare, as the area is not adequately researched. For those who enlist the fact that there is no respawn option in real war becomes evident during the boot camp at the latest.

## **5.5 Themes of Recruitment**

Harnessing contemporary media for military strategic communication and recruiting purposes is not a recent phenomenon or novel idea. “Piggybacking the armed services message onto popular entertainment was pioneered years go in movie newsreels, radio, and TV ads.” (Zyda et al., 2003b:219) As discussed in sub-chapter 3.1.1 the key messages behind the AGP were formulated in other public relation initiatives, “Army of One” and “Army Strong” campaigns. There were also rhetorical equivalences that could be traced back to even earlier time periods, as Capra’s *Why We Fight* –series demonstrated. *America’s Army* is a farthest end of a continuum that started with the most famous anthropomorphization of the United States, J.M. Flagg’s Uncle Sam poster, and

establishment of the Office of War Information (UWI) in 1942. In their two-piece study, *Trends in Military Influences on Army Recruitment Themes: 1915-1953* (2001) and *1954-1990* (2002), Peter Padilla and Mary Laner examined trends of military recruiting themes through content and sociological analyses of printed recruitment materials, such as posters and advertisements, from 1915 to 1990. They divided the aforementioned time period into eight separate historical eras: World War I (1915-18), World War II (1940-45), The Postwar Period (1946-49), The Korean War Period (1950-53) Early Cold War (1954-64), The Vietnam War (1965-72), The All-Volunteer (1973-80) and Late Cold War (1981-90). From the data Padilla and Laner identified seven distinguishable recruitment theme categories: 1) job/career/education; 2) adventure/challenge; 3) patriotism; 4) social status; 5) travel; 6) miscellaneous and 7) money. As a hypermedia system the AGP enables simultaneous use of four categories: job/career/education, patriotism, adventure/challenge and social status.

The category job/career/education, to which the category of money has been integrated as benefits, is the principal recruitment theme of the AGP. According to Padilla and Laner (2002) the category focuses on acquiring a skills or funds to pursue higher education. *America's Army* aims to provide “players with 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.”<sup>98</sup> In other words the game intends to portray accurately what kind of occupation the soldiering profession is from initial stages to active duty. The training simulations and game missions demonstrate the practical side of the soldiering profession, whereas the Strength for Life –videos on the AA:SF homepage mainly concentrate on service-related benefits and career opportunities. The Army service is described in following manner:

“From recruitment to retirement, the U.S. Army provides a unique and diverse lifestyle. Soldiers are given every opportunity to grow. With expert training in one of over 150 different jobs for Soldiers on Active Duty and over 120 in the Army Reserve, you'll gain a foundation of confidence, discipline, and leadership - and an experience that will give you an edge over those in the civilian world. The Army also offers money for college to further position you for success. It's the strength for today - and the strength for an even better tomorrow.”<sup>99</sup>

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<sup>98</sup> Source: AA:SF homepage: Game Features: <http://www.americasarmy.com/intel/features.php>

<sup>99</sup> Source: AA:SF homepage: Strength for Life: <http://www.americasarmy.com/army/>

The message of lifestyle is strengthened with four video interviews of SPC Taylor, PVT Alaniz, SGT Peter, and SSG Sperling. All interviews emphasize financial, educational, health care, and recreational benefits provided by the service. SPC Taylor, the only female soldier present in the AGP's recruiting initiatives, addresses with misconceptions of the soldiering profession among civilian population and educational benefits that attracted her to join the Army. PVT Alaniz is interviewed in a classroom with other soldiers. Other soldiers in the classroom are browsing AA:SF homepage. For Alaniz, who continues military traditions of his family, joining the Army meant independency; he joined the Army to pay his college education. SSG Peters also grew up in a military family; his father was also a soldier. His interview treats with the false beliefs of the military service, created by the entertainment industry. "It is not as hectic as it normally might seem in the TV shows or the movies". The video also treats with themes ranging from insurance and health care to housing benefits. The interview of SSG Sperling demonstrates that the target demography of *America's Army* reaches beyond the younger members of Generation Y; his core message is directed towards more mature audience. Sperling, a father of two children, talks about the inexpensiveness of having children and child care while serving in the Army. SSG Sperling accentuates the rhetoric of unique life style and comradeship of soldiers, by dividing the civilian and military world into separate spheres as he praises the health care benefits: "they're part of my community. They are soldiers, so they take care of you, I think, a little better than a civilian out in the outside world."<sup>100</sup>

In 1977 Charles C. Moskos (1934-2008) presented his Institution/Occupation (I/O) thesis, which has since influenced research on military sociology. The I/O model argued that the armed service was becoming more of an occupation and less an institution. Moskos saw negative effects in using financial incentives in recruitment. He postulated that the civilian-influenced model of soldiering profession, where soldiers have status of employees was harmful for the primary group solidarity, held integral for effective service by military sociologist (Padilla & Laner, 2001). The I/O thesis opposes the all-volunteer military model and has remained a highly controversial topic. Senior Fellow of the RAND Corporation, Bernard Rostker (2006), considered the financial incentives rather as a way to manage problems concerning recruitment. According to Rostker by developing new marketing strategies and marketing programs were essential in recruiting high-potential youths. Media could only be used to convey the message about the benefits and

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<sup>100</sup> Transcript from SSG Sperling's interview. Available online: [http://www.americasarmy.com/flash/qol/sperling\\_1.swf](http://www.americasarmy.com/flash/qol/sperling_1.swf)

opportunities, whereas the military had to guarantee these promises with different types of incentives. “A mix of economic benefits and educational programs helps channel youths into hard-to-fill occupations, hazardous duty assignments, and undesirable locations. Educational benefits proved particularly important.” (Rostker, 2006:753) As the argumentation and themes of the Strength for Life -videos exemplified, the AGP follows the path set by the I/O hypothesis to certain extent as it emphasizes financial and educational benefits, but at the same time it appeals to sentiments beyond the material world, such as the *Esprit de Corps* – a morale and common spirit of comradeship. These ideals become evident in the second recruitment theme category: patriotism.

Patriotism is naturally an axiomatic theme in the official U.S. Army computer game. Even though the armed forces have difficulties in attracting high potential prospects of the Generation Y, it is still one of the most regarded institutions in American society. This high regard and respect became evident in popular culture and media outlets as the wars in Afghanistan and Iraq begun; even if people were against these operations, they always underlined their support for the troops, separating the politics behind these conflicts from service personnel fighting in them. Patriotism in *America’s Army* refers to rhetoric which underscores the sense of duty and commitment to defend one’s country against ambiguous concept of tyranny. The game slogan itself calls the players to empower themselves and defend freedom. “Army Strong” advertisement screened inside the Virtual Recruiting Station (VRS) portrays soldiers fulfilling their patriotic duty in following manner:

“Speed, courage and power. Not for ourselves alone. Always ready (semper paratus). No task too tough. The will to succeed. Led by love of country (ducit amor patriae). Honor and courage. Vigilant and swift (vigilans et celer). Can and will. We will always win.”<sup>101</sup>

Similar rhetoric saturates the Soldier’s Creed i.e. Warrior’s Ethos (see 5.1.1), which states that as an American soldier one stands ready to “deploy, engage, and destroy the enemies of the United States of America in close combat” and to act as an “guardian of freedom and American way of life”. In the AGP patriotism and pride of serve the country is omnipresent theme from graphical design, as the game intro and several loading screens with the Star-Spangled Banner demonstrate, to textual rhetoric on the AA:SF homepage. Likewise the American player demography, the non-American players and clans transfer

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<sup>101</sup> The Latin verses are slogans found from different coat of arms of the U.S. Infantry Regiments: Vigilans et celer (395<sup>th</sup> Infantry), ducit amor patriae (131<sup>st</sup> and 361<sup>st</sup> Infantry), and semper paratus (16<sup>th</sup>, 24<sup>th</sup> and 364<sup>th</sup> Infantry).

their patriotism and national sentiments into the game world, in form of avatar nicknames or various graphical banners and signatures, celebrating militaries of their own countries through a game that has been designed to glorify the U.S. Army. This is not exclusive phenomenon of the Army game, but a general trait of the FPS genre.

The category of adventure and challenge, emphasizing action, is mainly associated with the actual game, which allows creation of engaging and appealing immersive experiences. Representation of the whole game experience can be seen as dynamic and interactive action-adventure in three-dimensional virtual environment; players can safely engage on undertakings of hazardous nature. The Real Heroes biographies and videos, available on AA:SF homepage and in-game Virtual Recruiting Station can be situated to this theme category. SSG Zedwick, one of the original Real Heroes, is characterized as an adventurous spirit with early interest in soldiering profession. On his biography he recalls motives behind his decision to enlist: “I wanted adventure and something of my own, something I did myself without mom or dad helping me. At the same time, I wanted to do something patriotic and serve my country.”<sup>102</sup> This type of rhetoric sends strong messages towards the potential prospects as the Real Heroes are portrayed as soldiers who exemplify the moral principles and professionalism of their craft.

The category of social status refers to messages that speak with potential recruit’s sense of identity and moral character. In later periods, the All Volunteer (1973-80) and the Late Cold War (1981-1990), the category has mainly been used to address the enhancement of recruit’s social status (Padilla & Laner, 2001). One can expect that this trend has continued after the 1990s. Elite military squads have been traditionally used as objects of identification in this recruitment theme category. “The social deference system depends on, and is conveyed through, the various chevrons, pins, and related items of army-issued clothing. Thus, the use of insignia associated with elite special units may influence a recruit’s motivation to join.” (ibid. p. 423) In *America’s Army*, the combat-oriented branches of the 75<sup>th</sup> Ranger Regiment and “Green Berets” (SF) of the Special Operations Forces (SOF) represent Army’s elite squads that participate on the most challenging military operations. These elite units have further uses for the AGP than just recruiting purposes. Shift in focus of representation in game version v2.0.0 (*SFAS*) – from the regular infantry to Special Forces – marked transition from conventional warfare towards

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<sup>102</sup> SSG Zedwick’s Hero biography: <http://www.americasarmy.com/realheroes/index.php?id=3&view=bio>

asymmetrical warfare. By centering on the SOF organizations developers were able to convey favourable message on Army's level of preparedness to meet the challenges of the 21<sup>st</sup> century warfare.

## 5.6 Spoils of War

Value of commercial games is generally measured through two criteria: reviews and financial performance (Bogost, 2007). Since *America's Army* is a non-commercial game only the first criterion of reviews can be applied to judge its success. The initial version, *Recon* (v1.0.0) was well received by the game industry as it was introduced at 2002 Electronic Entertainment Expo. In the aftermath of E3 game collected favourable critical reviews and multiple awards for spoils of war. IGN gave the rating of 8.8/10 with "Editor's Choice Award" and "Biggest Surprise of E3". Another gaming site, GameSpot.com reviewed the game with 8.2/10 points and rewarded it as "Biggest Surprise on PC". Wargamers selected it as "Best of Show". Additionally AA's serious game elements have been noticed; it received Digital Entertainment & Media Excellence Award for Advergame of the Year in 2005. The game has also been a subject of extensive press and television coverage. The AADT has naturally been satisfied with the response. In a 2002 interview, the former development director for the AGP, Michael Zyda, posed an interesting question: "what if the game rebranded the Army into America's Army?" (Gegax, 2002:4). Exposure to game brand does not alone dictate the success of the official U.S. Army game; serious games must be subjected to different type of accountability as their starting points and objectives differ from commercial games. "Serious games replace the cycle of capital with the cycle of political regimes, the cycle of industrial production, the cycle of institutionalized social goals." (Bogost, 2007:320)

In the end the accountability of AA is related to its ability to persuade. The AADT must provide evidence of successful strategic communication campaign for the military community to secure appropriate funding for the future. Also the amount of traffic it has generated to the official recruiting site, GoArmy.com, is an important indicator of success. GoArmy.com, has received over 1.5 million click-throughs from the AA:SF website. A 2004 survey of the effectiveness of Army marketing and strategic communication stated that the game was the most effective project in engendering positive image of the

soldiering profession as 29% of young Americans between ages 16 and 24 had contact with the game (Davis et al, 2004). Another informal survey, conducted at Ft. Benning, pointed out that 60% of recruits were familiar with the game; 4 out of 100 recruits named *America's Army* as the principal influencer to join the service (Jonsson, 2006). According to Erich Blattner, better known in the AA community as [Dev]Pye, producer for the AAPA, surveys have indicated that the game has been notable factor in shaping interests of recruits about the Army and a source for information gathering on the Army (Gaudiosi, 2008).

Second most important indicator of success is the number of downloads and registered users. In terms of return of investment the AGP can boast with impressive statistics; over 9.4 million registered users have played the game over 230 million hours since its debut. However closer inspection of the user statistics reveal that developers may be somewhat over enthusiastic and optimistic concerning game's overall popularity. For instance the figures do not necessarily reflect accurate size of the active and dedicated player demography. Furthermore the multiple accounts of experienced players will create a slight distortion. Here are the most important game-related statistics:<sup>103</sup>

Total registered players: 9,442,212

Total completed BT (basic training): 5,170,656

Marksmanship (unqualified): 36.49 %

Marksmanship (Marksman): 13.62 %

Marksmanship (Sharpshooter): 29.51 %

Marksmanship (Expert): 20.38 %

Honor 0-20: 93.95 %

Honor 21-40: 3.83 %

Honor 41-60: 1.23 %

Honor 61-100: 0.61 %

About 5.2 million registered users of total 9.4 million have passed all the BCT simulations, required to play the regular infantry missions and standard military occupational specialities. Almost 1/3 of the registered users have not even passed the Basic Rifle

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<sup>103</sup> Data retrieved 10.12.2008. Source: AA:SF homepage - Intel: <http://www.americasarmy.com>

Marksmanship, the first training simulation of BCT. In other words they have never played the online missions. In estimating how much time a player has spent with the game the Honor –rewarding system is excellent indicator. Overwhelming majority of players has 0-20 point of Honor. When the starting amount of Honor is 10 points the figure gives an indication of player’s persistence with the game. From 10 to 20 Honor players require 1,000 points/level; these 20,000 points can be acquired quite rapidly. After Honor level 21 the player percentage dramatically lowers, inferring that small fraction of registered users have actually continued to play the game for longer period of time.

## 6. CONCLUSIONS: THE ARTEFACT OF WAR

Development of the Army Game Project indicates transformation in the structures of the military-entertainment complex. The project has advanced the use of digital games from mere training tools into feasible public relations channel, suitable for effective one-to-many communication. During this process the U.S Army has become recognized developer and publisher of game entertainment, instead of just acting as co-producer, –funder or subject matter expert. The Army had existing organizational culture, developed after the Cold War, which concerned digital games and simulations as a usable asset for various purposes, making the realization of an innovative undertaking like the AGP possible. This culture that “accepts computer games as powerful tools for learning, socialization, and training” (Macedonia, 2001:167) is slowly starting to emerge in the civilian world through serious game phenomenon.

In the present thesis *America’s Army* has been defined as an adverggame, but it can also be referred as an edumarket game, as it combines the elements of advertainment and edutainment. This serious game subgenre aims to convey messages “to increase the value of product, an institution, a concept or even an ideology, by using a recreational approach with an educational dimension”. (Alvarez et al., 2006:3) AA’s multidimensional functions can be reduced into two main categories: persuasive and educational functions. The persuasive function, which includes advertising and propagation aims, is the principal function of the AGP as its impetus was to develop a game to support strategic communication and recruiting efforts. First and foremost the official U.S. Army game is an interactive adverggame, in which players interact directly with virtual representation of the advertised institution, rather than being subjected to mere product placement.

The in-game propagation is mainly linked to the manner of argumentation used in advertising and conveying explicit and implicit messages. The ethical questions that inevitably follow the use of propaganda depend on how the concept is perceived. In principle propaganda is neutral term that refers to systematic dissemination of information that reflects the cause of the advocating party, but after WWI and II it has obtained negative connotation in the Western societies. The Army openly admits that their game is propaganda. The principal rule of in-game communication is that messages concerning the

Army are explicitly expressed, whereas messages relating to the enemy and mission locales are usually implicit. References to politics are ambiguous and politically correct, leaving room for array of interpretations. *America's Army* is form of subtle white propaganda that is inseparable from advertising; both these forms of communication share similar rhetorical techniques. Attitudes concerning advertising through wargames during the time of war and the use of propaganda differ; as expected certain interest groups, such as media violence researchers and American liberal media, have adopted extremely precarious stance towards the game, whereas the military community have focused on commending it as a revolutionary tool of strategic community. For the one the game is a tool for luscious brainwashing and an all seeing eye of the new world order, whereas the other regards it as the herald of technocratic progress. The game has been in the centre of attention mainly because it is officially endorsed by the U.S. Army and its strategic communication objectives, but we should not overlook the fact that its rhetorical and aesthetical representation does not considerably differ from other games of the FPS genre, which traditionally glorifies militarism and warfare. On the contrary in certain cases *AA* is more socially aware and politically correct than its commercial points of comparison.

As the analysis of recruitment trends and themes revealed *America's Army* is a mix of innovation and traditions. The main difference between other recruitment campaigns and the AGP is the medium on which they operate. Nevertheless the most innovative aspect of the project is not necessarily the medium, but its aspiration to reach towards people who are not necessarily part of the existing constituency, and reshape the negative perceptions about the Army service. *America's Army* has not been designed and published to preach to the choir, which has been fundamental failing of the persuasive game genre. Games like *September 12<sup>th</sup>*, *John Kerry: Tax Invaders*, *Quest for Saddam*,<sup>104</sup> and *The Anti-Bush Videogame* are developed mainly to uphold shared narrative of an interest group and rally the troops. One important factor contributing to the limited scope and minimalistic representation of these games is their small budget, compared to the AGP, which enjoys adequate funding to develop complex virtual environments. In *AA* the full potential of digital games as vehicles of propagation has been harnessed for the benefit of the sponsor as it expands the sphere of influence outside its present boundaries.

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<sup>104</sup> In 2006, Global Islamic Media Front released altered version, *Quest for Bush*. In the game references to Saddam Hussein were replaced with references to G.W. Bush.

The array of explicit and implicit messages constructs a media strategy with three main pillars. These pillars are: 1) freedom and democracy, ideals that are interchangeable with the concept of civilized worlds, are under attack by omnipresent global terrorism; 2) the U.S. Army is the central organization to repel and deter this threat, because of the high level of training and its technical preparedness to wage unconventional war of the 21<sup>st</sup> century; and 3) you, the player, can virtually partake on this epic battle between freedom and fear. Promotional video trailer of the *AA:SF* -series, combining film footage with computer-generated animation, is an example how these arguments are united into consistent marketing message.

“As long as there are forces that threaten the promise of freedom America’s Army stands ready. And in the vanguard you will find Special Forces, the Army’s quiet professionals, qualified for independent action, experts in unconventional warfare. Help liberate the oppressed. Become one of America’s Green Berets and subdue the enemies of freedom. Empower yourself. Defend freedom.”<sup>105</sup>

*America’s Army* is not a narrative i.e. account of events, although it contains ergodic elements and modes of narration. The game is rather a loose bundle of different types of combat operations, situated into the ambiguous context of the GWOT, without a coherent story line or plot. There is a short prelude to war in form of training simulations, before players are deployed into the action. *AA* can be understood as a syntagm, a combination of signs and units, which uses the medium of digital games as its platform. Focalization,<sup>106</sup> the perspective through which the information is presented, is definitely the most notable narrative mean utilized in the game. Players experience and explore the game world and the encoded agenda from first-person view point and receive unilateral and one-sided information from non-player characters or mission descriptions that act as “narrators”. This thought correlates with an argument, presented by Ian Bogost (2006), that games are “biased, non-objective modes of expression that cannot escape the grasp of subjectivity and ideology.” (p. 99) The notion is beyond dispute in case of an edumarket game that was designed to host rhetoric about an organization that has also published and developed it. Game’s unique swapping paradigm, which limits the subjectivities of players to American soldiers, is designed to enhance the impact of focalization. The paradigm also demonstrates that particular view point is considered more important than the message of military

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<sup>105</sup> See the video: <http://www.youtube.com/watch?v=TrUaXIVCPX4>

<sup>106</sup> Eskelinen (2004) states that focalization is “delivery channel for narrative information, and its functioning as a narrative device is ultimately based on uneven distribution of knowledge.”

transformation, although it has been repeatedly underscored in various marketing materials. For the aims of the overall game project, players' identification with moral codes and ethos of the Army is perceived more significant than representation of the technical marvels of the 21<sup>st</sup> century warfare.

The educational function can be considered as the additional objective of the project. After the initial launch of the AAPA version the game software has evolved into a technological platform that serves different needs of edutainment, prototyping, and visualization purposes. This was due to its capability to render realistic and adaptable virtual environments. Although the AAGA applications are usually associated with edutainment one should not undervalue the educational elements of the AAPA version. The VIRTE and ARI research projects demonstrated that games initially designed for entertainment can contain elements that suit for pedagogical and research needs. The ARI's four-point guideline for creating effective edutainment<sup>107</sup> cannot be applied to the game as such, because AA is not a proper edugame; as an edumarket game it only contains some of these elements. Nevertheless one can conclude that representation of information in the Army game is quite consistent with the ARI's findings. Instructional objectives of the training simulations are relevant to the progression and evolution of the virtual soldiering career. Representation of the objectives favours procedures over factual information, although there are exceptions, such as the didactic combat medic training simulations. Combination of images, animation, and spoken text are main presentational modalities; printed text is used mainly in mission and situation descriptions or to provide factual background information. In addition the ARI's demand for motivational factors of challenge, realism, and exploration have become standard characteristics of contemporary games.

The Army game brand can definitely be considered as a success story of marketing and strategic communication; it stands for entertaining piece of militainment that has managed to gather avid international fan base, and become part of larger gaming culture. Nevertheless its success is slightly undetermined as it does not have to create sales, but downloads and clicks to GoArmy.com; the Army does not compete with commercial gaming industry for financial gains. One can only guess that whether *America's Army*

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<sup>107</sup> 1) Instructional objectives should be integrated into the game storyline, so that the training material is relevant to the progression of the game; 2) Spoken text and graphic images were found to be more effective presentation modalities than printed text; therefore, printed text should be kept to a minimum; 3) Games should be used for teaching procedures and experiences rather than factual information; and 4) Training games should be designed with attention to challenge, realism, control and opportunities for exploration, which influence player motivation.

would have made it in the game market, where most of the products fail commercially. As the results of Army's internal surveys demonstrated the game project can be considered to have fulfilled its initial objectives of raising positive awareness about the service among young Americans. Digital games are extremely powerful media to disseminate persuasive messages; along with the Internet it is one of the most preferred recreational mediums of contemporary popular culture. With printed material and filmed footage individuals usually engage for maximum of few hours, whereas an online game, to which players build strong emotional connections through avatars and social formations, can keep people engaged even for years. For marketing purposes this is an ideal situation; the players spend most of their time repeating and performing the same core game mechanics that constitute the overall characteristics of the game. If the marketing message can be embedded into these actions participation with the product and the "customer" is assured. The Army did not have to saturate the game environment with product placement as the game is about itself; what the Army is selling is a concept that has historically been a source of popular culture. Another crucial factor impinging to game's success was the time of its release; 9/11 and beginning of the Operation Enduring Freedom in Afghanistan situated the U.S. military into the focal point of international media.

For consumers the most inviting lure of the AGP is the fact that the Army offers a quality FPS game free of charge. Such marketing pitch almost automatically guarantees large amount of downloads as the word spreads through gaming communities; the game can be enjoyed without financial consequences. As the user statistic demonstrated, more problematic task is to keep the registered users active after their initial interest. From the drastic downward curve in number of more experienced players, one can presume that although players keenly download the game and register their user accounts, only minority of gamers become long term "customers". This type of distribution in player demography is typical for the ephemeral and vacillating nature of gaming communities. Communities are constructed of dedicated and casual players; the latter group of gamers come and go as new games or trends appear, whereas the core of the community, the "hardcore" gamers, keeps it alive.

The fact that the official U.S. Army game has remained a closed system, as it balances between the worlds of advertising and gaming culture, will not overcome this general tendency. Introduction of the AAMD only nominally changed the author/subject

relationship. Restrictions in creating alternative narrations have very practical reasons; the Army simply cannot afford for user-created scenarios, which could treat with controversial subjects, to be played and replayed on their advergame. It has to protect its brand. Albeit the open system structure would cause problems concerning control, it would also prolong the lifespan of the game, guarantee further exposure for the brand and keep the player demography active. In case of *America's Army* this operations model would have been topical months ago, as new FPS games at the head of *Call of Duty 4: Modern Warfare*, have diminished the size and activity of the AA community. It would be impossible to think that *Half-Life* (1998) could enjoy the status that it still possesses without its *Counter-Strike* modifications. In the future Army should acknowledge that in the computer game culture the audience of petty producers are a source of continuity and imagination to be reckoned with. They are an underlying asset that should be utilized to their full potential. Realization of modifications would not be impossible, if they are subjected to similar review process as user-created AAMD maps. From this perspective the Army should reconsider its position to the relationship of power between the author and the subject and allow creation of modifications, and thus enable rereading of the common narrative.

And what about the oft-repeated question of realism? We can conclude that in Army's marketing rhetoric the term "realism" is interchangeable with the term "authenticity". The official U.S. Army game can be described best as a hybrid of entertainment and military simulation. As the analysis of the game mechanics and characteristics demonstrated *America's Army* fulfils the standards of realism set by other games of the FPS genre. The game employs few noteworthy innovations and procedures that push the boundaries of immediacy further, such as the Combat Effectiveness Meter, single spawn mode, and random objectives. Although these features contribute to more dynamic and authentic gaming experience certain realities of war, ranging from strategic level to character physics, are discarded. Choosing the most applicable set of realistic mechanics is fundamentally tied to the overall design of the game. For instance employing respawn in AA would have detrimental effects for the gameplay, whereas in *Battlefield* –series the use of the mode is more suitable, since it features more players, has larger gaming area and utilizes number of vehicles. Game developers will pick mechanics that serve their needs, but it is difficult to imagine a game that would contain every realistic mechanic available or already used. Such product may not necessarily be economically viable as there would be hindrances to its playability. This constant balancing between the line of realism and

entertainment produce a state of verisimilitude, defined in the present thesis as engaging realism; a game simulation cannot create accurate mirror-image of the represented phenomenon, but a simulacrum, which does not contain all the characteristics of the original. Conventions of the gaming culture should also be addressed as a factor that keeps distorting the basic reality, as the universal use of degenerate strategies demonstrate. Online wargames in general are not played according to realities of warfare, even if they claim to reflect the real; they are played as games in which exploiting the system can be as important as defeating the enemy. Boundaries of the system are constantly challenged by the players to gain the upper hand. The official U.S. Army game is not necessarily “the most authentic military game available”, but it is definitely “the most authentic U.S. Army experience available.” One can infer that in terms of realistic gameplay *America’s Army* does not significantly differ from other contemporary first-person shooters, but the veracity in scrupulous graphical representation creates an atmosphere of authenticity that could not be achieved without the omnipresence of the U.S. Army. We can also conclude that realism in gaming is ultimately in the eye of the beholder; certain audiences deem the FPS genre as the most realistic because of its photorealistic human scale representation, whereas others regard RTS games in the same position because of their large scale realism.

The AGP’s courting season with the FPS gaming community will be permanently over as the next installation of the series, *America’s Army v3.0*, is released. Future may prove to be challenging for the project as the genre, through which the Army conveys its strategic communication messages, is perhaps the most competitive one in the game industry. The game brand has to evolve in order to distinguish itself from the swarm of other games. Furthermore any delays concerning the coming release of *America’s Army v3.0* can hinder the future success of the Army Game Project as the rumours of vapourware start to spread among the gaming community. Actions trump words.

## REFERENCES: LITERATURE

- Aarseth, Espen J. *Cybertext: Perspectives on Ergodic Literature*. The Johns Hopkins University Press, 1997.
- Aarseth, Espen. *A Multi-Dimensional Typology of Games*. In *Level Up Conference Proceedings*. M. Copier and J. Raessens (eds.). University of Utrecht, 2003.
- Academy of Achievement. *Norman Schwarzkopf Interview: Visionary Commander, Unwavering Leader*. 1992. Available online (retrieved 6.10.2008): <http://www.achievement.org/autodoc/page/sch0int-1>
- Adair, Bill. "Did the Army get out-gamed?" *St. Petersburg Times*, February 2005. Available online (retrieved 2.6.2008): [http://www.sptimes.com/2005/02/20/Worldandnation/Did\\_the\\_Army\\_get\\_out\\_.shtml](http://www.sptimes.com/2005/02/20/Worldandnation/Did_the_Army_get_out_.shtml)
- Alvarez J., Rampnoux, Jessel J-P and Methel G. *New Advertising Tools: Edugame Market*. Copenhagen Business School, 2006. Available online (retrieved 10.10. 2008): [http://www.cbs.dk/content/download/41849/616396/file/Paper%2030\\_Olivier%20Rampnoux\\_Julian%20Alvarez.pdf%20\\_BibTeX](http://www.cbs.dk/content/download/41849/616396/file/Paper%2030_Olivier%20Rampnoux_Julian%20Alvarez.pdf%20_BibTeX)
- Alvarez J., Rampnoux O., Jessel J-P. and Methel G. *Serious Game: Just a Question of Posture?* AISB'07 Conference Proceedings. SSAISB, 2007. 420-423. Available online (retrieved 10.10.2008): <http://www.aisb.org.uk/publications/proceedings/aisb07/aisb07-body.pdf>
- American Heritage Dictionary of the English Language, The. Fourth Edition*. Houghton Mifflin Company, 2000.
- Anderson, C. A. and Dill, K. E. *Video games and aggressive thoughts, feelings and behaviour in the laboratory and in life*. *Journal of Personality and Social Psychology* 2000, Vol. 78, No. 4. 772-790.
- Barker, Chris. *Cultural Studies: Theory and Practice*. SAGE, 2003.
- Baudrillard, Jean. *Simulacra and Simulations*. In *Jean Baudrillard, Selected Writings*. Mark Poster (ed.). Polity, 1988. 166-184.
- Bogost, Ian. *Unit Operations: An Approach to Videogame Criticism*. The MIT Press, 2006.
- Bogost, Ian. *Persuasive Games: The Expressive Power of Videogames*. The MIT Press, 2007.
- Boggs, Carl and Pollard Tom. *The Hollywood War Machine: U.S. Militarism and Popular Culture*. Paradigm Publishers, 2006.
- Bolter, Jay David and Grusin, Richard. *Remediation: Understanding New Media*. The MIT Press, 2000.
- Brinkley, Mark C. "Meet Your 'Overmatch'". *Army Times*, September 2006. Available online (retrieved 2.6.2008): <http://www.armytimes.com/legacy/new/1-292925-2096151.php>
- Burns, Robert. "Army launching 'Army Strong' ad campaign." *The Associated Press*, October 2006. Available online (retrieved 2.6.2008): <http://www.foxnews.com/wires/2006Oct09/0,4670,ArmySlogan,00.html>
- Bushman, Brad. "Army video game breeds violence with tax money." *Topplebush.com*. Available online (retrieved 24.6.08): <http://www.topplebush.com/oped376.shtml>
- Bushman, Brad and Anderson Craig. *Media Violence and the American Public: Scientific Fact Versus Media Misinformation*. *American Psychologist*, Vol. 56, No. 6/7. The American Psychological Association, 2001. 477-489.
- Capps, Michael, McDonald, Perry and Zyda, Michael. *Future for Entertainment-Defense Research Collaboration*. *IEEE Computer Graphics and Applications*, 2001. Available online (retrieved 6.6.2008): <http://gamepipe.usc.edu/~zyda/pubs/IEEECGA2001.pdf>

- Chen, Jane and Ringel, Matthew. *Can Advergaming be the Future of Interactive Advertising?* Fast Forward, 2001.
- Carnagey, Nicholas L. and Anderson, Craig A. *The Effects of Reward and Punishment in Violent Video Games on Aggressive Affect, Cognition and Behaviour*. Psychological Science, Vol. 16, No. 11. American Psychological Society, 2005. 882-889.
- Chambers, Christopher. "The Army Game Project." ARMY Magazine, 2002. Available online (retrieved 2.6.2008):  
<http://www.ausa.org/webpub/DeptArmyMagazine.nsf/byid/CCRN-6CCS4D>
- Clausewitz, Carl von. *Vom Kriege*. 1832. On War. J.J. Graham (transl.). N. Trübner, 1883. Project Gutenberg E-book. Available online (retrieved 10.11.2008):  
<http://www.gutenberg.org/files/1946/1946-h/1946-h.htm>
- Cosby, L. Neal. "SIMNET – An Insider's Perspective." SISO News, Vol. 2, Issue 1, 1999. Available online (retrieved 13.7.2008):  
[http://www.sisostds.org/webletter/siso/iss\\_39/art\\_202.htm](http://www.sisostds.org/webletter/siso/iss_39/art_202.htm)
- Dao, James. "Ads Now Seek Recruits for 'An Army of One'." New York Times, 2001. Available online (retrieved 2.6.2008):  
<http://www.nytimes.com/2001/01/10/national/10ARMY.html>
- Davis, Margaret (ed). *America's Army PC Game – Visualization and Realization*. United States Army and the MOVES Institute, 2004. Available online (retrieved 6.6. 2008):  
<http://www.movesinstitute.org/~zyda/pubs/YerbaBuenaAABooklet2004.pdf>
- Defense Advanced Research Projects Agency (DARPA). *DARPA's Strategic Plan*. The Department of Defense, 2007. Available online (retrieved 12.10. 2008):  
<http://www.darpa.mil/body/pdf/DARPA2007StrategicPlanfinalMarch14.pdf>
- Defense Science Board (DSB). *Strategic Communication*. DSB, January 2008. Available online (retrieved 10.10. 2008): [http://www.acq.osd.mil/dsb/reports/2008-01-Strategic\\_Communication.pdf](http://www.acq.osd.mil/dsb/reports/2008-01-Strategic_Communication.pdf)
- Dunnigan, James F. *The Complete Wargames Handbook - Second Edition*, 1992. Available online (retrieved 2.6. 2008):  
<http://www.hyw.com/Books/WargamesHandbook/Contents.htm>
- Entertainment Software Association (ESA). *Essential Facts About the Computer and Video Game Industry – 2008 Sales, Demography and Usage Data*. Entertainment Software Association, 2008. Available online (retrieved 3.11. 2008):  
[http://www.theesa.com/facts/pdfs/ESA\\_EF\\_2008.pdf](http://www.theesa.com/facts/pdfs/ESA_EF_2008.pdf)
- Entertainment Software Rating Board (ESRB). *Game Ratings and Descriptor Guide*. Entertainment Software Association (ESA), 2006. Available online (retrieved 3.11. 2008): [http://www.esrb.org/ratings/ratings\\_guide.jsp](http://www.esrb.org/ratings/ratings_guide.jsp)
- Eskelinen, Markku. *Six Problems in Search of a Solution: The challenge of cybertext theory and ludology to literary theory*. Dichtung Digital, March 2004
- Eskelinen, Markku. *Pelit ja Pelitutkimus Luovassa Taloudessa. Sitran raportteja 51*. Edita Prima Oy, 2005.
- Federation of American Scientists (FAS). *R&D Challenges in Games for Learning*. Summit on Educational Games 2006. FAS, 2006. Available online (retrieved 2.6. 2008): [http://www.fas.org/gamesummit/Resources/R&D\\_Challenges.pdf](http://www.fas.org/gamesummit/Resources/R&D_Challenges.pdf)
- Fort Leavenworth Lamp, The. "America's Army' Finds Place in Class Room." September 2008. Available online (retrieved 3.11.2008):  
[http://www.ftleavenworthlamp.com/articles/2008/09/25/dod\\_news/dod6.txt](http://www.ftleavenworthlamp.com/articles/2008/09/25/dod_news/dod6.txt)
- Foucault, Michel. *The Subject and Power*. In *Michel Foucault: Beyond Structuralism and Hermeneutics*. Hubert L. Dreyfuss and Paul Rabinow (eds.). University of Chicago Press, 1982.

- Freedman, Jonathan L. *Evaluating the Research on Violent Video Games*. Department of Psychology. University of Toronto, 2001.
- Galloway, Alexander. *Social Realism in Gaming*. *Game Studies* Vol. 4, issue 1, November 2004. Available online (retrieved 1.9.2008): <http://www.gamestudies.org/0401/galloway/>
- Gaudiosi, John. "America's Army Part of New Facility, New Game in Development." *Gamedaily.com*, 2008. Available online (retrieved 9.9.2008): <http://www.gamedaily.com/games/americas-army-special-forces/pc/game-news/americas-army-part-of-new-facility-new-game-in-development>
- Gegax, Trevor T. "Full Metal Joystick." *Newsweek Inc.*, 2002. Available online (retrieved 2.6.2008): <http://gamepipe.usc.edu/~zyda/Press/Newsweek14Oct2002.pdf>
- Gentile, D. A. and Stone W. *Violent Video Game Effects on Children and Adolescents: A Review of the Literature*. *Minerva Pediatrica*, Vol. 57, No. 6, 2005. 337-358.
- Gray, Wilbur. *Short History of Wargaming*. The Northwest Historical Miniature Gaming Society (NHMGS), 2008. Available online (retrieved 13.7.2008): <http://www.nhmgs.org/articles/historyofwargaming.html>
- Grossman, Dave and Christensen, Loren W. *On Combat: The Psychology and Physiology of Deadly Conflict in War and Peace*. PPCT Research Publications, 2004.
- Hall, Stuart (ed.). *Representation: Cultural Representations and Signifying Practices (Culture, Media and Identities Series)*. London: SAGE Publications, 1997. 1-30.
- Herz, J.C. *Joystick Nation – How Videogames Gobbled Our Money, Won Our Hearts and Rewired Our Minds*. Abacus, 1997.
- Herz, J.C. *Gaming the System: Multi-player Worlds Online*. *Game On – The History and Culture of Videogames*. Lucien King (ed). Laurence King Publishing Ltd., 2002.
- Hodes, Jacob and Ruby-Sachs Emma. "America's Army Target's Youth." *The Nation*, 2002. Available online (retrieved 2.8.2008): <http://www.thenation.com/doc/20020902/hodes20020823>
- Hodges, Michael. *AK-47: The Story of the People's Gun*. Hodder and Stoughton-Sceptre, 2007.
- Huizinga, Johan. *Homo Ludens: A Study of the Play-Element in Culture*. Beacon Press, 1950.
- Jonsson, Patrick. "Enjoy the Video Game? Then Join the Army." *The Christian Science Monitor*, September 2006. Available online (retrieved 1.10.2008): <http://www.csmonitor.com/2006/0919/p01s04-usmi.html>
- Juul, Jesper. *Half-Real: Video Games between Real Rules and Fictional Worlds*. The MIT Press, 2005.
- Kellner, Douglas. *Media Culture - Cultural Studies, Identity and Politics Between the Modern and the Postmodern*. Routledge, 1995.
- Keller-McNulty, Sallie and Weidman, Scott (eds). *Defense Modeling, Simulation, and Analysis: Meeting the Challenge*. National Academic Press, 2006.
- Kleeberger, Jürgen. *Online Gaming as Marketing and Sales Catalyst*. University of St. Gallen, 2002.
- Larsen, Christopher E. *Light Infantry Tactics: For Small Teams*. AuthorHouse, 2005.
- Lenoir, Tim. *All but War Is Simulation: The Military-Entertainment Complex*. *Configurations*, 8, 2000. 238-335.
- Lenoir, Tim and Lowood, Henry. *Theatre of War: The Military-Entertainment Complex*. Stanford University, 2002.
- Li, Zhan. *The Potential of America's Army the Video Game as Civilian-Military Public Sphere*. Massachusetts Institute of Technology, 2004.

- Libicki, Martin C. *What is Information Warfare?* National Defense University. Institute for National Strategic Studies, 1995.
- Little, Daniel. *History and Basics of M&S*. Battle Command, Simulation & Experimentation Directorate (BCSE). Washington, 2006.
- Lopez, C. Todd. "Army Meeting 2008 Recruiting Goals." The United States Army, January 2008. Available online (retrieved 2.6.2008): <http://www.army.mil/news/2008/01/31/7221-army-meeting-2008-recruiting-goals/>
- Lundblad, Nicklas and Frank, Anders. *Politics in Motion – Some Reflections on Political Bias in Simulation Gaming*. Defence Material Administration and Swedish Research Institute for Information Technology, 2002. Available online (retrieved 3.11. 2008): [http://www.defencegaming.org/downloads/ifip\\_lundblad\\_frank.pdf](http://www.defencegaming.org/downloads/ifip_lundblad_frank.pdf)
- Luttwak, Edward N. *Strategy and History. Collected Essays, Vol. 2*. Transaction Books, 1985.
- Luttwak, Edward N. *Strategy - The Logic of War and Peace*. The Belknap Press, 1987.
- Macedonia, Michael. *Games, Simulations, and the Military Education Dilemma*. EDUCAUSE, 2001. Available online (retrieved 5.11. 2008): <http://net.educause.edu/ir/library/pdf/ffpiu018.pdf>
- McKinsey & Company. *War for Talent: Department of Defense and Private Sector Battle for Survival*. Secretary of Defense Corporate Fellowship Program (SDCFP), 2001.
- McLeroy, Carrie. "Leveraging America's Army." *Soldiers Magazine*. September 2008, Vol. 63, No. 9. The Army Chief of Public Affairs, 2008. 10-15. Available online (retrieved 5.10.2008): <http://lists.army.mil/soldiersmagazine/pdfs/sep08full.pdf>
- Myers, Jack. *Advertising and Marketing Communications Forecast 2006-2009*. Jack Myers Media Business Report. Myers Publishing LLC, 2007. Available online (retrieved 2.6. 2008): <http://media.jackmyers.com/documents/Myers2006-2009Media-MarketingForecast.pdf>
- National Priorities Project (NPP). *Military Recruiting 2007: Army Misses Benchmarks by Greater Margin*. NPP, 2008. Available online (retrieved 6.8. 2008): <http://www.nationalpriorities.org/militaryrecruiting2007>
- Nieborg, David B. *Changing the Rules of Engagement – Tapping into the Popular Culture of America's Army, the Official U.S. Army Computer Game*. Utrecht University, 2005.
- Nieborg, David B. *First Person Paradoxes: The Logic of War in Computer Games. In Game Set and Match II. On Computer Games, Advanced Geometries and Digital Technologies*. K. Oosterhuis and L. Feireiss (eds.). Episode Publishers, 2006. 107-115.
- Office of Homeland Security. *National Strategy for Homeland Security*. Office of Homeland Security, 2002. Available online (retrieved 4.10. 2008): [http://www.whitehouse.gov/homeland/book/nat\\_strat\\_hls.pdf](http://www.whitehouse.gov/homeland/book/nat_strat_hls.pdf)
- Office of Inspector General. *Development and Management of the Army Game Project (D-2005-103)*. Department of Defense, 2005. Available online (4.10. 2008): <http://www.dodig.osd.mil/Audit/reports/FY05/05-103.pdf>
- Oxford English Dictionary – Second Edition, The. Volume XII (Poise-Quelt)*. Simpson, J.A. and Weiner E.S.C. (eds). Clarendon Press, 1989.
- Padilla, Peter A. and Laner, Mary Riege. *Trends in Military Influences on Army Recruitment Themes: 1915-1953*. *Sociological Inquiry*, Vol. 71, No. 4, 2001. 421-436.
- Padilla, Peter A. and Laner, Mary Riege. *Trends in Military Influences on Army Recruitment Themes: 1954-1990*. *The Journal of Political and Military Sociology*, Vol. 30, No. 1, Summer 2002.
- Rostker, Bernard D. *I Want You! – The Evolution of All-Volunteer Force*. RAND Corporation, 2006.

- Salen, Katie and Zimmerman, Eric. *Rules of Play: Game Design Fundamentals*. The MIT Press, 2004.
- Salokoski, Tarja. *Onko väkivallalla vaikutusta? In Väkivalta osana pelimaailmaa. Digitaalisen pelien maailmoja*. Marja Kankaanranta, Pekka Neittaanmäki and Päivi Häkkinen (eds). Jyväskylän yliopistopaino, 2004. 191-204.
- Schiesel, Seth. "On Maneuvers With the Army's Game Squad." *The New York Times*, February 2005. Available online (retrieved 2.6.2008): [http://www.nytimes.com/2005/02/17/technology/circuits/17army.html?\\_r=1&oref=slogin](http://www.nytimes.com/2005/02/17/technology/circuits/17army.html?_r=1&oref=slogin)
- Shilling, R., Zyda, M. and Wardynski E. *Introducing Emotion into Military Simulation and Videogame Design: America's Army: Operations and VIRTE*. GameOn Conference, 2002. Available online (retrieved 2.6. 2008): <http://gamepipe.usc.edu/~zyda/pubs/ShillingGameon2002.pdf>
- Smith, Roger. *Game Impact Theory: The Five Forces That Are Driving the Adoption of Game Technologies within Multiple Established Industries*. The U.S. Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI), 2006.
- Snider, Mike. "Army Game Recruits 'Real Heroes'." *Navy Times*, September 2006. Available online (retrieved: 2.6.2008): <http://www.navytimes.com/legacy/new/1-292925-2129296.php>
- Stephen, Mark. *Pause & Effect: The Art of Interactive Narrative*. New Riders, 2003.
- Sterling, Bruce. "War is Virtual Hell." *Wired Magazine*, Vol. 1.01, 1993. Available online (retrieved 5.10.2008): <http://www.wired.com/wired/archive/1.01/virhell.html>
- Sternheimer, Karen. *Do Video Games Kill? Contexts*, Vol. 6, No. 1, 2007. 13-17. Available online (retrieved 2.6.2008): <http://www.asanet.org/galleries/default-file/winter07ContextsFeature.pdf>
- Sutton-Smith, Brian. *The Ambiguity of Play*. Harvard University Press, 1997.
- United States Army Accessions Command (USAAC). *G-7 Strategic Communications, Marketing and Outreach. Campaign Ethos Statement*. Strategic Outreach Directorate, 2006. Available online (retrieved 15.10. 2008): [http://www.usaac.army.mil/sod/launch/downloads/campaign\\_key\\_messages.doc](http://www.usaac.army.mil/sod/launch/downloads/campaign_key_messages.doc)
- United States Army. *America's Army: Special Forces Home Page*. Available online: <http://www.americasarmy.com/>
- United States Army. *America's Army Game Manual*. Available online: <http://manual.americasarmy.com/>
- United States Army Research Institute (ARI). *Training Lessons from America's Army Game*. ARI Newsletter, Vol. 14, No. 1, 2004. Available online (retrieved 5.8.2008): [http://www.hqda.army.mil/ari/pdf/ARI\\_NewsLetter\\_Vol%2014\\_1\\_FINAL\(10-18-04\).pdf](http://www.hqda.army.mil/ari/pdf/ARI_NewsLetter_Vol%2014_1_FINAL(10-18-04).pdf)
- United States Department of Defense. *DOD Dictionary of Military and Associated Terms*. The Joint Doctrine Division, 2001. Available online (retrieved 5.7. 2008): [http://www.dtic.mil/doctrine/jel/new\\_pubs/jp1\\_02.pdf](http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf)
- United States Department of Justice. Office of Justice Programs. *National Crime Victimization Survey Violent Crime Trends 1973-2005*. Bureau of Justice Programs, 2006. Available online (retrieved 8.8.2008): <http://www.ojp.usdoj.gov/bjs/glance/tables/viortrdtab.htm>
- Vedrasko, Ilya. *Advertising in Computer Games*. Comparative Media Studies. The Massachusetts Institute of Technology (MIT), 2006.
- Webb, Gary. "The Killing Game." *Sacramento News & Review*, 2004. Available online (retrieved: 2.7.2008): <http://www.newsreview.com/sacramento/Content?oid=31755>

- Winkler, Tina and Buckner, Kathy. *Receptiveness of Gamers to Embedded Brand Messages in Advergaming: Attitudes towards Product Placement*. Journal of Interactive Advertising. Vol. 7, No. 1, Fall 2006. Available online (retrieved 3.10. 2008): <http://jiad.org/article85>
- Zimmerman, Eric. *Play as Research: The Iterative Design Process*. 2003. Available online (retrieved 6.8. 2008): [http://www.ericzimmerman.com/texts/Iterative\\_Design.htm](http://www.ericzimmerman.com/texts/Iterative_Design.htm)
- Zyda, Michael and Sheehan, Jerry R. (eds). *Modeling and Simulation: Linking Entertainment and Defense*. National Research Council (NRC). National Academic Press, 1997.
- Zyda, Michael. *The Naval Postgraduate School MOVES Program – Entertainment Research Directions*. Summer Computer Simulation Conference, Vancouver, 2000. Available online (retrieved 2.6. 2008): <http://www.scs.org/scsarchive/getDoc.cfm?id=1121>
- Zyda, M., Hiles, J., Mayberry, A., Wardynski, C., Capps, M., Osborn, B., Shilling, R., Robaszewski, M. and Davis, M. *Entertainment R&D for Defense*. Computer Graphics and Applications, IEEE Volume 23, Issue 1, 2003a. 28 - 36
- Zyda M., Mayberry, A., Wardynski, E., Shilling, R. and Davis, M. *The MOVES Institute's America's Army Operations Game*. Proceedings of the 2003 ACM SIGGRAPH Symposium on Interactive 3D Graphics (I3D), 2003b. 219-220. Available online (retrieved 2.6. 2008): <http://gamepipe.usc.edu/~zyda/pubs/I3D-Demo-Paper-2003.pdf>
- Zyda, M., Mayberry, A., McCree, J. and Davis, M. *From Viz-Sim to VR to Games: How We Built a Hit Game-Based Simulation*. The MOVES Institute, 2004.
- Zyda, Michael. *From Visual Simulations to Virtual Reality to Games*. Perspectives. IEEE Computer Society, September 2005. 25-32. Available online (retrieved 7.8.2008): <http://gamepipe.usc.edu/~zyda/pubs/Zyda-IEEE-Computer-Sept2005.pdf>

## REFERENCES: FILMOGRAPHY

- Broomfield, Nick. "Battle for Haditha." United Kingdom. HanWay Films, 2007.
- Capra, Frank. "Why We Fight. Episode 1: Prelude to War." United States. U.S. Army Special Service Division Office of War Information. 1943.
- Coppola, Francis Ford. "Apocalypse Now." United States. United Artists, 1979.
- Haggis, Paul. "In the Valley of Elah." United States. Warner Independent, 2007.
- Jarecki, Eugene. "Why We Fight." United States. Sony Pictures Classic, 2005.
- Kubrick, Stanley. "Full Metal Jacket." United States / United Kingdom. Warner Bros. Pictures, 1987.
- Mendes, Sam. "Jarhead." United States. Universal Pictures, 2005.
- Scott, Ridley. "Black Hawk Down." United States. Columbia Pictures, 2001.
- Spielberg, Stephen. "Saving Private Ryan." United States. DreamWorks and Paramount Pictures, 1998.
- Stahl, Roger. "Militainment, Inc. – Militarism & Pop Culture." Media Education Foundation (MEF), 2007.

## REFERENCES: GAMES

- Afkar Media. *Under Ash*. Dar al-Fikr, 2001.
- Afkar Media. *Under Siege*. Dar al-Fikr, 2005.
- Atari, Inc. *Battlezone*. Atari, Inc., 1980.
- Bohemia Interactive Australia. *Virtual Battlespace Systems 1*. BIS, 2001.
- Bohemia Interactive Australia. *Virtual Battlespace Systems 2*. BIS, 2007.
- Bohemia Interactive Studio. *Operation Flashpoint: Cold War Crisis*. Codemasters, 2001.
- Bohemia Interactive Studio. *ArMA: Armed Assault*. 505 Games & Atari, 2006/2007.
- Central Internet Bureau. *Special Forces*. Hezbollah, 2003.
- Central Internet Bureau. *Special Forces 2: Tale of the Truthful Pledge*. Hezbollah, 2007.
- Creative Assembly. *Medieval II: Total War*. Sega, 2006.
- Destineer Studios. *Close Combat: First to Fight*. 2K Games, 2005.
- Digital Illusions CE. *Battlefield 2*. EA Games, 2005.
- Dunnigan, James F. *Mech War '77*. Simulations Publications Inc., 1975.
- Epic Games. *Unreal Tournament 3*. Midway Games, 2008.
- Gameloft. *America's Army: Special Operations*. U.S. Army, 2007.
- GlobalVR. *America's Army (Arcade)*. U.S. Army, 2007.
- id Software. *Doom*. Shareware (DOS version), 1993.
- id Software. *Doom II: Hell on Earth*. GT Interactive, 1994.
- id Software. *Quake II*. Activision, 1997.
- Infinity Ward. *Call of Duty 4: Modern Warfare*. Activision, 2008.
- Irrational Games. *SWAT 4*. Vivendi Universal, 2005.
- Kuma Games. *Kuma\War 1*. Kuma Games, 2004.
- Kuma Games. *Kuma\\War 2*. Kuma Games, 2006.
- Marine Corps Modeling and Simulation Office (MCMSMO). *Marine Doom*. USMC, 1996.
- Pandemic Studio. *Full Spectrum Warrior*. THQ, 2004.
- Raven Software. *Soldier of Fortune II: Double Helix*. Activision, 2002.
- Rebellion Developments. *Sniper Elite*. Atari/Ubisoft/Namco, 2005.
- Red Storm Entertainment. *America's Army: True Soldiers*. Ubisoft, 2007.
- Relic Entertainment. *Company of Heroes*. THQ, 2005.
- Relic Entertainment. *Company of Heroes: Opposing Fronts*. THQ, 2007.
- Roberts, Charles S. *Tactics & Tactics II*. Avalon Hill, 1953/1958.
- Secret Level. *America's Army: Rise of a Soldier*. Ubisoft, 2005.
- Sierra Northwest. *SWAT 3: Close Quarters Battle*. Sierra Entertainment, 1999.
- Splash Damage. *Wolfenstein: Enemy Territory*. Activision, 2003.
- United States Army. *America's Army: Recon*. U.S. Army, 2002.
- United States Army. *America's Army: Operations*. U.S. Army, 2002-03.
- United States Army. *America's Army: Special Forces*. U.S. Army, 2003-09.
- Valve Corporation. *Counter-Strike*. Vivendi Universal, 2000.
- Valve Corporation. *Half-Life*. Sierra Studios, 1998.

## APPENDIX A: VERSION HISTORY

<u>Title</u>	<u>Version</u>	<u>Release date</u>
AA: Recon	v1.0.0	04 JUL 2002
AA: Operations	v1.0.1b	05 JUL 2002
AA: Operations (Marksmanship Pack)	v1.1.1	01 AUG 2002
AA: Operations (Airborne Pack)	v1.2.0	22 AUG 2002
AA: Operations (Map Pack)	v1.2.1	03 OCT 2002
AA: Operations (Mountain Pass)	v1.3.0	10 OCT 2002
AA: Operations (River Basin)	v1.4.0	25 NOV 2002
AA: Operations (Weapon Cache SE)	v1.5.0	23 DEC 2002
AA: Operations (Radio Tower)	v1.6.0	16 MAR 2003
AA: Operations (Bridge SE)	v1.7.0	21 APR 2003
AA: Operations (Medics)	v1.9.0	08 AUG 2003
AA: Special Forces (SFAS)	v2.0.0	06 NOV 2003
AA: Special Forces (Sandstorm)	v2.0.0a	21 DEC 2003
AA: Special Forces (Downrange)	v2.1.0	25 MAY 2004
AA: Special Forces (Vanguard)	v2.2.0	19 OCT 2004
AA: Special Forces (Vanguard)	v2.2.1	18 NOV 2004
AA: Special Forces (Firefight)	v2.3.0	18 FEB 2005
AA: Special Forces (Q-Course)	v2.4.0	05 MAY 2005
AA: Special Forces (Direct Action)	v.2.5.0	13 OCT 2005
AA: Special Forces (Link-Up)	v.2.6.0	09 FEB 2006
AA: Special Forces (Overmatch)	v.2.7.0	14 SEP 2006
AA: Special Forces (Coalition)	v.2.8.0	21 DEC 2006
AA: Special Forces (SMU GH Map Pack)	v2.8.1	22 MAR 2007
AA: Special Forces (Overmatch)	v2.8.2	06 SEP 2007
AA: Special Forces (Overmatch)	v2.8.3	31 JAN 2008
AA: Special Forces (Overmatch)	v2.8.3.1	25 MAR 2008
AA: Special Forces (Overmatch)	v2.8.4	09 OCT 2008

## **APPENDIX B: TRAINING SIMULATIONS**

<u>Basic Combat Training</u>	<u>Version</u>
Basic Rifle Marksmanship	v1.0.0
Eagle Tower	v2.7.0
Weapons Familiarization	v2.7.0
MOUT Shoothouse	v1.0.0
 <u>Advanced Individual Training</u>	
ES2 McKenna	v2.8.4
Javelin Training	v2.7.0
HMMWV Driver	v2.7.0
CROWS Gunner	v2.7.0
 <u>Advanced Marksmanship</u>	
M-24	v1.1.1
M-82	v1.1.1
 <u>Airborne School</u>	
250' Tower	v1.2.0
Live Jump	v1.2.0
 <u>Medic Training</u>	
Airway Management	v1.9.0
Control Bleeding	v1.9.0
Treat Shock	v1.9.0
Field Training	v1.9.0
 <u>Special Forces Training</u>	
Camp MacKall	v2.7.0
SF Escape & Evade	v2.0.0

## APPENDIX C: OFFICIAL GAME MISSIONS

<u>Infantry Missions</u>	<u>Version</u>
Canyon	v2.8.4
District	v2.8.4
Border	v2.6.0
Urban Assault	v2.3.0
Mountain Pass Second Edition	v1.9.0
Bridge Second Edition	v1.7.0
River Basin	v1.4.0
Mountain Pass	v1.3.0
Headquarters Raid	v1.0.0
Collapsed Tunnel	v1.0.0
Insurgent Camp	v1.0.0
Pipeline	v1.0.0
Bridge Crossing	v1.0.0
MOUT McKenna	v1.0.0
<u>82<sup>nd</sup> Airborne Missions</u>	
JRTC FARP Raid	v1.2.1
FLS Assault	v1.2.0
<u>75<sup>th</sup> Ranger Missions</u>	
Rummage	v2.8.2
Steamroller	v2.7.0
Interdiction (Co-Op)	v2.7.0
Dusk	v2.6.0
Woodland Outpost	v2.3.0
Radio Tower	v1.6.0
Weapons Cache Second Edition	v1.5.0
Weapons Cache	v1.2.1
Mountain Ambush	v1.2.0
Swamp Raid	v1.2.0

### Special Forces Missions

ES2 Border	v2.8.4
SF Hospital Second Edition	v2.8.2
SF Snakeplain (Co-Op)	v2.7.0
SF Dockside	v2.5.0
SF Extraction	v2.5.0
SF Courtyard	v2.4.0
SF Blizzard	v2.4.0
SF Precious Cargo Recovery (PCR)	v2.4.0
SF Water Treatment	v2.4.0
SF Taiga	v2.2.0
SF Oasis	v2.2.0
SF Village	v2.1.0
SF Arctic	v2.1.0
SF Sandstorm	v2.0.0a
SF Combat Search and Rescue (CSAR)	v2.0.0
SF Pipeline	v2.0.0
SF Recon	v2.0.0
SF Hospital	v2.0.0

### User Created Missions (SMU GH Map Pack)

SF Refinery	v2.8.1
SF Old Town	v2.8.1
SF Floodgate	v2.8.1
River Village	v2.8.1

## **APPENDIX D: LIST OF ABBREVIATIONS**

AA	America's Army
AADT	America's Army Development Teams
AAFA	America's Army Future Applications
AAGA	America's Army Governmental Applications
AAMD	America's Army Mission Depot
AAME	America's Army Mission Editor
AAP	America's Army Platform
AAPA	America's Army Public Applications
AA:O	America's Army: Operations
AA:SF	America's Army: Special Forces
AGP	Army Game Project
ARI	U.S. Army Research Institute
ARPA	Advanced Research Projects Agency
BCT	Basic Combat Training
CEM	Combat Effectiveness Meter
COTS	Commercial off-the-shelf
CROWS	Common Remotely Operated Weapon System
CSET	Convoy Skills Engagement Trainer
CQB	Close Quarter Battle
DARPA	Defense Advanced Research Projects Agency
DoD	United States Department of Defense
DSB	Defense Science Board
ESRB	Entertainment Software Rating Board
ES2	Every Soldier a Sensor
FPS	First-person shooter
FST	Future Soldier Trainer
FSTS	Future Soldier Training System
GWOT	Global War on Terror
HMMWV	High Mobility Multipurpose Wheeled Vehicle
HUD	Heads-Up Display
ICT	Institute for Creative Technologies

IED	Improvised Explosive Device
IF	Indigenous Forces
IMT	Infantry Movement Technique
MCMSMO	Marine Corps Modeling and Simulation Office
MEC	Military-Entertainment Complex
MIC	Military Industrial Complex
MILES	Multiple Integrated Laser Engagement System
MOS	Military Occupation Specialty
MOUT	Military Operations in Urban Terrain
MOVES	Modeling, Virtual Environments, and Simulation
M&S	Modeling and Simulation
NPS	Naval Postgraduate School
NRC	National Research Council
OpFor	Opposing Forces
OEMA	Office of Economic and Manpower Assessment
ROE	Rules of Engagement
RPG	Rocket-propelled grenade
RTS	Real-time strategy
SAI	Situational Awareness Indicator
SAW	Squad Automatic Weapon
SED	Software Engineering Directorate
SF	Special Forces
SIMNET	Simulator Networking
SOF	Special Operation Forces
STOW	Synthetic Theater of War
UE	Unreal Engine
USAREC	U.S. Army Recruiting Command
USMA	United States Military Academy
USMC	United States Marine Corps
UW	Unconventional Warfare
VAE	Virtual Army Experience
VIRTE	Virtual Technologies and Environments
VRS	Virtual Recruiting Station

## APPENDIX E: LIST OF FIGURES

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<http://www.firingsquad.com>
- Fig. 10: “The Soldier’s Creed appears on game’s loading screens as part of illustration” Page 82.
- Fig. 11 “Various representations of the OpFor combatants in *Dusk*.” Page 84. Source:  
<http://www.americasarmy.com/images/media/screenshots/800x600/dusk3.jpg>

Fig. 12: “Advertisement poster from *Dusk* and screenshot of an OpFor combatant wearing civilian clothes in *SF Hospital*. Same poster appears also in *Rummage* mission.” Page 87. Source:

<http://aaotracker.com/gallery.php>

Fig. 13: “The graffiti from *Rummage* and a photo of Iraqi children greeting an American soldier share similar connotation and are used to convey the similar message. Photograph by Ceerwan Aziz, Reuters.” Page 88. Source:

<http://blogs.usatoday.com/ondeadline/images/2007/05/07/soldier.jpg>

Fig 14: “Cover art of *Under Siege*.” Page 93. Source:

[http://www.underash.net/download/press/posters/poster01\\_s.jpg](http://www.underash.net/download/press/posters/poster01_s.jpg)

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