Clicking and Shooting for Hearts and Minds

Soft Power and Military Serious Games

Master Thesis

B.C. Arriën Post
3291111
New Media & Digital Culture
Faculty of Humanities
University of Utrecht

Supervisor: René Glas
Second Reader: Mirko Tobias Schäfer

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Abstract

This thesis seeks to build a relation between the fields of international relations, military studies and games studies in order to examine tactical military serious games, both used for strategic communication purposes and military training and education in terms of their persuasiveness as expressive media. Building on Joseph S. Nye's concepts of hard-, soft- and smart power, this thesis examines both the ability of military serious games to persuade and attract players to see military activities as legitimate and military policy goals as credible, as the ability to train soldiers to acquire smart power awareness and competencies which may aid them in making hard decisions in actual complex 21st century conflict situations. It starts out by examining the concepts of hard, soft and smart power and the consequences of the increasingly soft-power oriented global affairs climate. It then examines the ability of games to persuade and attract and subsequently links these theories to soft power concepts. Based on both game and international political concepts, the thesis follows with the examinations of a military serious game that is used for strategic communication purposes, The U.S. Army's official game *America's Army*, and of a military serious game that is used for military training and education purposes, Bohemia Interactive's *Virtual Battlespace 2.* The goal of these examinations is to show how these games try to persuade and attract the players in seeing specific military activities and policies as credible and legitimate.

Keywords: Soft Power, Smart Military Power, Military Serious Games, Strategic Communication, Military Training and Education.

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Introduction

"I know that," the translator said, raising his voice so the sentries could hear. "We know these are just young kids. They are frightened and hot and don't know anything. But they should learn something. Just a few phrases. Yesterday, I was on the highway at a checkpoint and they stop a car and they are shouting at the driver, 'Stay in your car' in English. He cannot understand what they are saying—he was not educated man—he is opening the door. And I am running to him and saying in Arabic, 'Don't get out.' But I cannot in time and they shoot him. Dead."

I looked at him.

"You don't believe me. Listen, I saw him with my eyes. This is why they are losing Iraq.""

– Rory Stewart, *The Prince Of The Marshes* (2006, p. 105)

So what have games given me? Experiences. Not surrogate experiences, but actual experiences, many of which are as important to me as any real memories. Once I wanted games to show me things I could not see in any other medium. Then I wanted games to tell me a story in a way no other medium can. Then I wanted games to redeem something absent in myself. Then I wanted a game experience that points not toward but *at* something. Playing GTA IV on coke for weeks and then months at a time, I learned that maybe all a game can do is point at the person playing it, and maybe this has to be enough.

– Tom Bissell, *Extra Lives* (2010, p. 57)

Here we see two quotes. The first is a shard of experience from the life of former British infantry officer and diplomat Rory Stewart. His 2006 book, *The Prince Of The Marshes*, is an autobiographical history of his experiences as a political advisor and deputy governor in two of Iraq's provinces during the U.S.-led occupation that started in 2003 and lasted until the last U.S. troops officially left Iraq in December 2011. The quote functions as a grim example that shows us, among other things, at least two truths: First, warfare ultimately means the execution of illiberal behavior that leads to death and destruction (Gray 2011, p. 8), and second, people, whether innocent or not, are always the victim of war. The second quote is one from journalist Tom Bissell's 2009 book *Extra Lives*, which describes many of his funny, but also more tragic experiences with games, gameplay and the game industry. What this specific fragment makes so evident is not a game's ability to contain all kinds of messages and ideas, but the ability of making the player think about his performance; a critical understanding deriving from the reciprocal interaction between game and gamer, forming a *real* experience. But how do they relate to each other?

In the global information age nation-state governments are increasingly competing over power not only with other nation-states, but also with publics and non-state organizations. Information and Communication Technologies (ICTs) are available in abundance to both state and non-state actors, and information becomes ubiquitous and always accessible. On top of this, information is becoming increasingly important which leads to the primacy of ideas, values, ethics, norms and laws over other resources. In the 21st century communication between state- and non-state actors is essential for the success of nations to secure and achieve national priorities (Arquilla & Ronfeldt 1999; Castells 2001; Nye 2004, 2011a). Such political communication attempts, as, for example, public diplomacy efforts, focus on communicating policy-related information to both domestic- as foreign actors such as governments, organizations, corporations and publics. The increasing availability of networked communication platforms such as the Internet and social media in the 21st enable new possibilities for non-state actors to engage in public debates to justify or criticize government policies. This increasing centrality of media in the public sphere has serious implications for government policy-making and execution.

Traditionally, a country's military and economic, or *hard power*, has always been the most important component of nation's power sources. However, in the global information age a third component is of increasing importance: *soft power* (Arquilla & Ronfeldt 1999). Coined by professor Joseph S. Nye Jr., soft power is the ability to get others to want what you want (2004), and is used to co-opt others rather than to force them (1990, 2002, 2004, 2011a, 2011b). According to Nye hard power is usually exercised to coerce or force people to change their behavior: one actor holds the

power *over* others. Soft power, on the other hand, "rests on the ability to shape the preferences of others" (Nye 2004, p. 5) and thus acquires some form of cooption, or cooperation *with* other actors (Nye 2011a).

The ethical appeal of the term soft power is making it increasingly popular, and morally superior, for both nation-states as non-state actors. However, threats that acquire hard power solutions have by no means disappeared (Gray 2011). For nation-states, statecraft and grand strategies this means that there has to be a focus on both traditional hard, military and economic power, and soft power. To accomplish effective integration of both Nye calls for 'smart power strategies' (Nye 2004, 2009, 2011a). However, publics and non-state organizations are increasingly able to undermine policy efforts as they hold governments accountable for their actions (Hayden 2012). Thus, governments can only effectively use power if a policy is perceived as legitimate and credible. Soft power sources and resources are increasingly recognized as an important means for nations-states to achieve national priorities.

Nation-state governments attempts to gain credibility and legitimacy, i.e. creating a source of soft power, have made use of all kinds of communication efforts, such as public diplomacy, cultural diplomacy, strategic communications, place- and nation branding and other soft-power oriented examples. However, I am specifically interested in strategic communication attempts to persuade state and non-state actors to acknowledge that military policies and activities are legitimate and credible. Furthermore, the scope of this thesis is on *Military Serious Games* (MSGs) of the tactical First Person Shooter (FPS) genre. I define MSGs as military-themed video games that are developed by military organizations (or in relation with). They are a subgenre of serious games, which are video games that are designed to educate, train and inform (Michael & Chen 2006).[1] MSGs

[1] There are several reasons why serious games deserves attention in general. First of all, serious games are hot. Although the military has an extensive history of utilizing video games as training tools, several other domains, such as corporative and governmental domains have also picked up on the trend during the last ten years (for examples see Michael & Chen 2006, Bogost 2007). Game idealist Jane McGonigal's inspiring twenty minute talk for TED talks (February 2010) and popular book *Reality is Broken* (2011) on using games to find solutions to real world problems have contributed to the popularity of serious games. The numbers do not lie either: While the first serious games—arguably Atari's *Army Battlezone*—originates from the beginning of the 80s, the number of serious games entering the market over the two decades after the 80s seem to have exponentially increased (Alvarez et al. 2011). Analysis by Ambient Insight Research and Interpret revealed at the Serious Play Conference mid 2012 pointed out that the serious gaming business is already a multi-billion industry and is likely to keep growing albeit steadily (Bussinesswire.com 2012). Furthermore, diverse—i.e. governmental and non-governmental, industrial and institutional, *inter alia*—actors are increasingly forming cooperative bonds in order to mutually benefit from these networked undertakings. Although serious games still have a niche status (Smith 2009), the proliferation and increasing utilization of these media within corporate, governmental, military, healthcare and advertising domains, will ultimately lead to an increasing quantity of potential players within these diverse domains. Media scholar Henry Jenkins said in 2006: "If games are going to be a mature medium, they're going to serve a variety of functions. It's like film. We think first of using it for entertainment, but then also for education and advertising and politics and all that stuff" (quoted in Thompson 2006). In general it seems that serious games are increasingly more accepted as a valid

are used within military organizations to train and educate soldiers and as a means of strategic communications to domestic and foreign non-state actors. Thus, subject of this thesis lies within the convergence of international politics and military studies on the one side, and game studies on the other.

The ironic part of soft power is that governments want it but that it can only be generated within relation to publics and non-government actors. Soft power is at work when resources are converted in behavioral change by the recipient. Played by publics and military personnel, or a composition of these actors, MSGs are becoming a source of soft power if they succeed in persuading and attracting these actors to change their behavior. MSGs contribute to the generation of both positive images (attracting and persuading actors) and negative images (repulsing actors) of military activities as a means of foreign policy (see Thomson 2008), which is likely to influence a country's soft power and eventual smart power capabilities. I will argue that MSGs do so in two ways: 1) directly by strategically communicating to non-state actors, influencing their understanding of military activities and policies, and 2) indirectly by educating and training soldiers to be able to adapt to the complexity of conflict environments and by creating awareness of the potentially negative effect of bad decision-making on a nation's success to achieve policy goals in general. The aim of the following pages is explore *how MSGs put forward ideas and make claims about military affairs, i.e. how they are designed to persuade and attract to contribute to the generation of soft power.*

This is relevant because of the potentially negative effects that have been attributed to games in general (see Jansz 2005; Raessens 2005) and violent, usually military-themed games in specific (see Dyer-Witheford & de Peuter 2009; Galloway 2006; Halter 2006; Stahl 2010). For example, game scholars Nick Dyer-Witheford and Greig de Peuter argue that the military-themed

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means to inform, educate and train, pointing at the maturing of the medium. The number of games and gamers has also substantially increased and diversified over the last years, showing that gaming is more than ever part of our daily lives (see Raessens 2006). Gaming, originally an activity for young white males, has become more mainstream: In 2011 42% of gamers in the U.S. were female and the average age of American gamers was 37 (ESA 2011). In 2010 the number of adult gamers in Europe was estimated at almost 100 million (ISFE 2010). Furthermore, playing video games have become a diverse activity, with casual gamers playing web browser games often for small amounts of time (See Juul 2010), while game culture expert T.L. Taylor has described the lives of power- (2003, 2006) and professional gamers (2012) who play complex games for many hours per day. Finally, although serious games are often still small-budget casual games that are created, for example, for political or healthcare campaigns (see Michael & Chen 2006), larger projects are also becoming more apparent. The U.S. department of state has recently released an online platform to learn about American English and American culture intended for international teachers, students and publics in general. The site is accompanied by *Trace effects*, "a 3D video game experience geared for students ages 12-16, supplements classroom English lessons. Students explore American culture through puzzles, activities, and adventures in an interactive world" (State.gov 2012). The largest serious game project to date is, arguably, U.S. Department of Defense game *America's Army* (*AA*), also reaching beyond the limits of what is considered as a serious game, launched in 2002 and played by tens of millions over the last decade.

game *Full Spectrum Warrior*— of which both a U.S. Army infantry training version exists to train soldiers to make "smart decisions in the nightmare of urban combat" (2009, p. 104) and a commercial version that is used for entertainment purposes—represents a *banal war*, in which war is not used to dissolve a conflict between actors, but in which the enemies are permanent, absolute threats without boundaries and waging war against them becomes normalized, generally accepted part of every life (2009, p. 100). Although the military version seems slightly more realistic in terms of casualties and civilian presence, the game in general, as well as other games, generates "subjectivities that tend to war" (p. 118). In a similar fashion militainment—i.e. a form of military-themed entertainment—expert Roger Stahl explains that military-themed video games "gain a profound rhetorical force. What was once a fantastical and entertaining sidebar becomes the very presentation of war" (2010, p. 111). And the utilization of military serious games for training and education purposes—often games that are based on commercial technology and developed in cooperation with both commercial businesses and military institutions—also receives critique. Stahl notes that many within the military question the efficacy and relevance of such tools (2010) and there have always been those who claim violent games inspire violence in the real world (for some examples of soldiers referring to video games after carrying out military force, see Power 2007).

Both Stahl (2010) and Dyer-Witheford and de Peuter (2009) analyze games in the context of current military affairs and the collaborative bonds between military institutions and entertainment industries that lead the development of such games. They note how the relations between military organizations and the entertainment industry work together to, in a sense, *militarize* society. However, they tend to focus more on the representational aspects of military-themed games and thereby often leave out the aspect of what makes games unique: their *simulative* nature and their ability to show how things in a procedural way (Bogost 2006a, 2007). Stahl notes that games represent *how we fight* instead of asking the more important question *why we fight* (2010). Dyer-Witheford an de Peuter dive into the context of military-themed games and describe how the representations of warfare in these games have economical and political consequences for international affairs (2009). Therefore it is interesting to *show how MSGs persuade and attract, i.e. how MSGs as simulative, expressive forms transmit messages and make claims about 21st century military affairs,* or, to put it simply, *what do they teach the player(s) about military affairs*?

In order to answer the abovementioned question, my thesis will be divided into three chapters. The first chapter will describe the theoretical background that focuses on the concepts of hard, soft and smart power and how they relate to the current situations in international politics, and secondly, on the military capabilities of states that have been, are or are going to be involved in

conflict.[2] Although this thesis is mainly oriented towards the use of MSGs for the generation of soft power, both through strategically communicating to non-military actors and through soft power-oriented education and training of military personnel, we cannot disengage the concept of soft power from other concepts such as hard and smart power. Furthermore, the abovementioned goal of this thesis—*id est* the examination of how MSGs convey which ideas about military conflict, activities and policies—can only be approached if we take into consideration current military affairs and the need for military organizations to develop soft power components.

For this reason I will also examine literature that can be situated as part of the paradigm of military studies. Literature on the subject acknowledges the changing environment of military affairs in relation to the cold war era (Davis in Cimbala 2010; Gray 2011; Krulak 1999; Nye 2004, 2011a; Thomson 2008). In the 21st century informational warfare has replaced industrial warfare, and conflicts are often fought against irregular enemy forces who use unconventional warfare methods such insurgency and terroristic attacks. Such conflicts often take place in urban environments where many actors are involved and have different risks at stake. Non-state actors are heavily involved in the process of justifying military affairs and casualties come at a high price in terms of policy success (Nye 2004). For this reason military power needs to be accompanied by some form of soft power. Furthermore, the role of the soldier in the 21st century is radically different than the soldier in the cold war era as soldier nowadays are often involved in military operations that are not only focused on traditional warfare, but also on peacekeeping and -building and humanitarian aid provision to civil actors, and, on top of this, often carry out such diverse activities simultaneously (Krulak 1999). For these reasons, I argue, military power needs to be accompanied by some form of soft power.

I will argue that efforts that attempt to generate soft power through the creation of legitimacy and credibility for military activities and policies adapt a soft power approach that lies on a spectrum between narrow and broad. In order to do so I will make a distinction between two types of soft power approaches based on international communications scholar R.S. Zaharna's soft power differentials (2007): 1) that of *wielding* soft power that relies on mass communication, and 2) that of *creating* soft power which relies on networked communication. The former approach relies on predetermining a message and then 'pumping it out' to the intended receivers. The latter emphasizes relation-building and enables all actors to create a message themselves. The mass communication approach translates to what I call a narrow soft power approach, which focuses on attracting and persuading actors through one-way communication: Actor A communicates his ideas,

[2] This is definitely a large generalisation, but my concern here is with countries that deliberately use their military capabilities to, for example, conduct military operations outside of their borders, which, in practice, are a lot of countries with different forms of government, laws, ethics, ideas, etc.

values, norms, ethics and/or laws to Actor B and expects attraction. Actor B is in this case a receiver of information and successful communication relies mainly on the utilization or appliance of soft power resources. The networked communication differential relates to what I call a broad soft power approach which focuses on establishing a common ground between actors from which consensus about a subject can be created: Actor A creates a base of standards with actor B to create ideas, values, norms, ethics and/or laws that are perceived as legitimate and credible.

The second chapter is also based on theoretical analysis and will describe the game- and game design-oriented concepts and theories I invoke to analyze MSGs and is subsequently related to the concept of soft power. To conclude I will describe and clarify my choice for the approaches and methods I will utilize in chapter three to show how MSGs can be persuasive and what messages they transmit about military affairs.

I will argue that—based on ludologist Jesper Juul's game-centered distinction between *progression* and *emergence* games (2002, 2005), and game scholar Gonzalo Frasca's game-centered distinction between *paidia*, *ludus* and *meta* rules that underlie computer games (2001, 2003a, 2007)—the designs of MSGs, either for strategic communication, military training efforts, or both, show similarities to these soft power approaches. I describe this in terms of relatively strict and lenient game design. Strict game design show's similarities with Juul's (2002, 2005) *progression* games in which a predetermined set of actions is needed to win the game. Strict game design is characterized by its reliance on restrictive, *ludus* rules (Frasca 2001, 2003a, 2007), which set conditions to win the game and steer the process towards one direction, towards a predetermined outcome. As such, the player often seems destined to play the game as the designer intended. Lenient game design relates to Juul's *emergence* games (2002, 2005) in which the player is free to choose paths whether they lead to the achievement of predetermined objectives or not. Lenient game design is dependent on both *paidia* rules, which are open rules that allow the player to perform actions (Frasca 2001, 2003a, 2007), and *meta* rules, which are rules that allow the modification of rules and the removal and addition to rule systems (Ibid.). Lenient games seem to allow the player to decide what will happen instead of forcing them to perform predetermined actions.[3]

[3] Especially during the years after the 9/11 terrorist attacks a large stream of military-themed gamed were developed by both commercial enterprises and military organizations, or in cooperation, and these games were created for both commercial as non-commercial use (also see Thomson 2008). Military organizations utilized tactical FPS MSGs that were focused mainly on violent warfare, of which THQ's *Full Spectrum Warrior* and the U.S. Army's *America's Army* are prime examples. These games, used as both strategic communication tools and as training- and education tools military personnel, are relatively closed in terms of what kind of activities they allow the player to perform and communicate a relatively singular predetermined message about military affairs. Rather, relatively new MSGs, such as Bohemia's

I will build upon theorist Espen Aarseth's functionalist ontology of games as being *ergodic* in nature, i.e. that games tell non-linear stories and their players have to actively choose a path to create a certain storyline (1997, 1999). Nevertheless, rather than seeing games from a purely functionalist approach as closed systems from which meaning derives, I agree with game theorist, -critic and -designer Ian Bogost who points out that games, as a form of simulation, create "*biased, nonobjective* modes of expression that cannot escape the grasp of subjectivity and ideology [and] require critical interpretation to mediate our experience of the simulation, to ground it in a set of coherent and expressive values, responses, or understandings that constitute effects of the work" (2006, p.99). Instead of analyzing games as media that are expressive in their systemic entirety, Bogost puts forward a post-structuralist approach to games, defining them as configurative systems, arrangements of interlocking, discrete units of expressive meaning, which he describes as *unit operations*. These unit operations can make claims about *how things work* in a procedural form, through the authoring of behavioral rules and dynamic models. Nevertheless, meaning derives from the player's subjective interpretation of what the simulation's unit operations include and exclude. As such, a game is always built around what Bogost calls a *simulation gap*, i.e. a break between that what the game procedurally represents and simulates and the player's subjective idea of how things work in the real world. The critical comparison between both the simulation game and the player's subjective ideas is what Bogost calls *simulation fever* (Ibid.). Using processes in a persuasive way is what Bogost describes as *procedural rhetoric* (2007). Bogost describes games that encourage such processes as persuasive games, or, in other words, as games that mount such procedural rhetoric effectively (Ibid.). These games persuade the player to fill in the simulation gap as the designer intents her to do.

In the third chapter I will carry out a comparative analysis between the commercial versions of *America's Army (AA)*, a MSG that is designed and used by the U.S. as a means of strategic communication and which I will define as a MSG that adopts a narrow soft power approach with a relatively strict game design, and the non-commercial version[4] of *Virtual Battlespace 2 (VBS2)*, a MSG platform that is used by different military organizations worldwide to create scenarios for several training purposes and I will define as a MSG with a relatively broad soft power approach based on a relatively lenient game design. The reason for the choice to analyze one commercial

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Interactive's *Virtual Battlespace 2* and eSim Games' *Steelbeasts Professional*, show increased opportunities to build, modify and change parts of the simulation software, share content and to link these simulation systems to other systems. As a result, these technological changes give military organizations the ability to train military personnel to let them actively participate in the search for solutions for military conflict issues that also lie outside the scope of traditional warfare, conveying messages and creating ideas through the participation and experimentation with simulation technologies.

[4] The commercial version of *VBS2* is called *Armed Assault 2*, made by the Czech counterpart of Bohemia Interactive.

version of a MSG that is used for strategic communication purposes and one military version that is used to train and educate military personnel is to create another comparative dimension. I will not only look at how these games make claims about 21st century military affairs, but also at how these differ. I will draw relations between the MSGs and the abovementioned comparative framework on soft power approaches and game design, and use Bogost's method of *unit operation analysis* (2006), a form of video game criticism that combines literary theory, philosophy and computation that attempts to evaluate texts—MSGs in this case—not as systems, but as discrete, interlocking, expressive units which are "discursive in their own right, outside and before the grammars of specific creative strategies" (p. 71). In short, it relies in the deconstruction of a cultural artifact in terms of its concurring unit operations.

Commercial MSGs such as *AA* have received a lot of scientific attention and have been criticized from different perspectives on different social, cultural and ethical matters (see Dyer-Witheford & de Peuter 2009; Nieborg 2004, 2005; Power 2007; Stahl 2010, Tawil Souri 2007, and see for addictive and violent effects see Jansz 2005; Raessens & Goldstein 2005). On the other side, MSGs used for military training and education, such as *VBS2,* have mainly gotten a lot of scientific attention in terms of technological and educational matters (see, for example, Alexander et al. 2005; van der Hulst et al 2008, 2011). It is therefore interesting to actually look at how they differ in making claims in terms of military conflicts, activities, policies and other affairs. As I will show, both MSGs make different claims about military affairs in general and on affairs a tactical level. Furthermore, I will show that the strict design of *AA* tends to ensure the gamer is confronted with the procedural messages the U.S. army has predetermined. *VBS2* has a respectively lenient game design which allow soldiers in training to create the messages through experimentation within the simulation and in discussion afterwards, which in military terms is called an After Action Review (AAR).

AA's restrictive rules make procedural claims that are mainly focused with the solution of military conflicts through activities that are characterized by the utilization of force, a feature that is similar to other commercial military-themed games. As Stahl has put it, such games show military affairs in terms of *how to fight* instead of *why to fight* (2010). *VBS2*, on the other hand, does not contain many restrictive rules as the game is based on 3D virtual environment with an respectively open rule system. Restrictions are often set in terms of mission objectives but are absent in terms of simulation rules. For example, winning and losing conditions are do not lead to predetermined outcomes and the breaking of the rules of engagement (*RoE*) such friendly fire or firing or making civilian casualties do not have predetermined consequences. Thus, where *AA* makes very clear

procedural claims of the process of *how* to fight in (tactical) military conflicts, such direct claims are often less apparent or even absent in *VBS2* scenarios. This is not to say that the latter MSG makes no claims at all, but the lack of predetermined restrictions and consequences first of all creates a wider possibility space which, in turn, can be highly useful in terms of reflecting on simulation, i.e. filling in the simulation gap. However, such processes require active participation and reflection to be productive and for this reason soldiers in training discuss their performances after playing *VBS2* scenarios. Secondly, it allows for thinking in solutions for military affairs in terms of both hard and soft power, i.e. smart power.

My conclusions will summarize this work and point out that MSGs that are used for strategic communication in general, and in this case *AA*, tend to put forward the idea that force is the only way to solute military conflict as it makes clear procedural claims about resolving military conflict with combat and elimination of opposing forces. As such, this means of generating soft power promotes hard power solutions. Military training simulation scenarios that are run on platforms such as *VBS2*, on the other hand, do not make procedural claims to solve military conflict by only utilizing hard power means, but create a simulation space in which military personnel in training is able to experiment and create a common base for debate and discussion. I point out the possibility of tactical FPS MSGs such as *VBS2* to become platforms of networked communication, bringing together military and non-military actors for the creation of mutual understanding of military affairs and cooperative problem-solving for the 21st century conflicts they are mutually involved in.

I want to conclude this section with an ontological clarification as my thesis makes use of a wide array of concepts and theories from different paradigms which may lead to unintended associations in relation to the topics I want to address. In his analysis of U.S. soft power rhetoric as justification for policies, international communication scholar Craig Hayden describes "an evolving U.S. interpretation of soft power that emphasizes the particular benefits of technological platforms for outreach that demonstrate, rather than elaborate on, the resources of soft power" (2012, p. 225). These platforms enable a shift toward facilitation and engagement, not only for organizations but also for citizens themselves. As a result "the communication environment may be more significant than the transmission of the message" (Glassman, quoted in Hayden 2012, p. 236). This trend can be seen in the increased attention of government actors towards the Internet, online games and social media as a means for strategic communication and public diplomacy. Actors are not only participating by being present on such networked platforms, but should also be contributing to conversation and community building (Fisher 2008). In addition, where U.S. public diplomacy incentives mostly rely on mass communication, international communications scholar R.S.

Zaharna suggests that network communication—in a time where the bipolar Cold War mass audiences are replaced by fragmented, media-dependent audiences, culture and communication are intertwined, and where ICTs enable non-state actors to influence policy-making—is likely to be more effective (2007). Regardless, this thesis is not concerned with the relative success of generating soft power or an attempt to create a kind of soft power balance between actors or countries.

The examination of such claims is not the focus of thesis and, thus, I will not claim that one soft power approach is superior than another because it generates more or better soft power that contributes to the ability to achieve national priorities. Measurement of soft power often cannot escape being highly biased and blurred by numerous variables that make the concept's complex nature intangible and it is even arguable that power is not measurable at all (Guzzini 2009). In a complex world where individuals are subject to so many information and communication flows, it would be naive to claim that the implementation of specific technology or medium will always lead to a specific outcome. Excellent work on the belief in technology as a means of democratization has been written by media critics Evgeny Morozov (2011, 2013), and Philip Seib (2011).

Furthermore, game historian Frans Mäyrä points out that the focus of game studies lies in the interaction between 1) games, 2) their players in 3) various contexts which cannot be seen separately (2008). Although this work is mostly game-centered and focuses on how MSGs make claims about how military conflict, activities and policies work, rather than focusing on the interpretation of the players in practice, I do not want to make the functionalist claim that the meaning that derives from playing games is inherent to the game technology. Work by media scholars David Machin (Machin & Suleiman 2006; Machin & van Leeuwen 2007) and Helga Tawil-Souri (2007) describe the impact of procedural political messages in computer games by analyzing player discourse, but such accounts are very specific and do not provide the empirical evidence that (military serious) games lead to specific behavioral change. For this reason it is neither my purpose to critically assess the ideas that might arise from MSGs from an ethical approach, claiming that MSGs have positive or negative effects on their players.

To conclude there are two final demarcations that I want to address. The first considers the possible association to *game theory*, a mathematical approach often used in political science and economics that uses statistic probabilities to predict the outcomes of strategic decision-making processes on the basis of the preferences of agents (see Ross 2012). Although game theory can be an interesting approach to decision-making in games, especially multi-player games such as Online Role Playing Games and in relation to game cultures specialist T.L. Taylor has written about (2003, 2006, 2012), this thesis does not incorporate it. This brings me to the second: This work does not

dive into the subject of (the government of) social structures that arise from the use of networked technologies (also see Copier 2007; Taylor 2003, 2006). Although I will mention the relation between MSGs and the possibility of gaming platforms to become a place for discussion and debate, it is not my main purpose to show how new social structures arise in relation to technological platforms.

Power

Chapter I Soft Military Power

According to political scientist Joseph S. Nye Jr. there are two shifts occurring within the context of international politics (2011a). The first is power transition, which is a phenomenon that describes the transition of relative power from a dominant nation-state to others which affects the ability of nation-states to achieve national priorities. Secondly, power diffusion describes the increasing power and quantity of non-state actors such as, for example, supranational organizations or international organizations (IOs), such as the *United Nations* (UN) and the *North Atlantic Treaty Organization* (NATO), non-governmental organizations (NGOs) such as *Doctors without Borders*, *Red Cross* and *Unicef*, and multinational corporations such as *Shell* and *Microsoft*. U.S. Defense strategists John Arquilla and David Ronfeldt have called this the *proliferation of new organizations* (1999).

Besides organizational changes the information age is also marked by technological proliferation. Innovation of and access to Information and Communication Technologies (ICTs) enables individuals and the social formations they are part of—groups, institutions, etc.—to gain access to an enormous amount of information, constituting an *information society* (Castells 2001). On top of these technological changes, digital, networked ICT infrastructures such as the Internet are increasingly becoming a means for such formations to organize themselves—often involved around specific issues they are concerned with from which *issue networks* arise (Marres 2006)—and use ICTs as a means of communication, dissemination and discussion of available information which, in turn, influences society, culture, politics and economics (Castells 2001). According to U.S. Defense strategists John Arquilla and David Ronfeldt ICTs have always been important for strategy, "but they are moving from being subsidiary to becoming overarching concerns" (1999, p. 7). On top of this, public diplomacy scholar Jan Melissen argued that this post-WWII communication revolution "has enabled citizens to obtain information on what is going on in other countries equally fast, or even faster, than governments" (2005, p. 3) Within the *network society* power is increasingly decided within mediated, interconnected, networked social spaces (Castells 2006). This often takes place outside the direct control of state governments making it hard for governments and states to control information (Arquilla & Ronfeldt 1999; van Ham 2011; Nye 2004, 2011a).

Furthermore, information *itself* is increasingly becoming an important source of power. Alongside traditional forms of power, military power and economic power, the power that derives from stories, ideas, norms, values, ethics and laws is becoming more important than ever before (Arquilla & Ronfeldt 1999). The recognition of this importance of informational or ideational power

is spreading among corporations, institutions, governments and other actors on the global political stage. Arquilla and Ronfeldt already pointed out that a shift is required for strategic thinking: a shift from traditional *realpolitik*, which focuses only on hard power such as military and economic power and which empowers nation-states, to what they call *noopolitik*, which "emphasizes the primacy of ideas, values, norms, laws and ethics" (1999, p. x) and empowers networks and non-state actors.

These changes effectuate a state in which governments need support from domestic and foreign publics, multinational corporations and other organizations in order to carry out (international) policies. The opinion of publics matters because these publics, as part of a network of companies and non-governmental organizations hold increasing potential to exert influence on governments (van Ham 2011; Lord 2008). Such networks are often able to scrutinize and undermine policy efforts (Livingston 2003) and hold governments accountable for their actions and performances (Hayden 2012). For example, public responses to foreign policies considering the occupation of Iraq and Afghanistan by U.S- and European governments in the first years of the 21st century show that unilateral force-oriented solutions are highly unpopular and have contributed to a declining image of the U.S. in the rest of the world as "postindustrial democracies are focused on welfare rather than glory, and they dislike high casualties" (Nye 2004, p. 19).[5]

Western military organizations have improved their capabilities in terms of effect-based operative action through precision weaponry, real-time intelligence and surveillance, and command and control systems. These developments often allow militaries to solute conflict quicker and with lesser casualties than any time before. Nevertheless, the effects of the utilization of these scientific and technological advances are raising the political and social costs in terms of power (Nye 2004). For example, the unilateral decision of the Bush administration to invade Iraq, has led the U.S. to achieve a military victory within four weeks with a relatively low casualty rate in relation to previous military conflicts. However, the popularity of the U.S. and its citizens dropped steeply (Armitage & Nye 2007; van Doeveren 2011; Hayden 2012; Nye 2004, 2011a). On the global stage "unpopular policies are the most volatile element of the overall image" (Ibid., p. 38) which, subsequently, undermine a country's ability to achieve national priorities. Military affairs such as the use of predator drones to destroy terrorist cells, which often lead to civilian casualties, and the torturing of political prisoners at Abu Ghraib and Guantánamo, which are "in a manner inconsistent with American values" (Nye 2011a, p. 106) are examples that have contributed, and still do, to a bad image of the country (also see van Doeveren 2011).

[5] In addition, according to Nye half of all the countries in the world are democracies (2004)

A desired change for the course of America's declining image has resulted in a widespread recognition of the term *soft power* (Hayden 2012). The ethical appeal of the term soft power is making it increasingly popular, and morally superior, for both nation-states as non-state actors.[6] Although morally superior, hard power capabilities are still required in the 21st century with threats such as terrorism, weapons of mass destruction and cyber-attacks on the loom (Gray 2011; Nye 2011a). For nation-states, statecraft and grand strategies this means that there has to be a focus on both traditional hard, military and economic power, and soft power. To accomplish effective integration of both Nye calls for *smart power* strategies (Nye 2004, 2009, 2011a). However, this means that the need for a state's military power to be accompanied by some kind of soft power—that is, the ability to attract and persuade others about the use of military force as a credible and legitimate means to achieve necessary goals—is increasing.

However, how does *hard power* differ from *soft power*? And what are the implications for the traditionally *hard power-oriented* military capabilities of a nation-state in this increasingly *soft power-oriented* international political context? To answer these questions I will look at the theories behind the concepts of hard-, soft- and smart power and how they relate to the traditional notion of military power. Furthermore I will look at how the need for smart power is translated to the military capacities of nation-states and the execution of military activities as part of a nation's foreign policy.

Hard Power and Soft Power

Power, according to Nye, is the "ability to influence the behavior of others to get the outcomes one wants" (2004, p. 2). The international relations discipline has long been marked by a *realist* perspective on power, understanding power in global affairs only in terms of *hard power,* such as military and economic power. These powers are usually measured in terms of resources that affect the outcomes of conflicts between nation-states. However, "having the resources of power does not guarantee that you will always get the outcome you want" (Nye 2011a, p.8). In addition, power analyst Stefano Guzzini argues that fully measuring power distributions is not even possible because they are not absolute but relative (2009). Therefore, Nye explains that in order to achieve desired outcomes, resources are to be converted into behaviors which will lead to these outcomes in a specific context, a process Nye calls *power conversion* (2011a).

[6] However, this is by no means to say that soft power is better or less politically charged: "Since power shapes the formation of actors' consciousness, no interest formation can be objective; defining what an actor's 'real interests' are is not free of power relations. That is to say, not only mobilization of bias agenda-setting but also production and effects of all norms and values that shape human consciousness should be critically scrutinized" (Bilgin & Eliş 2008).

The notions of *hard power* is fairly straightforward. Nye (2004, 2011a) explains that hard power resources are leveraged to force others to change their behavior. Military power has often expressed itself as coercing or deterring behavior in the form of force and threats. War is the prime example of hard power policy, but other forms, such as coercive forms of diplomacy and terrorism, are also considered hard power behaviors. Economic power can also be coercive when it is used to induce an actor to change its behavior. Payments and sanctions are methods of bribing or aiding actors. Boycotts are a good example of forcing others to change their behaviors, but payments can also be incentives that are supposed to effectuate behavioral change in terms of attraction.

In addition to hard power and coined by Nye in 1990, *soft power* is about communication with other actors in a way that recognizes that "what people believe can shape or constrain the agency of a political actor and their ability to effect change" (Hayden 2012). Soft power is defined as "the ability to shape the preferences of others" (Nye 2004, p.5) and is used to describe the process of getting others to want the same outcomes you want[7], and is often used as a justification for all kinds of strategic communication efforts (Hayden 2012). Nye's concept of soft power relies on *cooption* through behaviors such as agenda-setting, attraction and persuasion. Hard and soft power, however, are not contradictory and often rely on each other. Rather, power can be located on a spectrum which ranges from commanding to co-opting efforts, where some behaviors are relatively more forcing or less co-optive than others.

According to Nye (2004) there are three sources of soft power: 1) a country's *culture*, which he defines as "the set of values and practices that create meaning for a society (p. 11), 2) a country's *political values*, and 3) a country's *foreign policies.* The U.S. is still the biggest exporter of culture in the world, but Nye points out that cultural resources are not always to be considered sources of soft power. This also counts for the latter two sources, political values and foreign policies. A state's political ideas and policies do not always appeal to other states or, worse, lead to repulsion (which is often seen when we look at the opinion of Islam fundamentalist groups of Western culture, as far as generalization is possible). However, sometimes they do and this can add to the ability of a particular nation-state to get what it wants. Unlike hard power, soft power is ultimately about *influence* and always relies on the ability of an actor to *think* something about those sources, or, as Nye puts it, "soft power is a dance that requires partners" (2011a, p. 84).

[7] Arguably, the first notion of an additional power component that focuses on the opinion of the public is coined by British realist E.H. Carr who pointed out that power has three components: military power, economic power and power of opinion (1939). It also shows similarities with political scientist Steven Lukes calls the *third face of power* (1974).

Before we continue to look at how soft power works, there are some ontological uncertainties that need to be pointed out. Soft power can be a confusing concept as it seems intangible and often uncontrollable (Fan 2008). Especially, cultural soft power, which shows similarities with nation branding (Fan 2008; van Ham 2011), is hard, arguably even impossible, to measure and its workings are often hard to grasp. We can count a nation's soldiers and jet carriers and compare the numbers with the number of resources other countries possess, but is difficult to add a numerical value to and count the relative soft power resources a country has.[8] On top of this, soft power resources can be as translatable to behaviors that are used *with* other actors instead of against others, which goes against traditional zero-sum balance assessments (Nye 2011a). Finally, soft power always relies on the context and the skills of the agent in converting the resources, through certain behavioral changes of other actors into the desired outcomes (Hayden 2012; Nye 2004, 2011a). As mentioned before, the ability to leverage what are often called hard power resources, such as armies and military material, can also be used in different ways. Regardless, where armies have been used for warfare, foreign governments and publics interpretations of such policies are considered, as we have seen through history, of relatively low importance.

There are also some epistemological concerns that need clarification. First, Hayden (2012) notes that soft power can both be seen as an asset, something that derives from a power source, and a tool, an instrument that a government can utilize in order to achieve national goals. Looking at soft power in both ways, one is likely to confuse sources with resources. When looking specifically at new ICTs, this has happened when politicians and scholars alike contributed the uprisings of citizens against their governments in Middle Eastern countries —Iran, 2009 and Tunisia and Egypt, —to social media, addressing these events as, respectively, the *Twitter revolution* and the *Facebook revolution*. However, as public diplomacy researcher Philip Seib points outs that these uprisings were carried out by people, not by media, and states that "media are just tools; nothing more" (2012, p. 3). Similarly, media scholar Evgeny Morozov has warned politicians and academics for *internet centrism*,' a way of western technological deterministic thinking that claims new technologies such as the Internet and social media will lead the entire world to become democratic (2011).[9] As we

[8] And even numerical balances of military resources are most often unable to predict the outcomes of battle as it often leaves out the variable of force employment (Biddle 2004).

[9] During the writing process of this thesis Morozov published another book called *To Save Everything, Click Here* (2013), in which he describes a similar philosophy, full of pitfalls, he coins 'technological solutionism', a way of thinking that smart technologies will enable us to solute 'every' problem.

have seen above, the outcome is not inherent to the resource, and (soft) power should rather be seen as "a product of a particular moment" (Hayden 2012).[10]

Secondly, following Nye who sees soft power not as a (predictive) theory but rather as an analytical concept (2010), Hayden notes that "soft power suggests both a *post hoc* measure of effectiveness in achieving foreign policy objectives, as well as implies a *means* to achieve these political goals by leveraging the assets that cultivate " attraction"" (2012, p. 5). On the one hand soft power is way to measure the effectiveness of a leveraged resource to attract and persuade others actors to get what one wants, while on the other hand is the resource itself that counts as a form of soft power. Soft power, however, should be seen as a *capacity*; a potential that can be leveraged to achieve goals by cooption, relying on the context in which it is used and on the skills of the agent in converting the resources into outcomes (Nye 2011a).[11]

The concept of soft power is reliant on 1) *agenda-setting* and *framing*[12], 2) *persuasion* and 3) *attraction*. Put simply, soft power is at work when an agent persuades other with attractive ideas, values, norms, ethics and laws. Therefore, it depends on *legitimacy* and *credibility* (Nye 2004, 2011a). The first two are rather straightforward behaviors: agenda-setting and framing influence the perception of other actors. Equally relatively simple is the concept of persuasion which is "a means by which agents use arguments to move the beliefs of subjects in some direction" (Hayden 2012, p. 43). Attraction is somewhat more complicated according to Nye (2004), but is best seen as a behavioral outcome. According to security theorist Alexander Vuving (2009) attraction is gener**a**ted by three power currencies: 1) *benignity*, which is generated when actors feel being treated with a positive attitude, 2) *brilliance*, which "refers to the high performance that you accomplish when you do things" (p. 8), and 3) *beauty*, which is referred to as "the resonance of shared ideals, values, causes or visions" (p. 11). Legitimacy and credibility are generated when an actor perceives the policies and goals of another actor as the right way to do it and the right thing to do. In other words, soft power relies on persuading others with credible goals which are to be achieved by legitimate means. However, credibility and legitimacy are often harder to gain than to lose; when credibility

[10] See for example a fragment of the 2012 presidential debate on military spending between Romney and Obama. Romney chooses to make his arguments based on the number of military resources and gets burned by Obama who explains that not the numbers but the capabilities matter: *Obama to Romney: U.S. Uses Less 'Horses and Bayonets' Today - Presidential Debate 2012 (*Youtube 2012, last visited 30-6 2013).

[11] Steven Lukes (2005) has argued that understanding power can lead to two fallacies: the *exercise* fallacy, which explains power as that what has been caused by an observable chain of events, and the *vehicle* fallacy, which points out that whenever a power resource is utilised, that what follows is power.

[12] Although Nye only mentions agenda-setting, I have added framing to this list. The reason for this is that in order to influence actors that they should put a certain idea, problem or conflict on the agenda, it should be framed as important first.

and legitimacy are undermined, confidence and trust are easily lost and attempts to attract and persuade are likely to receive more resistance (Nye 2004).

From a constructivist perspective there has also been argued for an approach on the performative nature of power (Guzzini 2005). Nye also implies this when he describes how soft power resources are translated into outcomes through action. We must look at how resources are utilized in certain manner—a process he describes as turning resources into behaviors—to effectuate a certain outcome, i.e. *power conversion*. As he puts it, "we must specify *who* is involved in the power relationship (the scope of power) as well as *what* topics are in involved (the domain of power)" (2011a, p. 6). What follows is the question of *how* resources are translated to outcomes, i.e. by which means national goals are supposed to be achieved. In addition, Hayden points out that:

> Most "cases" of soft power are a constellation of factors: relations, histories, technologies, and inducement strategies. This is not to argue that soft power is an irredeemably relative concept, but a systematic understanding is ultimately ascertained in *relations*, which are likely not static. And thus soft power is ultimately *contingent*—we need to understand how soft power is both understood and identified by actors *as* soft power in particular circumstances, lest its mechanisms work in entirely predictable ways in an uncontroversial explanation or set of expectations (2012, p. 54)

Partially based on Nye's work, Hayden focuses on three levels on soft power conceptualization: 1) the *scope* of soft power, which "signifies how actors are conceived as relevant to the workings of soft power" (p. 59), 2) the *mechanism* of soft power, which describes the links between soft power resources and the behaviors these resources produce, i.e. how power conversion takes place (also see Guzzini 2005), and 3) the *outcome(s)*, i.e. what soft power is supposed to accomplish.

Smart Military Power: Combat, Hearts and Minds

What type of power to use, according to Nye, depends on which game is being played. Nye explains that the distribution of power in the world resembles as complex three dimensional chessboard.[13] On top sits military power which is largely uni-polar because the U.S. has by far the largest military capabilities of all international actors. The middle chessboard is concerned with economic power which is multi-polar since several large actors—China, India, Europe, U.S., *inter alia*—are at stake here. The bottom chessboard is focused with soft, ideational power and "is the realm of transnational relations that cross borders outside of government control" (2011a, p. xv). The actors on this chessboard are mainly non-state actors and power is widely diffused among them.

[13] Nye seems to pick appropriate metaphors in relation to the subject of this thesis, i.e. games.

On this chessboard the proliferation of information and organizations and the reduced costs of and increasing accessibility to ICTs create a political sphere in which power increasingly lies outside the control of these states (Nye 2011a, also see Arquilla & Ronfeldt 1999, van Ham 2011, Hayden 2012). The problem for states and statecraft in the 21st century arises on this bottom chessboard, as non-government actors gain more power and are able to undermine government and non-government policy efforts. Furthermore, the nature of communicative processes has changed. Communication theorist Ernest J. Wilson argues that target audiences have also become 'smarter' and these smarter individuals are increasingly becoming more assertive as they have access to and use new ways to express their ideas about government activities (2008). R.S Zaharna points out that governments still think in mass communication processes whilst NGOs show that network-based communication might be more effective (2007). In a similar fashion Nye explains that:

> It is not enough to think in terms of power *over* others. We must also think in terms of power *to* accomplish goals that involves power *with* others. On many transnational issues, empowering others can help us accomplish our own goals. In this world, networks and connectedness become an important source of relevant power. (2011a, pp. xvi - xvii)

Hence the dependency on the game that is played: On the third chessboard the utilization of armies and money will not likely achieve national goals on its own. Thus, power depends on the context in which it is used. What actors within the international relations therefore need, is *contextual intelligence*, i.e. "the ability to understand an evolving environment and capitalize on trends" (2011a, p. xvii).

What Nye argues for are *smart power* strategies (2011a). The concept was first mentioned in 2004—"Smart power is neither hard nor soft. it is both", concluded the preface of Nye's 2004 book *Soft Power*—and is defined as "the combination of the hard power of coercion and payment with the soft power of persuasion and attraction" (2011a, p. xiii). It can be seen as a combination or, even, integration (CACI International 2009) of both soft and hard power elements into successful strategies that are likely to achieve national priorities, but also as a blended hard-soft power strategy in its entirety. Wilson points out that "achieving smart power requires artfully combining conceptual, institutional, and political elements into a reform movements capable of sustaining foreign policy innovations into the future" (2008, p. 120). Nye often draws upon Norway's smart power capabilities as an example, as the country is both actively involved in both hard power defense policymaking and soft power attempts such as peace building, humanitarian aid and other diplomatic efforts (Nye 2004, 2011a).

Although traditionally considered as hard power, military power can also have some kind of soft power appeal: "A military [...] can both coerce some people and attract some others, when it achieves victory" (Vuving 2009. p. 4). This happens when, for example, dictatorships are overthrown by military forces and foreign publics feel liberated by such efforts. Furthermore, victories do not always imply winning the war. Nye himself often draws on the U.S. Navy relief provision for Indonesia after the East Asian tsunami in 2004 (Nye 2004, 2009, 2011a 2011b) and for Japan after the earthquake in 2011 (Nye 2011a).[14] In addition, Nye also mentions the U.S., Brazilian, Chinese and Israeli military relief provision after the 2010 earthquake in Haiti (Ibid., p. 48). Furthermore, these efforts are also costly in terms of money and material, showing that economic power can also be leveraged for the generation of soft power between countries. Similarly, contributions in the form of money and material that is used for military-led healthcare and education programs that are set up in development countries can also be considered soft power efforts.

Although the concept of soft power is attractive and an increasingly popular approach to policymaking (Hayden 2012), Nye has never claimed that it should substitute hard power approaches. Political scientist Colin S. Gray points out that "the quality of justification required for the use of force has risen, which means that the policy domain for military relevance has diminished, but has by no means disappeared" (Gray 2011, p. vii). In the wake of the 21st century unconventional forms of warfare such as terrorist attacks from extremist organizations in the Middle East and cyber attacks launched from Africa and Asia that target both state as non-state actors go alongside, for example, North Korean threats to utilize their full military power, in both conventional and unconventional (chemical, nuclear) forms.[15] Defense strategist Rob de Wijk (2001) has argued that the conventional warfare of the 20th century, i.e. the form of warfare that is used to reduce an enemy's military capability, will likely be replaced by unconventional warfare, that is, warfare through acquiescence, capitulation and/or offering clandestine support, a form of warfare that seems more soft power-oriented than its predecessor and relies on small military quick-reaction force when force is the only option left. However, as Gray puts it, "it would be irresponsible in the extreme to attempt to dismiss recent nonuse-of-force prescriptions as harbingers of conflict in a century that is barely 10 years old. We simply do not know what this century will bring" (2011, p. 7).[16]

[14] These operations, Operation UNIFIED ASSISTANCE and Operation TOMODACHI, are examples of Crisis Response and Limited Contingency Operations on major scale in the Joint Publication 1, doctrine for U.S. armed forces (2013).

[15] The equivalents of conventional and unconventional warfare in U.S Doctrine are described as traditional and irregular warfare (JP 1 2013), and Dutch Doctrine describes them in terms of regular and irregular operations (NDD 2005).

[16] Gray even argues that "soft power is potentially a dangerous idea not because it is unsound, which it is not, but rather for the faulty inference that careless or unwary observers draw from it" (2011, p. 29).

The implications of the abovementioned changes in terms of international conflicts are large for a nation-state's military (and economic) capabilities. Militaries are concerned with the defense and security of a nation and its people, and in the 21st century terrorism and cyber-warfare are very different threats than the armies of other nation-states such as North Korea nowadays and as was often the case in the 20st century during the two world wars and the cold war. Furthermore, violent threats and activities are often carried out by non-state actors, as is seen when we look at the terrorist attacks on the World Trade Center in 2001, or the recent bombings of a crowd during the Boston Marathon in 2013. Nye explains that the increasing violent activity of non-state actors such as terrorist organizations and their underlying cells, private military firms or even threatening individuals with sophisticated weaponry are part of a bigger trend, which he calls the *privatization of war*. In military terms, the enemy of the 21st century is likely to be asymmetric, i.e. using different capabilities, strategies and/or tactics than a state's military component.

Furthermore, soldiers often carry out missions in urban areas, complex terrains that are usually full of civilians of which some carry weapons, potential enemies that are often indistinguishable from civilians and friendly non-military actors such as aid provision personnel and journalists. Military force from the level of strategy to the level of operations, tactics and even military individual action increasingly contribute to the images of nation-states as media are ubiquitous and pervasive nowadays and "whose presence will mean that all future conflicts will be acted out before an international audience" (Krulak 1999). Furthermore, oldiers often carry out missions in urban areas, complex terrains that are usually full of civilians. We can see this when we look at the first exemplary quote of the introduction of this thesis: A soldier's action to pre-emptively shoot an Iraqi citizen—whether following military *RoE* or doctrine or not—can negatively affect the relation between the U.S. military and the Iraqi citizens in general. Or, even more exemplary, a few soldiers' act of making pictures of themselves gruesomely torturing prisoners in the Abu Ghraib prison could even negatively affect the U.S. image worldwide (Nye 2004, 2011a). Once such narratives enter the public domain, usually quickly disseminated through (online) media platforms, credibility and legitimacy are easily undermined and confidence and trust in a country are easily lost. In such cases it seems that winning the war is easier than keeping the peace. Nevertheless, as three U.S. soldiers wrote: "Although it may be expensive to build peace, wars are much more expensive" (Garcia et al. 2009, p. 22).

This has serious consequences for defense planning and the execution of military operations on all—strategic, operational, tactical and technical/individual (see NDD 2005)—levels. Take for example this (traditional) view by Gray:

> Fighting is the core competency of the soldier; he is a specialist in violence. While armed forces can serve many purposes, what defines them uniquely is their ability to damage things and injure or kill people as a legitimate instrument of polity. When functioning under the authority of law to advance or protect the political interests of a security community, the soldier can be said to threaten or execute force rather than violence. This distinction in language, and even in concept, is apt to be clearer in principle than it is in practice, particularly if one is on the receiving end. (Gray 2011, p. 1)

Gray underlines what military resources and capabilities have been mostly used for from a hard power perspective: Armies are used to induce and threaten, for example, to protect the west from the east (or *vice versa*) during the cold war to destroying terrorist cells worldwide during the first decade of the 21st century. However, "hard military threat and use are more difficult to employ than was the case in the past, in part because of the relatively recent growth in popular respect for humanitarian values" (Ibid., p. vi).

Not only did the ideas about military affairs and warfare change. The ideologies behind the use of military force changed enormously after the cold war era and the First Gulf War. For example, during the First Gulf War the U.S. army used "the Powell doctrine [named after Colin Powell who was Chairman of the Joint Chiefs of Staff at the time] of overwhelming force, massed troops, and long-build up periods upon which Desert Storm was based" (Thomson 2008, p. 77). However, (partially) military conflicts in seemed to change from being conventional in nature to unconventional, of which the Bosnian war (1992-1995) and the Somali Civil War (1991-ongoing) are examples. During these years military doctrine started to change, laying its emphasis on the development and utilization of lighter and smaller- and special forces, stand-off precision strikes, drones, Unmanned Aerial Vehicles (UAVs) and Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) technologies. This shift in emphasis of military capability planning is often referred to as military transformation (see Thomson 2008, Davis in Cimbala 2010) or as the Revolution in Military Affairs (RMA), which is "the shift from industrial to informational warfare" (Dyer-Witheford & De Peuter 2009, p. 103). Examples of this shift in military thinking are, *inter alia, Effect Based Operations* (EBO, see Jantunen & Huhtinen 2011) which focuses on thinking in end-states or goals that need to be achieved rather than in methods, and *Networked Centric Warfare* (NCW, see Thomson 2008) which emphasizes information use of interlinked, networked technological systems. Such missions are often justified through precise use of military force and high-end networked technological systems, quick adaptations to changing and complex situations, and the reduction of casualty numbers (Ibid.; Thomson 2008). This, in turn, has led to the beliefs of paradoxical—if we agree that warfare in its true nature is about violent force—concepts *civilized warfare* (Freedman 1998, quoted in Thomson 2008) or *humane warfare* (Bacevich 2005,

quoted in Thomson 2008), wherein reduced casualties, utilizing precision equipment to only take out those who are considered a threat to the nation and the relative compliance to the rules of engagement are considered justifications for engaging in military conflict.

In addition to the increased military emphasis on the effective utilization of high-end technologies and precision systems, the role of the 21st century individual soldier has kept evolving. Soldiers nowadays need to able to carry out traditional full scale military operations, but peace building and -keeping operations, humanitarian aid other *operations other than war* (OOTW) as well.[17] The latter types of operations seem to be opposed by less resistance from non-military and non-government actors and could be considered more politically acceptable. Regardless, they require a soldier to quickly shift and adapt to news situations between warfare and non-warfare activities.[18] On top of this, the complexity of mission environments in which such operations are carried out are often characterized by the need for combat, peace building and -keeping and aid provision to be carried out *simultaneously* and in relation with non-military organizations who might have very different objectives. Nye explains that "in hybrid wars, conventional and irregular forces, combatants and civilians, physical destruction and information warfare become thoroughly intertwined" (2011a, p. 33). These new situational contexts were first described as the *three block war* by former U.S. Marine general Charles Krulak.[19] Krulak (1999) also pointed out that the performance and decisions made on the lower levels—that is to say operational, tactical and technical, or individual levels—of military operations are increasingly important in order to achieve positive outcomes on higher—operational, strategic and grand strategic—levels.[20] Furthermore, success in such situations acquires a high level of *situational awareness* and rapid *decision-making* assessments that lead to the right choices (also see Antal 1998).

[17] U.S. Joint Operations (JP 3-0) doctrine describe these missions as Crisis Response and Limited Contingency Operations (2011), while, for example, the Netherlands Defence Doctrine (NDD) describes them as Crisis Management Operations (2005).

[18] The Netherlands Defence Doctrine, for example, uses the *Manoeuvrist Approach* which central principle is "not to eliminate the enemy's combat power (his personnel and equipment) but to break the enemy's general cohesion and his will to fight (NDD 2005, p. 52). This type of warfare "requires a mental attitude which allows unexpected, rapid and creative actions to be combined with an unremitting determination to succeed" (Idem, p. 52).

[19] Krulak also saw the potential of commercial video games. The 1996 U.S Marine Corps directive under his lead stated: "The use of technological innovations, such as personal computer (PC) based wargames, provide great potential for Marines to develop decision making skills, particularly when live training time and opportunities are limited. Policy contained herein authorizes Marines to use Government computers for approved PC-based wargames" (quoted in Lenoir 2000, p. 322-323).

[20] However, the concepts of *three block war* and *strategic corporals* concepts were never fully adopted as part of operational doctrine due to its ambiguity and the lack of a solid intellectual foundation (Dorn & Varey 2009), but has been followed by many other military doctrines describing the increasing complexity of military operations.

The consequences for military activities and policies are neatly summarized by military game expert Mathew Thomson's reading of international relations theorist Martin Shaw's concept of the *global surveillance war* (2005):

> Modern war must be limited in risks for Western polities, economies and societies, to avoid political, economic and social disturbance; anticipate problems of global surveillance, such as the media, public opinion and law; be time limited wars; minimize casualties to Western troops through casualty aversion, and the use of airpower, proxies and private security firms; distinguish between combatants and non-combatants to minimize non-combatant casualties and collateral damage; and maintain legitimacy through the use of precision weapons and advanced technologies. (2008, p. 155)

Therefore, 21st century military personnel requires to be aware of when to use hard power capabilities, such as maneuvering in teams and shooting, and when to use soft power capabilities, such as competencies that are useful for cooperation with military and non-military actors and (foreign) publics. As national security experts Patrick Cronin and Kristin Lord put it: "Hybrid challenges require hybrid professionals" (2010). What soldiers need are *smart capabilities* which contribute to the ability to win the war and, as Steven Lukes (2005) has called it, to win the *battle of hearts and minds*.

Nevertheless, we cannot ignore the fact that international conflict often requires hard, military solutions to reduce or diminish threats (Gray 2011). Morally and ethically unappealing military (violent) action as a means can only be seen as necessary by domestic and foreign publics and other non-state actors if the goals are credible and legitimate. However, this implies the requirement for a nation-state's military power to be accompanied by some kind of soft power, i.e. the ability to attract and persuade others about the use of military force as a credible and legitimate means to achieve necessary goals. Thus, military departments policy- and strategy making processes need to be transparent to some extent. Nye argues that "smart strategies must have information and communications component" (2011a, p. 20). However, communication, notes Nye, that is perceived as simple propaganda may be counterproductive and messages need to created carefully (2004).

Thus, smart power works two ways: On the one side state and military actors need to have soft power in order to utilize their hard power. This means state and military actors need to actively promote legitimate and credible policies through framing and agenda-setting. On the other side the same actors need to attract and persuade non-state and -military actors which increasingly relies on

the opinion of ideas, ethics, values, norms and laws of the latter actors. This means that there is a need to conduct activities that generate, or create soft power first. State and military actors promote their policies but also have to partially comply to the ideas of other actors in their operation space.

Soft Power Differentials: Narrow and Broad Approaches

Now that we have pointed out that effective utilization of a soft power-orientated ICT component is a requirement for a nation-state's military power, let us look at how attempts are setup to generate soft power through such channels. R.S. Zaharna makes a distinction between two approaches of how soft power generation is conceptualized. She describes soft power approaches as either *wielding soft power* or *creating soft power* (2007). Wielding soft power, she points out, is the approach that strategic communication efforts used in the cold war, when mass communication was used to disseminate messages among the people behind the iron curtain. Based on communication theorist Harold Laswell's sender-message-receiver model, the process was defined by "who says what to whom through what medium with what effect" (1948 in Bryson p. 37, quoted in Zaharna 2007) Although praised for its ability to *set the agenda*, i.e. telling the audience *what to think* (see McCombs & Shaw 1972), mass communication's ability to persuade audiences, relies on the *control* of the *medium* used and the *message* sent (Zaharna 2007) as the message is predetermined, produced and sent independently from the audience.

However, "the dynamics of these basic elements of the mass communication approach, which focuses on information production and dissemination, are dramatically different from a network communication approach that focuses on information exchange" (Ibid., p. 219). After the Cold War era audiences were fragmented and culture emerged as "the new dynamics in international relations" (p. 215). Additionally, the proliferation of ICTs and non-state organizations have led individuals and the networked formations they become part of to become new factors that influence the creation of information and enables them to scrutinize and undermine policymaking. Creating soft power depends on networked structures, networked relation-building, and the subsequent utilization of information to create credible storylines. This process is referred to as *framing* (Arquilla & Ronfeldt 2001, also see Entman 1993; Goffman 1974). Zaharna (2007) points out the essential difference in outcomes:

> In contrast to the mass communication approach that *begins* with a predetermined message, the network paradigm *ends* with the message of the story. Rather than trying to design a message that is distinct from the intended audience and then using mass media as a communication channel to cross the cultural barrier, networks *first* establish the structure

> and dynamics for effective communication channels, *then* members collaborate to craft the message. (p. 221)

Wielding soft power is what I will refer to as *narrow soft power approach*. First, because it sees the recipient as a relatively *passive actor* who either is attracted and persuaded, or not. Second, because the possibilities for the recipient to communicate feedback in a mass communication model is delayed, indirect or even absent creating a *hierarchical one-way communication stream*. This severely limits the possibilities for discussion and mutual understanding as the process is mainly considered with the *deliverance* of the message. Third, because the range of possible outcomes is very narrow: The actor is either persuaded and changing his behavior, or not. Creating soft power is what I describe as a *broad soft power approach*. A broad soft power approach tries to first establish a *common ground* through socialization processes and from which actors can engage in debate which lead to new messages and ideas. From such an approach target actors are seen as *active interpreters* and the range of outcomes depends upon the active many-to-many communication between the members of networks. Ali Fisher (2008) has referred to both systems with the metaphors of the *cathedral*, where one dictates and the others listen, and the *bazaar*, where everybody can speak with everybody. However, it must be added that the narrowness or broadness of the approach is always *relative*. For example, R.S. Zaharna points out that the subject of mass communication is able to give feedback, but it is usually delayed or indirect (2007). Networked communications often also experiences some structural resistance in the form of, for example, downtime or platform restrictions such as rules of conduct, information overloads, etc. In other words, soft power approaches reside on a spectrum between narrowness and broadness.

Furthermore, soft power approaches are not limited to the level of international politics but can also be a useful concept when analyzing social relations between groups and individuals (van Ham 2011; Nye 2011a; Pallaver 2011). In a sense, the broad soft power approach shows similarities with sociologist and philosopher Jürgen Habermass' ideal of a *public sphere* (1989), a place where individuals can freely identify, critically discuss and deliberate on societal and political problems. However, the goal of a broad soft power approach is to create a common base for mutual understanding of issues between governmental actors and non-governmental actors that can be used to negotiate, persuade and attract to government—and in this case military—affairs that will likely lead to the achievement of national priorities rather than to debate and deliberate to advance critical thinking and understanding. In addition, the broad soft power approach shows a lot of similarities with what political scientist Peter van Ham calls *social power*, or "the ability to set standards, and create norms and values that are deemed legitimate and desirable, without resorting to coercion or payment" (2011, p. 8).

Games

Chapter 2 Military Serious Games

In July 2009 a conference was hosted by the United States Institute of Peace (USIP) under the name "Smart Tools for Smart Power". During the event presentations were held on cases of education and training processes for both government personnel as domestic and foreign publics making use of simulation- and game technology. First speaker of the day, U.S. deputy chief technology officer and author of *wiki government* (2009) Beth Noveck explained the U.S. government was looking at new technologies that could aid them in achieving government goals. During her presentation she pointed out that the big question was what the role of simulation and games could be in achieving national priorities.[21] To more specific she asked: "What is the strategy for using games to achieve national priorities with measurable impacts?" (Ibid.). Noveck points us at three questions: 1) *What* goals should governments try to achieve with simulations and games?, 2) *Why* would simulation and game technologies make a difference?, and 3) *How* will those means achieve these sought-for effects?

This is an example of what game scholar Mathew Thompson points out in his comprehensive analysis of military computer games and what they teach players about warfare: "The global use of computer games as tools of recruitment, propaganda and political confrontation, and the reaction which these games have evoked, is testament to the belief in the power of games on the part governments, intelligence agencies, militaries, and terrorist organizations" (2008, p. 2). For example, U.S. army simulation expert Michael Macedonia even went so far to say that "computer games are not nonsense. We win wars with these games" (quoted in Thomson 2008, p. 3). Although this belief seems to be more prominent than ever before, computer games and simulations have no long history of being specifically related to soft power and smart power and empirical evidence of their specific effects in terms of persuasiveness and attractiveness seem to be largely absent. However, some examples of research that tied soft power to games do exist.

Communication scholar Michael Strangelove posted an online named *Video Games and Soft Power*.[22] As Strangelove points out, "video games are artistic, political and religious expressions [as] fans, artists and scholars alike have used the medium of video games to create commentaries on many aspects of contemporary life" (Strangelove 2010). After explaining how 2K's 3D Sci-Fi Shooter

[21] See *Beth Noveck at Smart tools for Smart Power: Simulations and Serious Games for Peacebuilding* (Youtube 2009, last visited 30-6-2013).

[22] Also found on Youtube. See *Video Games and Soft Power* (Youtube 2010, last visited 2-7-2013).

Bioshock (2007) critiques contemporary social and religious ideologies[23], Strangelove calls for more games that are able to show and critique the underlying structure of contemporary politics and society. China-oriented online platform GBtimes.com posted a news-video under the name *Video Games as Soft Power* in 2012.[24] This video elaborates on the growing Chinese game market and the potential of creating games for an international market. These games are supposed to create a source of soft power as they attract international audiences by incorporating elements of Chinese culture and history in the games (GBTimes.com 2012).

Academic references to computer games as a source of soft power are made by digital strategist David Nieborg in his extensive base of research on the U.S. Army game *America's Army* (*AA*). In addition to the impressive statistical information on the numbers of players of the game and the recruitment success that the game generated in terms of cost-reduction, Nieborg claims that "*America's Army* is not only propaganda tool, it is a powerful example of the ability of the U.S. to successfully wield soft power by directly tapping into popular culture" (Nieborg 2009, in van den Boomen et al., p. 39). In a similar writing, published a year later, Nieborg writes "America's army is not only a publics relations tool and a compelling cultural artifact, but it is a powerful example of the U.S.'s ability to successfully wield soft, and thus sweet power by tapping into and affecting popular culture affecting popular culture by becoming popular" (Nieborg 2010, in Huntemann & Payne, p. 58).

Not directly explicitly mentioning soft power, Morozov gives a small count of two Chinese games, *Learn from Lei Feng* and *Incorruptible Warrior*, that try to attract its players to socialist ideas. Morozov, however, points out that "the provenance of such games is not always clear; some are funded by the government, some are merely subsidized, and some are produced by the private sector in hopes to curry favor with the government" (2011, p. 138). The academic research on games and political resource by media scholar David Machin and colleagues (Machin & Suleiman 2006; Machin & van Leeuwen 2007, in Chouliaraki) is focused on the relation between the framing of military activities and policies in military-themed games and effect of such of playing them in terms of behavioral change. In one article that focused on both a U.S.-made game *Delta Force: Task Force Dagger* and Hizbollah's *Special Force*, Machin and Suleiman (2006) analyze, interpret and compare the narrative of the introduction of both games and interview players from different nationalities about their perception and interpretation of the level of ideologies that flow from these games. The

[23] The game is based on Ayn Rand's philosophical theory of *Objectivism*.

[24] Also on Youtube. See *Video Games as Soft Power (Third Angle Insight)* (Youtube 2012, last visited 2-7-2013)

subsequent discourse analysis shows varying results as some players seem to be attracted to the ideologies conveyed in the games and others that seem to reject these ideas.

What, however, should go before the labeling of games as soft power tools is not only a justification of the claim that video games are indeed contributing to the understandings of military activities and policies and the generation of soft power, i.e. an examination of *its effects* and *effectiveness*, but also *how they function*, *how they are utilized* and *whom exactly they persuade and attract*. In other words, *how do games frame and set agendas and how to they persuade and attract their players*? Military-themed games have often been seen as forms of imperial and military propaganda, often referred to as *militainment*, a blending between the communication of military ideologies and entertainment which has potentially negative effects on society if it succeeds at *militarizing society* (see, for example, Halter 2006; Dyer-Witheford & de Peuter 2009; Stahl 2010). In his research on (U.S.) military games and the claims of military games serving as a tool of education, propaganda and militarization, Thomson notes that:

> existing critiques concerning the relationship between computer games and American militarism have relied on descriptions of the practical realities of the military-entertainment complex, and vague inferences concerning the parallels between games and political policy which are based purely on an understanding of the military-computer game relationship as propagandist and insidious. On the basis of these inferences, existing criticisms have made emotive claims concerning the effects of military computer games; but behind these claims, there is an absence of analysis concerning game play, game content, and also the question of how it is that games transmit their meaning and generate understandings. (200, p. 44-45)

Media critics often tend to analyze games in terms of media effects yet they do not acknowledge the workings of a game's representation, simulation, structure and the player's role (Ibid.). Thomson rightfully notes that "any suggestion that computer games influence public understanding of warfare must concede that the process of audience reception is far more complex than the passive acceptance of meaning that the 'hypodermic needle' model of media effects once suggested, and that the interaction between game and player involves processes of encoding and decoding, as well as resistance and rejection" (2008, p. 20-21).

As we have seen in the previous chapter, potential power resources are not per definition also power sources that lead to specific outcomes and, furthermore, power is always dependent on the context. On top of that, if soft power is a capacity, a potential of achieving a certain effect, we need to take into account *how* ideas may be spread by playing games. On top of this, we need to

consider the role is the person that uses, or in terms of gaming, interacts with the medium, and what the gamer can do with such messages. In other words, in order to look at how games generate soft power, the content of games must be scrutinized in relation to what the game structure allows a player (who is no likely not completely passive) to do with the content. In order to this we must look at how simulations persuade and attract users, focusing on both representation as technological structures of simulation systems, how interaction between the user and the system takes place and what the role and the subsequent effect is on the player.

Representation, Simulation and Interaction

Games and the military have a long history (see Deterding in Huntemann & Payne 2010; Lenoir & Lowood 2005). Ancient games such as the Chinese *Go* were already in use 2000 years ago (Halter 2006), the Prussian wargame *Kriegspiel* became popular in the 18th century and in the 21th century both military and non-military actors seem to play military-themed games more than ever before. Already in the 1960s cooperative bonds were created by both the commercial industries and military actors that focused on creating games and simulations. This was partly because of policy discussions reoriented defense research spending towards research that was beneficial beyond the military (Lenoir & Lowood 2005). The cooperative bonds and idea-sharing practices between commercial game industries and military organizations have led to the emergence of the what has been dubbed the *Military Entertainment Complex* (Lenoir 2000, Stockwell & Muir 2003) or the *Military-Industrial-Media-Entertainment Network* (MIMENET, Der Derian 2001).

One of most successful products of these industries are military-themed computer games and, a subcategory of those, MSGs. Tactical MSGs are a combination of military-themed computer games and serious games. Military-themed computer games are games are games that have a theme that relates to military activities. These games are sometimes made by or with in relation with military organization. Some are made by commercial companies and purely for entertainment purposes, for example THQ's *Company of Heroes* and the *Call of Duty Modern Warfare 3*. Serious games are games that have *education* instead of entertainment as their primary goal, or, in other words, are games that inform, educate and/or train (Michael & Chen 2006). Thus, MSGs not only represent and simulate military subjects, but also try to influence its players, by informing them about something, by teaching them something and/or by training them to be able to do something. Tactical implies that the games are (mainly) focused on military action on tactical and individual levels. These games are usually played from a first-person view and are therefore often labeled as First Person Shooters (FPS).

A game can be defined as "a system in which players engage in an artificial conflict, defined by rules, that result in a quantifiable outcome" (Salen & Zimmerman 2004, p. 80), and is different from other popular expressive media such films and books because it is "not just based on representation but on an alternative semiotical structure known as simulation" (Frasca 2003a, in Wolf & Perron, p 222). Simulation can be defined as "a process by which a phenomenon is representatively modeled by another phenomenon" (Crogan 2011, p. xviii). Although games often have identical semiotic sequences as books and films (as they use characters, settings and events), they cannot be understood by only looking at its output (Frasca 2003a, in Wolf & Perron).[25] Games include a system of behavioral rules which will determine what the next events will look like, creating different sequences of events. In other words, games not only built upon model the representational characteristics of an object, but they also model the objects dynamic behavior. In terms of their expressive potential games, unlike books and films, "are not only able to state if social change is possible or not, but they have the chance of expressing how likely they think it maybe" (Frasca 2003a in, Wolf & Perron, p. 228).

However, there is another characteristic of games that cannot be denied. As Frasca puts it, "any attempt to interpret games need to pay attention to both the semiotic and the ergodic level, since games are not merely made of signs but they are also directly affected by the player's performance" (2007, p. 17). What Frasca point out here is that games are *interactive*, or as communication scholar Alexander R. Galloway prefers to put it, games are an *action-based* medium (2006), and rely on manipulation by the player in order to make something happen. This is by no means a one-way relation as the changes within the game are communicated back to the player who, in turn, does something with the output. Understanding this interactive process is critical to understand behavioral change, both within the system as within the player.

From a cybernetics[26] perspective, games are systems that "set the player a well-defined task [and by this] exemplify the logic informing the predominant modality of computer interaction, which is to master the algorithm's manipulation of the data structure" (Crogan 2011, p. 61). The military ideology driving the development of simulation technologies is to be able to predict, anticipate and

[25] I am aware that there has been a divide between narratologists and ludologists more than ten years ago about whether to approach games as narrative texts or as ludic systems with certain mechanics. This debate, according to Frasca has been "cluttered with a series of misunderstandings and misconceptions that need to be clarified if we want to seriously discuss the role of narrative in video games" (Frasca 2003b, p. 1). In accordance with Frasca, I too argue that games have similar aspects as other forms of media that are of importance, but that the simulational nature of games make them unique and should definetely be taken into account.

[26] Cybernetics is a research field founded by Norbert Wiener in the 1940s which "studies the regulation and control of systems" (Salen & Zimmerman 2004, p. 214). Cybernetics, or *systems theory* was the basis for military research on the conceptualisation of simulation technologies.

control future military situations, or, in other words, to create ideas about the question of what to do when or if a specific situation is presented (Ibid.). From this perspective game scholar Espen Aarseth has described games as instances of *ergodic discourse* (1997, 1999).[27] Aarseth describes that "ergodic phenomena are produced by some kind of cybernetic system, i.e. a machine, human or a composition of both, that operates as an information feedback loop, which will generate a different semiotic sequence each time it is engaged (1999, p. 32). Thus, games procedurally simulate sequences which will create a narrative. Such narratives are not strictly linear as in films or books, but the player creates the chain of sequences by making choices and is able to create different semiotic sequences every time she plays. This is not to say that games always include possibilities to create entirely different stories, as Aarseth implies, every time one decides to play. The sequence of events and the narrative of, for example, military single-player FPS games have usually been fairly linear (Frasca 2003a, in Wolf & Perron; Thomson 2008).

Game scholar Jesper Juul makes a distinction between games of *progression* and games of *emergence* (2002, 2005). Juul explains that games of progression have a predefined task that, in turn, require a predefined set of actions to complete. He explains that in a pure progression game all the options and solutions are explicit, such as when games make use of branching narratives. For example the narrative options in Bethesda's *Fallout 3* where the player needs to pick predetermined responses in order to interact with artificially controlled virtual entities. Any particular choice will lead to a new set of predetermined options and so on. Juul points out that: "one feature of the progression game is that it yields strong control to the game designer: Since the designer controls the sequence of events, this is also where we find the games with cinematic or storytelling ambitions" (2002). Emergence in games derives from a small set of rules that allow a (large) variety of game variations. Players have a to utilize these rules to make strategies in order to solve the proposed problems. An example of games that allow for emergent gameplay are real-time strategy games (RTSs) such as Blizzard's *StarCraft II*: *Wings of Liberty* in which the player has to build an army to defeat other armies. The player has to actively choose to build a large number of "zerglings", "hydralisks" or any other random set of units as long as the player defeats the enemy player(s).

However, complex simulation systems such as games often model complex situations and processes which, in turn, have not a single solution to predefined tasks, but multiple solutions in multiple contexts. For this reason we should not only look at the relative nature of games, but also make a distinction between rules that structure the game. Such rules propose, or even constitute a path or restrict the player to that path to reach a specific outcome, but sometimes also allow the

[27] The term *ergodic* is based on the Greek words for *work* (ergos) and *path* (hodos) (Aarseth 1997).

player to take different paths that lead to different outcomes. Simulation and game scholar Gonzalo Frasca builds upon game philosopher Roger Callois distinction between *paidia* (play) and *ludus* (game) to define the rules upon which games are built. Ludus rules constitute a closed system, usually built upon dichotomies. Paidia rules are rather open-ended and propose no winning or losing conditions. For example, the goal of C*all of Duty Modern Warfare 2* is to achieve victory by defeating the terrorist threat in general and its conspired leaders in specific. This is clearly a ludus goal: You must shoot your way through hundreds of enemy militias and kill their leaders who threaten the world peace. You must find and kill the fictional terrorist leader Imran Zakhaev to stop the terrorists from waging a third world war. As Frasca puts it: "You must do X in order to reach Y and therefore become a winner" (Frasca 2003a, in Wolf & Perron, p. 230). The Massively Multiplayer Online Role Playing game *World of Warcraft,* on the other hand, has no ultimate winning conditions and the player can set out goals for herself: You can ride on a tiger through the world of Azeroth and you can go fishing in a lake in the Howling Fjord area. in short, you can do X. In a sense, ludus rules seem to *restrict* the player to do something while paidia rules *allow* players to do something.

Game designer and researcher Ian Bogost argues that game rules can be designed in such ways that they contest, implicate and reinforce an ideological frame (2006b, 2007). Games can, just like books and films, can represent and refer to problems, affairs and conflicts we experience in the real world. However, he explains that games are unique in the sense that they are *procedural* in nature (also see Murray 1997) and describe processes in small steps, which he calls *unit operations* (2006a). Thus, rather than seeing a game in its entirety, as a system from which a certain expressive idea might flow once it is manipulated, Bogost argues that unit operations are "modes of meaning-making that privilege discrete, disconnected actions over deterministic, progressive systems' (2006a, p. 3). These unit operations are biased as they ultimately use human, symbolic forms of representation (Ibid.). As such, games can be used to make claims by putting forwards arguments which "are not made through the construction of words or images, but through the authorship of rules of behavior, the construction of dynamic models" (Bogost 2007 p. 29). In other words, games can form a procedural rhetoric—through (a sequence of) claims made by unit operations—that tries to show *how things work* (or *how things do not work*, adapting what Bogost calls the *rhetorics of failure*). Bogost describes the process of (successfully) designing and utilizing procedural media such as games to put forward claims as *procedural rhetoric* (Ibid.). Bogost explains that the ideological messages that may flow from interaction with games can be derived through *unit operations analysis*, a method based on literary theory, philosophy and computation that analyses games by deconstructing them into discrete unit operations and then looks at how these make procedural

claims about how something works and what this means for the creation of arguments through game design.[28]

The procedural claims that games make function through the use of restrictive mechanics and rules, the *ludus* rules. Frasca explains, ludus rules add an extra ideological level to a game: "creating a ludus creates a moral set of rules, defining what is right and wrong" (2001, p. 47). On top of this, ludus rules are built upon binary logic: "Ludi imply that you either win or lose; there is no middle term" (Ibid., p. 48). Thus, ludus rules tell a player what he is able to do or not and thereby restrict the number of play possibilities. Paidia rules only allow a player to do something and such actions do not have predetermined consequences. For example, consider vehicle theft in Rockstar's *Grand Theft Auto IV.* The player can decide to steal a car, a bus or a motorcycle, which is a paidia rule and makes no procedural claim. However when a player decided to hijack a car and is spotted by a police officer, the latter will alarm his colleagues and will try to chase the player down. This ludus mechanic makes a procedural claim: *If* you are spotted when hijacking a vehicle, *then* the police will try to chase you down. The same counts for Namco's *Pacman* pac-dot eating. You can go up down left and right in the maze eating pac-dots, which is a paidia rule. But *if* you decide to eat a big pac-dot, *then* you can eat the ghosts that try to chase you down *and* the ghosts will run from you instead of chase you. This is how ludus rules create procedural arguments.

In order to convey procedural arguments the player must interpret that what is happening in the game through her actions. In other words, she must create a mental model of the simulation model that is used to simulate a certain process. From the Peircian semiotical concept of the *interpretant,* i.e. the ”product of the interpretation of the sign in somebody's mind" (Frasca 2001, p. 29), Gonzalo Frasca has argued that, in relation to simulative media such as games, the interpreter also creates an *interpretamen,* or a mental model of how a model works. Thus, there must be, as Bogost explains it, a breach between the rule-based representation and the player's subjectivity, i.e a *simulation gap* between the game world and the material world through which ideas flow about how the game simulates the real world in relation to what the player thinks and knows about how something works in the real world (2006a, 2007). If the player blindly accepts the results of a simulation, Bogost—in continuation of media theorist Sherry Turkle (1997)—explains this as *simulation resignation*. When the player rejects the simulation, she speaks of *simulation denial*.

[28] Bogost's approach shows similarities with Bruno Latour's Actor-Network-Theory (ANT) which describes that, in order to create understanding of modern society, the researcher must *trace* the chains of associations within a network (or *work-net*) of human and non-human actors (or *actants*) through *cultural-material artefacts* and *reassemble* what it means for something to be social (1987, 2005). However, this is an approach to social theory and Bogost's philosophical approach is hermeneutical in nature, focusing on games as configurative systems that are formed from interlinked units of expressive meaning that can be traced and analyzed in terms of the procedural claims they make.

However, Bogost argues that such struggles "between the omissions and inclusions of a source system and the player's subjective response to those decisions" (2006a, p. 132) are often relative as players can partially accept and deny the simulation, being thrown out of the illusion constituted by gameplay. This process is what Bogost defines as the process of *simulation fever* (2006a) in which the player acknowledges the constructed ideology in games and works through her subjective experience of the simulation. Play theorist Mary Flanagan concept of *critical play*, i.e. "to create or occupy play environments and activities that represents one or more questions about aspects of human life [and is ultimately about] a careful examination of social, cultural, political, or even personal themes that function as alternates to popular play spaces" (2009 p.6) seems to go even further as it explicitly calls for a critical examination of simulations. From this perspective, MSGs would also hold the potential of becoming a platform for the critical discussion of military activities and policies and other military affairs.

Nevertheless, games that are highly reliant on relatively closed rules systems are able to communicate a strong message from the designer to the player, but are often limited in terms of the possibilities for experimentation with the behavioral model and its rules. Frasca points at the possibility to change the rules behind a simulation through *meta rules*, i.e. "a rule that states how rules can be changed" (Frasca 2003a, in Wolf & Perron). Games sometimes include options to edit or modify the simulation. For example, some games include level editors or are open source so that the player can change the source codes. The manipulation of meta-rules allows players to challenge the rules of the game, opening it up for experimentation and critical debate (2001, 2007, 2003a in Wolf & Perron). In relation to Bogost's concept of unit operations, games that include such meta-rules can also allow the player to create, remove or modify procedural arguments and create different sequences of procedural claims.

Play and the Player

A cybernetic perspective on gaming activities alone lies a strong emphasis on how a simulation or a game functions. According to Galloway, playing with the technologies of today is built upon both cybernetics and romanticism (2009). While the first movement emphasizes an objective, rational, functionalist perspective of games, the latter implies that gaming is also an aesthetic experience, an activity which the player might enjoy or (in some cases) dislike. Players, according to game scholar Miguel Sicart, should therefore be seen as moral beings who have the ability to critically reflect upon their actions in the game world (2009). Additionally, game theorist Jesper Juul has argued that even though games are virtual but the outcomes and reactions can certainly be experienced as real to the player (2005). Furthermore, players can learn from games and can have a meaningful experience

even if they are not progressing in a game (see Gee 2003; McGonigal 2011). Bogost's rule-based approach has been criticized for being too narrow, since it overemphasizes the game and tends to reject the player as a complex moral being and the importance of their motivation for their actions. (see Frasca 2007; Sicart 2011). In other words, the proceduralist approach allows us to explain how signs in games lead to a specific interpretation through the mechanics of the game, but it leaves out the background and the performance of the player.

From a cybernetic perspective Aarseth (1999) explains this by describing that a game proposes an *aporia*, a state in which the players needs to negotiate about choosing a solution. The *epiphany* is the state in which the player has found the solution. Successfully completing the event leads to *ergodic closure*. However, even if the path is more or less predefined we should not deny the role of the gamer in choosing the path. Playing games means that players are subject to a process of "making choices and taking actions" (Salen & Zimmerman 2004, p. 33). In simple words, the player tries to create an understanding of what is happening on the screen in relation to what they already think and know. Game scholars Katie Salen & Eric Zimmerman have proposed the concept of *meaningful play* to describe this process:

> Meaningful play in a game emerges from the relationship player action and system outcome; it is the process by which a player takes action within the designed system of a game and the system responds to the action. The meaning of an action in a game resides in the relationship between action and outcome (2004, p. 34).

For example, although the goal of a game of deathmatch in any online shooter is (usually) to eliminate the enemy team, some players do so by not using some of the available weaponry (such as playing the game by only using knives or prohibiting grenade launchers in *Call of Duty Modern Warfare 2* which are often called "noobtubes"). Such *emergent* gameplay phenomena show that games are often player in ways the game designer did not intend it to be played.

The example above falls under what is called *meta-gaming,* a container term for all kinds of activities that go beyond the prescribed mechanics and rules of the game, utilizes factors that lie outside an original game. Examples of meta-gaming are finding new ways to play a game in terms of restrictions, allowances, exploitations of the environment, the rules or other players, creating websites and other contextual platforms with all kinds of information about the game and game-related issues[29], and modifying (or *modding*) components of the game such as adding new rules, creating new environments, objects, avatars, weapons and skins. Meta-gaming is an prime example

[29] Such information is what Mia Consalvo understands as *gaming capital (2007).*

of how gamers find new ways to play and that rules are not fixed but are negotiated through playing games (also see Consalvo 2007; Taylor 2003, 2006, 2012).

Frasca explains the ability to create meaning and alter thoughts and behavior through games in a broader sense by putting forward the concept of play rhetoric, i.e. "the use of play (and game) activities in order to communicate meaning, forming attitudes or including actions through signs, rules and the player performance" (2007, p. 88). Frasca points at three perspectives to look at how games create meaning: 1) Through the *playworld*, which focuses on the visual, audial and textual, i.e. the sensible elements (time, space physical objects, etc.) of games, which is to a certain extent similar to other expressive media, 2) through the *mechanics*, which proposes a perspective similar to Bogost's procedural rhetorics, and 3) through the *playformance*, or the performance of the player, which focuses on how a game is interpreted through the actions that a player performs.

Frasca only notes that he partially disagrees with the proceduralist claims made by Bogost, but Sicart goes even further by giving an extensive critique on the proceduralist approach for failing to acknowledge that games are meant to be played by players who might do different things with games then intended and its shortcomings in terms of acknowledging other representative forms that are apparent in games such as narratives or aesthetics (2011). He explains that "the meaning of a game cannot be reduced to its rules, nor to the behaviors derived from the rules, since play will be a process of appropriation of those rules, a dialogue between the system and the player" (2011). Instead Sicart claims that the meaning that derives from playing games should rather be understood in terms of instrumental play, a term coined by T.L. Taylor (2003, 2006), which describes the player's exploitation of choosing the most effective path to a achieve a predetermined goal. On top of this, it is not only the performance of the player that make up the process of play, but:

> also includes the values of the player. Her politics. Her body. Her social being. Play is part of her expression, guided though rules, but still free, productive, creative. Without the openness of play, the player cannot express or explore their ethics, their politics. The player may be guided by reason, by the instrument of play, but that does not guarantee [...] that rationality is enough to express politics and ethics. (Sicart 2011)

In sum, Sicart argues for a more player-centered approach which emphasizes the manipulation and appropriation of games through play. The incorporation of player's background and performance is critical if we want to understand the attractiveness and persuasiveness of arguments about how things work that can derive from playing a game. It is unlikely that any player has no experience with other expressive media: She always carries ideational baggage and is never neutral.

Ergodic texts such as games often propose singular solutions to problems which means that, simply put, a player has to *master the algorithm* in order to complete a game (Manovich 2000). Simulation and war scholar Patrick Crogan has named this process *gametime*, or "the process of learning the solution" (2011, p. 78) and this linearity in terms of gameplay has often been a critique on (especially military) games. In other words, games are often designed in such ways that they contain a narrative that leads to a specific outcome, which seriously delimit the player's opportunity to experiment with the simulation. For example, game designer Clint Hocking's analysis of playing *Bioshock* shows that the narrative of the game undermines the *ludic* possibilities of the game, as the narrative forces the player to adopt a certain way of thinking. Hocking writes:

> In the game's mechanics, I am offered the freedom to choose to adopt an Objectivist approach, but I also have the freedom to reject that approach and to rescue the Little Sisters, even though it is not in my own [...] best interest to do so [...]. Yet in game's fiction on the other hand, I do not have that freedom to choose between helping Atlas or not. Under the ludic contract, if I accept to adopt an Objectivist approach, I can harvest little Sisters. If I reject that approach, I can rescue them. Under the story, If I can reject an Objectivist approach, I can help Atlas and oppose Ryan, and if I choose to adopt an Objectivist approach – well too bad... I can stop playing the game, but that's about it. (2007)

Hocking describes this problem as *ludo-narrative dissonance*, a form of cognitive dissonance, i.e. the confliction between cognitive states, and is just one example of how games can fail at persuading and attracting the player to the procedural claims of how things work. On the other side, it shows that games create a space in which the player is going through the process of simulation fever, actively interpreting the simulation model and its claims, and how it resonates with his own believes and ideas. The problem in this case arises because Hocking is not able to do anything about it and we should see it as an example that there is always a possibility for designed arguments to *not* be able to persuade and attract.

A methodological justification is in place here. I want to argue that Frasca's reading and especially Sicart's reading of Bogost's theories of *unit operations* and *procedural rhetorics* might be too narrow. First of all, Bogost does not exclude the player as he is fully aware that it is the player that has to fill in the gap between her subjectivity and the representation and simulation of the game's structural model, that what Bogost calls the *simulation gap* (2006a, 2007). If a player becomes aware of the ideological construction of the model, or in other words, gets taken out of the gameplay experience, she enters a process of *simulation fever* in which she actively related the flaws

of the model to her subjective understanding of how something works in the real world. Although I agree that this seems a rather formal approach which can be expressed in practice in many forms (such as Hocking's ludo-narrative dissonance), it does not mean that Bogost denies the player and the possibility of the model to be rejected, causing an intended process of persuasion and attraction to actually fail. Bogost later pointed out that games should be understood as part of a *media ecology*, "a media-agnostic approach to understanding how a host of different technologies work individually and together to create an environment for communication and perception" (2011, p. 6).

Second of all, Bogost does neither reject the roles that narratives or aesthetics might play in the creation of meaning. Although Bogost mainly focuses on the procedural aspect of games (and other media), he does *not* imply it is the only component from which meaning may flow. The aesthetic and narrative components are not unique to games as books and films usually also carry a certain kind of aesthetics and narratives. Games are unique in the sense that they are able to frame arguments in a procedural form, i.e. explaining how things work step by step. These steps are not fixed, as they usually are in books, films and other non-procedural expressive media, but configurable as they are built up from discrete, interlinked units. However, when procedural units are following up each other, it is not hard to see that they actually create a narrative. For example, in FPS this would be a normal sequence: the player spots an enemy. He then grabs his sniper rifle. Subsequently he zooms in and aims at the enemy. He then shoots at the enemy. The enemy is hit and falls down. The player could have also missed and the sequence would have been different as the enemy might have ducked or shot back. What has been created is, in fact, a narrative. The same counts for aesthetics as the representation of an object might influence the player to do something that was not intended by the designer. For example, one can play Zynga's *FarmVille* as it is intended by building up farm with animals and crops and enjoy the happiness, colorfulness and, as Juul describes it, juiciness of the game (2010). Or the player could use the 3D environment to write a large vulgar word entirely made out of objects. This is unintended but possible in terms of the game's rules.

Finally, Bogost's approach to games is one that is ultimately focused on the *design* of games and soft power generation is likewise about the design of soft power efforts. The proceduralist approach should therefore not be seen as a *measure* of in how far the player succeeds at filling in the gaps as intended by the designer. Rather, it focuses on how the design tries to steer the player into a certain direction, but leaves open a gap between the model and the subjectivity of the player for the player to do something with it. Player-centered theories focus more on the background of the player and the ways they engage with games, create playful experiences and what it means for

the player to be engaged in such processes. Such theories would probably be more fit if we would want to *measure* soft power, i.e the *effect* of gaming in terms of behavioral change. Regardless, what we are considered with here is the *design* of games to spread certain messages as intended by an actor who wants a certain form of soft power.

Soft Power Approaches and Games

Now let us look how all this relates to the soft power approaches leveraged to persuade and attract others to change their behavior described in chapter one. R.S Zaharna (2007) made a distinction between *wielding* and *creating* soft power which I subsequently used to make a distinction between *narrow*- and *broad* soft power approaches. Narrow soft power approaches tend to predetermine a message that is sent to a passive recipient who has limited to no possibilities to provide feedback and is either successfully influenced in the process or not. The communication flow goes only one way in which the sender dictates and the receiver listens. Broad soft power approaches first create a common base from which to engage in a discussion with active interpreters which can lead to many insightful outcomes. Here, everybody can speak to everybody and all actors are able to share their opinions and listen to others. Simply put, the former is designing a message and hoping it sticks, whilst the latter is a means to discuss a problem and hoping it leads to an answer. As I explained before, the narrowness and broadness of a soft power approach are relative, laying on a hypothetical

When compared to games and the way they are designed to be played by players, we can see similar characteristics between the game design approached and soft power approaches (see table 1). A game can be designed with a *strict*, predetermined message through a relatively closed mechanics and rules system which is high on restrictive, *ludus* rules. Such, as Juul would put it, *progression* games create a fairly linear chain of sequences and forces the gamer to either follow them to progress, or keep failing at a specific sequence. The player is seen as part of the system that either functions as it should, or is dysfunctional and is not successful at completing the (intended) process. The outcome, or rather the range of possible outcomes is relatively strict as well: The player succeeds by performing the right manipulation of the system, or not. We can say that the player's *freedom of choice*, i.e. her freedom to act or play and experiment with the simulation, is rather limited. Therefore, designing games, or components of games, in this way is what I refer to as *strict* game design. The single-player of, for example, *Call of Duty Modern Warfare 2* is relatively strict as it spectrum.

the player has to work her way through small linear sequences in which a few enemies always start shooting at the player and the only way of passing through to the next sequence is by eliminating them. Additionally, a procedural claim such a game makes about enemies is that the only way to get passed them to the next section of the level is to use violence[30], i.e. to kill them and when the player does not want to kill them, she cannot progress.

		Narrow Soft Power Approach	**Strict Game Design Characteristics**		**Broad Soft Power Approach**	**Lenient Game Design Characteristics**
Perceived Other Actor(s)		Passive recipients.	Players should function as part of the system.		Active interpreters.	Players are able to decide what they want to do next.
Communication Model / Structure		Mass one-way and hierarchical.	Closed rules system (High on ludus rules)		Many-to-many and non-hierarchical.	Open rules system (High on paidia/meta rules
Range of Outcomes		Actor is either persuaded to change behavior, or not.	Player either succeeds to progress, or not.		Discussions and debate after socialization can lead to many outcomes.	Players are able to playfully explore the game in many ways.

Table 1. Comparison of Soft Power Approaches and Game Design Approaches

On the other side, games, or parts of them, can also be designed in a way that the underlying rules constitute a rather open rule-based system, one that is relatively high on *paidia* rules which allow many possible forms of manipulation of the simulation. Such aspects allow the gamer to experiment with the sequence of events and see how different manipulations generate different outcomes and different messages, that what Juul would describe as *emergence*. This approach to game design can be seen as *lenient* game design. Games are designed in such way that the player experiences a high level of freedom of choice as chain of sequences are highly configurable. The player creates the story herself. For example, *World of Warcraft* is respectively lenient as the player is able to choose what to do to progress: level up, get better items for her avatar, make gold on the action house, become a useful raid member, etc. Virtual worlds such as Linden Lab's *Second Life* go even further as it does not include a predetermined objective at all, and is extremely low on mechanics and rules (and we could thus even argue that it might not even be a game). Especially when a game is open source and allows the player to change the simulation rules, games show potential to become a platform for discussion (see Fisher 2008). Therefore, *meta rules,* i.e. rules that allow the player to adjust the already existing rules through modification further increase the options to enhance gameplay in terms of experimentation and examination. Where

[30] Though some sequences enable the player to choose other ways to progress, such as passing by enemies using stealth skills.

World of Warcraft, for example, is not open for modification, *Second Life* is actually successful because of its high modifiability. Although not claiming anything about their comparative relative success—both games generated large amounts of income for its creators and enjoyed millions of players—we can claim that the former is relatively *stricter* than the latter in terms of game design.

As I explained before, the narrowness and broadness of a soft power approach are the two ends of a spectrum, and the same can be said for the relative strictness and leniency of game design. Soft power approaches are never fully narrow or broad and neither are games either fully strict or lenient. Games, in fact, need both a form of restriction as a certain extent of freedom to act and interpret—i.e. a game has to be interactive—otherwise it just would not be a game. Games also have to be restrictive in a way in terms of mechanics, rules and objectives. In other words, the player has to be steered at least somewhat. However, it is through their restrictions, games are able to make procedural claims about how things work: They point out to the player to the fact that something is important through framing and use mechanical logics to make claims about how a process might work or might not work. This is not so say that paidia rules cannot constitute playful experiences. Nevertheless, if a player *can* do X—You can drive a car, you can pretend that you are an airplane—the action does not have predetermined consequences and, thus, no procedural claim is made. Most games make at least some claims, but also leave open some possibility space for emergent gameplay.

As mentioned before, some have argued that networked-based communication models might be more effective than mass communication models to generate soft power (Zaharna 2007; Fisher 2008), yet the success is not inherent to the technology itself (Morozov 2011, 2013, Seib 2011). In a similar fashion some argue that a player's freedom to manipulate and modify might enhance the discussion of social and cultural problems (see Frasca 2001), while others put forward the idea that games can successfully influence and persuade through strong procedural claims made by discrete and closed unit operations (Bogost 2006a, 2007). Regardless, the characteristics of soft power approaches and game design approaches will not always culminate in the successful persuasion of others to change their behavior and, therefore, this comparison between approaches is by no means an indicator for the effectiveness in terms of persuasion. Soft power depends on its context and should be seen as a potential, a capacity which means that attempts to persuade and attract others can fail and eventually even backfire. Similarly, attempts to leverage games—which might have the potential to further a procedural argument or to create a common base for active discussion and debate about how things (should) work—can also not succeed in terms of achieving the predetermined goal. We can imagine that relatively *strict* game design leads to *strong*

predetermined messages and that relatively *lenient* game design leaves to different, in a sense, *weaker* messages as they do not put forward definitive claims. Yet the process of meaning making happens within the subjectivity of the player and whether a player is persuaded depends on contextual variables such as, for example, the player's background, her state and her performance. Such analysis would require methods to analyze player's and their thoughts. However, in the next chapter we will look at how MSGs are *designed* to represent and simulate, i.e. to make persuasive and attractive procedural claims about military affairs.

Games and Power

Chapter 3 Military Power Games

In this chapter I will describe two cases of military serious games: The first case will treat the U.S. Army game series *America's Army* (*AA*) that is used as a means for strategic communication to non-military actors such as domestic and foreign publics. The second case will analyze *Virtual Battlespace* 2 (*VBS2*), a tactical simulation game that is used within several army tactical training processes by a range of military organizations. My goal here is not only to show how games express procedural claims about 21st century military affairs, but also to compare both the training game with the strategic communication game in order to find differences and similarities in terms of what they try to teach the player(s).

Of both games exist commercial and non-commercial versions, i.e. versions that are sold or freely downloadable for public, entertainment purposes, and military versions that are used within military organizations for military training, education and experimental simulation. I will look at the commercial version of *AA*, the official U.S. Army tactical First Person Shooter (FPS) which, arguably, is the most played MSG until now. Built by the Modeling, Virtual Reality and Simulation (MOVES) institute and released by the army in 2002, the has been used for the training of soldiers as for strategic communicative purposes in the form of entertainment for non-military actors (Zyda 2005). Being free of charge *AA* was downloaded more than a half million times in first the weekend that is was available and in 2006 the game had 7.5 million registered users (Stahl 2010). In 2008 that number had increased to 9 million (Ibid.), yet the number of players online is usually hugely less, ranging between a couple of thousand to a couple of hundred in the last years. The *AA* brand also has several games for other platforms, such as for Xbox 360 and mobile phones. Now, eleven years after its release, the current PC version of *AA* is 3.3 (the version I analyze) and the next version, *AA Proving Grounds* is scheduled to be released this year.

Developed by the Czech/Australian company Bohemia Interactive (BI), *VBS2* is a military off-the-shelf PC-based tactical simulation platform. VBS2 is currently being used by several military organizations around the world, such as the U.S. Army, the U.S. Marine Corps, the Royal British army, the Netherlands army, but also by corporate businesses such as Boeing and Thales. BI's website states that *VBS2* "can be specifically tailored to meet the individual needs of military, law enforcement, homeland defence, and first responder training environments" (www.bistudio.com). *VBS2* also has a commercial counterpart called *Armed Assault 2* (*ArmA2),* a commercial FPS simulation game that has been marketed as being highly realistic. Although the platform is multifunctional as it can be utilized for experimentation, analysis and planning, what makes it a

serious game is the fact that soldiers can train tactics, techniques and procedures (TTPs) in multiplayer sessions that mimics commercial FPS single-player games. The player is set with an objective and has to maneuver through a virtual environment to complete the mission. This form of training can be referred to as full task-oriented training or Job-oriented training (Van der Hulst et al. 2008, Van der Hulst & Muller 2008) in which the role of the serious game is the one of a means to achieve a goal, namely the acquisition of competencies—the skills, knowledge and attitude (Hartog 2009)—which emphasize decision-making, command and control, leadership and communication which are needed to effectively conduct TTPs.

There is quite a difference in terms of research done on *AA* and *VBS2.* The former has had quite some attention from academics in terms of the representation of warfare, the U.S. Army and international and military conflicts (see Bogost 2007; Galloway 2004, 2006; Li 2003; Nichols 2010 in Huntemann & Payne; Nieborg 2004, 2005, 2006; Nieborg 2009, in van den Boomen et al.; Nieborg 2010, in Huntemann & Payne; Stahl 2010; Thomson 2008). For example, Galloway (2004, 2006) has argued that the game shows a high level of graphical realism, but lacks a form of *social realism* as it does have links with the lives of the teenagers the game is aimed at. Bogost has also written a small analysis of the game and points out that "the game 's verisimilitude sets an expectation for political verisimilitude—and indeed the ideology of the enemy accurately represents the United States' one-sided perspective on matters of global conflict" (2007, p. 78). Probably the most extensive research on the game has been done by game scholar David B. Nieborg, who has shown that the game has four dimensions: *AA* can be seen as propaganda game, an education game, an advertisement game and a means for strategic communication, showing and teaching U.S. and non-U.S. citizens that the U.S. Army is highly specialized force that fights for freedom against those who oppose it (Nieborg 2005; Nieborg 2009, in van den Boomen et al.; Nieborg 2010, in Huntemann & Payne).

The research on military training simulation games in general, and *VBS2* in specific, has been focusing mainly on the technical and educational aspects of the platform. Instead of talking about *realism* and *authenticity*, terms that are often used to promote commercial military-themed games to give them an interesting appeal (Thomson 2008), *VBS2* has been examined in terms of *fidelity*, i.e. the extent to which a simulation resembles reality (see Alexander et al. 2005; Visschedijk 2010).[31] Additionally, instead of arguing how games might have certain effects on their players, military

[31] Fidelity can be described as "the degree to which the physical simulation looks, sounds, and feels like the operational environment in terms of the visual displays, controls, and audio as well as the physics models driving each of these variables" (Baum et al. 1982 in Alexander et al. 2005, p.4). Although fidelity has often been used to describe the *physical* characteristics of simulators—which is rather irrelevant in relation to MGSs since the user uses either a keyboard and a mouse or a controller and looks at a screen—military serious games for military training and education also require a high level of *functional fidelity*, i.e. if the simulation behaves like the real environment (Visschedijk 2010).

organizations speak of the effectiveness of simulations and serious games that are used for training and education in terms of knowledge transfer, i.e. the extent to which the player acquires the needed information from interaction with MSGs and other education tools (see Alexander et al. 2005; Hartog 2009; Hill 2008; Roman & Brown 2008). However, no real research has been done on *VBS2* in terms of the procedural claims that it makes about warfare and how underlying rule structures allow military personnel in training to experiment with conflict situations and the reason for this is quite clear: Ideally, MSGs are supposed to have a high level of fidelity in order to make training with such systems relevant. Although this is one of the main goals in the development of simulation technologies for education and training, the main focus has always been the physical, representational components of simulation technologies, such as graphics, lighting, physics, dynamics and ballistics. However, experts point at the need for better artificial intelligence for a higher level behavioral fidelity (van der Hulst et al. 2011).

My own goal here is to look at how *AA* and *VBS2* are designed to persuade and attract and what arguments *AA* and *VBS2* transmit about 21st military conflict through their unit operations. Furthermore, I want to compare the views of 21st century military affairs on a tactical and individual level in order to gain insight in how, on the one hand, military organizations utilize games to persuade and attract non-military actors such as domestic and foreign publics and, on the other hand, how they train and educate their own personnel to be aware of the complex conflict situations they might find themselves in and which require both hard- and soft power—i.e. smart power—capabilities.

America's Army: Hard Power for the Masses

Although many military-themed computer games exist, Galloway has argued that *AA* is unique in some ways "because it was developed by the American army and purports to model the experience of the American army, the game can claim a real material referent in ways that other military games—*Delta Force, SOCOM,* and so on—simply cannot (2006, p. 79). However, Thomson points us at the fact that many other games, of which some are in use by the army, do the same and are often promoted in terms of high graphical standards and being developed in collaboration with Army experts (2008). Similarly, *AA* was promoted as being developed by *real* soldiers and represents realistically modeled soldiers and equipment such as uniforms and weapons. The *AA3* manual describes that "the game is designed to provide an accurate portrayal of Soldier experiences across a number of occupations" (U.S Army N.D., p.9) According to Nieborg, *AA* is not *just* a game as "*America's Army* cleverly mixes educational, ludic, marketing and propaganda elements that fits comfortably into the FPS genre, while also promoting a highly politicized recruiting and public

relations agenda (2010, in Huntemann & Payne, p. 54). However, Nieborg explains, the U.S. Army have stated that "the goal of the game is to inform popular culture rather than to persuade, and to raise awareness of the US Army brand rather than to recruit directly, which is done by a large group of dedicated US Army recruiters" (2009, in van den Boomen et al., p. 36).The game can even be praised for its success in terms of recruitment, as it has proved to be a cost-efficient and far-reaching recruitment tool (Nichols 2010 in Huntemann & Payne; Nieborg 2005). Because the game is downloadable and playable for gamers all around the world and also communicates values, norms and views on U.S. military policies, it becomes part of the U.S. public diplomacy effort, or, as Nieborg claims, a part of U.S. soft power. (2009 in van den Boomen et al.; 2010, in Huntemann & Payne). But how does this game frame military actions and policies as legitimate and credible?

AA can be seen as a tactical combat simulation game in which the player controls a soldier from the first person view, an obvious conventional aspect of FPS games. The game has two sorts of missions: Single-player training missions in which the player learns about the basics of moving, shooting, weaponry, medical skills, tactical maneuvering, codes of conduct and army values. These training sessions need to be completed successfully to gain more possibilities within the multiplayer sessions which are called *operations*. For example, non-enlisted soldiers are restricted to an M16A4 with an A3 iron sight and will not receive grenades until they enlist. Restrictions also count for players who have not completed Basic Combat Training (BCT). There is a strong procedural argument here: *If* you have not successfully completed a weapon training mission, *then* you cannot use that weapon in the field. As such, the game maintains a strong procedural rhetoric towards the necessity of the training of (combat) skills that are required in the conflict zone.

Although the game starts out with these single-player training missions, "the game is first and foremost meant as a multiplayer experience, played online, via the internet, or on a Local Area Network (LAN)" (Nieborg 2005, p. 16), in which two teams of a maximum of sixteen players compete against each other. In these sessions players have to work together to complete one of the five objectives: 1) *Take & Hold*, in which both teams need to search and secure weapon caches or defend valves, 2) *Extraction*, in which both teams need to recover a briefcase with important information, 3) *VIP*, in which one team needs to escort one of their players (the VIP) and the other team has to neutralize the VIP, 4) *Assault* or *Classic*, in which one team assaults certain objectives and the other defends these, and 5) *Demolition*, in which one team needs to destroy an objective and the other team has to defend the objective. There are five maps in which teams confront each other: 1) *Bridge*, which consists of two islands on which a village is built and that is connected by a large bridge, 2) *Impact*, a heavy urbanized area, 3) *Pipeline*, which contains a large pump facility, 4) *Ranch*,

a hilled, rural area with some rural buildings, and 5) *Alley*, an urban area with several multistory buildings.

In terms of representation all these maps have a high extent of fidelity as military tactical and operational activities in the 21st century are often conducted in urbanized areas. However, although the 3D environments contain houses, offices, facilities, cars, parks, benches, washing machines, drying clothes on lines, streetlights, soda machines and all kinds of other objects we can find in urban zones, they do not contain any (virtually) living entities other than the opposing teams. There are no civilians walking on the streets, nobody is at home, there are no domestic animals and there is no traffic. This is, of course, not only a representational lack, but also one in terms of simulation. Simply put, the procedural claim *AA* makes is that *if* military missions on a tactical level are conducted in urbanized areas, *then* everybody else is on vacation. Civilian presence and activities—whether it are locals that are doing market shopping or NGO personnel carrying out humanitarian aid provision—makes 21st century military missions very complex and civil casualties are usually very costly in terms of soft power as governments and military organizations will often get heavily criticized for it. However, it is exactly this feature that is missing in *AA*, simulating a less complex form of conflict that, in a way, depoliticizes urban warfare.

In terms of simulation sequences, *AA* "is far more a rule based system than it conveys meaning through a narrative of pre-rendered or scripted material" (Nieborg 2004, p. 2) and Nieborg claims that *AA* is a game of *emergence* (see chapter two) because it has a relatively small set of simulation rules that allows a large range of manipulations (2005). Nevertheless, the training missions are fairly linear and, although the multi-player sessions provide a 3D domain in which the player can choose their own path, they are restricted, first of all, by their mission and the objective of that mission (which Nieborg points out as well). Thomson notes that this is fairly common to military computer games:

> As a player, at each level you are set a new series of objectives which you must achieve in order to proceed with the game. You are not free to ignore these objectives, or to pursue a different course in order to complete your mission; instead, the attainment of these objectives becomes the basis around which the narrative of the game, and your progress within it, is defined and constructed. The representation of mission briefings and objectives in military computer games therefore serve to limit the interactivity of games and also the agency of the player, thereby directing the narrative in a preordained sequence. (2008, p. 130)

Secondly, the play sessions are limited by time. After the timer ends, which is usually a couple of minutes, the game is over. Thus, players have to succeed their mission within that time or they lose. This often means that a player has to spend her time effectively in relation to the mission objectives, or she faces defeat. As Thomson explains the problem in relation to military computer games in general:

> The limitations of technology, which require that the interactivity of the game be limited, necessitate the structure of military computer games around missions and objectives. The structure and narrative of military computer games is therefore based around the idea of the successful attainment of objectives, which leads to the successful completion of missions, which in turn ultimately results in the successful completion of the game and victory. These restrictions are also required in order to give a game narrative coherence, whilst the narrative teleology of games and their culmination in victory also responds to computer game convention and player expectation. But this sense of narrative teleology and inevitable victory is also a result of the problems which computer game developers face in maintaining the player's agency whilst attempting to depict insurmountable setbacks and defeat. (2008, p. 136)

Although this is also true for *AA,* what is interesting is the fact that *AA*'s infantry missions, as described above, are only won if the objective is achieved—securing or destroying an area or object—or when the entire enemy team is neutralized and is no longer capable to fight (which means dead or heavily wounded). In other words, *AA* makes the claim that the U.S Army can only use violent methods to neutralize the enemy: *If* someone resists you from taking the objective, *then* you can shoot him.[32] Off all the full range of U.S. operations, which include crisis management and limited contingency operations which often are characterized by activities such as peacekeeping and -building and aid provision, it seems that only the full combat missions have made it to the game. In this way, *AA* seems to promote hard power solutions for conflict situations in which hard power solutions seem to be the only method to resolve conflicts.

There is another procedural claim that can be derived from the rule structure of *AA*: Through a software trick, you are always portraying and playing a U.S. soldier and the enemy team is always represented as the fictional Czervenian military (the Nocza Militarni zo ta Ekspedi or NME). Nieborg notes that in this way the player never has to shoot a U.S. soldier or a civilian, which is part of the

[32] Regardless, the geopolitical situation—a fictional multi-actor conflict in which the U.S. army is sent in to assist the country of *Republik Demokratzny za ta Ostregals* (*RDO*) who is in conflict with the *Paredo zo ta Karoden zo Czervenia* (*PKC*)—of the virtual enemy is only mentioned the manual of the game. These enemies seem to speak their own language—"Lector nikursta!" (Medic on the way!)—and have their own weaponry but remain rather faceless.

game's incorporated *RoE* (2005). Although the physical representation of the enemy soldiers is different, as they use different uniforms and weaponry and speak a different language, this enemy is far from being the unrecognizable, asymmetrical threat which employs irregular tactics and strategies to fought the U.S. army in Iraq or Afghanistan. In terms of the representation of conflict, *AA* seems to build more upon conflicts such as the Bosnian War. However, this is also an example of how the game puts forward a strong rhetoric on the subject of "winning the battle" instead of "keeping the peace", as the player is always trying to win it for the U.S. Army until there is no enemy left.

AA also lives up to the army's Rules of Engagement (*RoE*) in a way that seems more serious than other military FPS military games. For example, friendly fire is always "on" and shooting teammates will lead to player punishment, such as throwing the player into a virtual prison, by deducting honor points or, if this happens regularly, kicking the player from the server. The procedural argument behind this is that friendly fire is unacceptable: *If* you shoot a friendly, *then* you are going to be punished. This restriction is somewhat loosened by the fact that players can be forgiven by the victim of the friendly fire, but it still a strong argument on what the U.S. army thinks of "blue on blue". However, such cruelties are simulated without blood and other gruesome injuries that might give an impression of how ugly warfare can be. The reason for this is the fact that the game is targeted at youngsters and in order to let the game be rated as appropriate for teenagers (Nieborg 2005). Furthermore, shooting an incapacitated enemy soldier also leads to the deduction of honor points. Neutralized or incapacitated enemies, instead, need to be affirmed and secured (tying their limbs together), yet wounded enemy soldiers cannot be triaged. The design argument behind this can be found in the manual: "incapacitated enemies are still a threat to your team. If another enemy player is able to provide medical aid to an incapacitated enemy, they can be revived and return to the fight" (U.S Army N.D., p. 84). The claim here is also strongly hard-power oriented: *If* a wounded enemy is still a threat, *then* he needs to be secured without triage. *AA*'s tactical missions seem to be focused on the utilization of military violence in order to neutralize enemies, rather than using military force to solve a conflict.

A way of making gameplay interesting in the long run is through the honor and advancement system. As the player plays *AA*, she receives and accumulates honor points for her actions. These honor points are translated into a honor level and that level translates into a rank. For example, once a player reaches honor level 25, she is advanced to the rank of Corporal. Honor is gained by living up to the U.S army values: *Loyalty, Duty*, *Respect, Selfless Service, Honor, Integrity* and *Personal Courage* (which creates the abbreviation *L.D.R.S.H.I.P)*. For example, *Duty* points are gained

when the player scores objectives and completes missions, and *Personal Courage* points are rewarded if the player manages to neutralize enemies or completes a mission while being wounded. Furthermore, players are rewarded for their performances and achievements in terms ribbons, coins, badges and medals. For example, if the player completes BCT she receives a ribbon and coins are received when, for example, the player has secured 50 enemies or completes a mission after being revived. Nieborg notes that "*America's Army´*s simulation model as well as its external discursive framework, are meant to let gamers internalize the rules of the game, to the extent that the Army-dictated rules of play are seen as natural" (2006). Indeed, these reward mechanics seem to orientate the player towards the conduct of military activities that are in line with the U.S. army values, maintaining a strong procedural rhetoric that points out that holding up to these values is indeed *necessary* to a successful player and, subsequently, a U.S. soldier.

In terms of 21st century military doctrine and ideology (see chapter one), *AA* seems to focus strongly on the utilization of highly specialized, quick response units that, with the use of high-end weaponry and additional technology, can carry out *Network Centered Warfare.* Soldiers are equipped with state-of-the-art U.S. Army weapons and grenades, body armor and communication and information devices. These features are usually apparent in military-themed video games but in *AA* there is a special for these communication and information devices. For example, *the Blue Force Tracker* (BFT) is a kind of mini-map that shows the locations of friendly soldiers, objectives and other vital information. The BFT is accompanied by a location indicator that points out the specific location the player is in. Via automated messages—"Medic!"—, predetermined radio commands, a text chat and a voice chat players are encouraged to communicate to each other in order to effectively work together. For example, communicating the locations of secured enemies, which sets in motion an automated message to your teammates and updates the score-tab and BFT, earns you honor points. As such, *AA* makes a procedural argument about how high-end technologies and teamwork are essential for the success of military affairs. However, although the list of radio commands is extensive, they are all tactical expressions that relate to combat-oriented tactical communications.

Bogost notes that the honor system spills into the meta-game, which are "the websites and leaderboards that frame the experience" (2007, p. 77). The author notes that players are motivated to play for rewards by the system not because they are consciously interested in the conflict, but because they complete a conflict without any political circumstances. As such, "The U.S. army recruit, one learns from *America's Army*, is an apolitical being (Ibid. p. 77). Examining the relation between war-themed entertainment goods and their ability to influence the construction of the

citizen's identity in relation to war, media theorist Roger Stahl points at the narrowness of the design of military games in general and the playing performance which they require. He argues that:

> Gametime moves quickly, subordinating critical and ethical questions to movement and action. Historically, the spectacle of war emerged to shift emphasis from rational question of "why we fight" to the dazzling display of "that we fight." Gametime integrates the citizen, however virtually, into the mechanical pleasures of "how we fight." (Stahl 2010, p.110)

What Stahl points out here has been pointed out by others before him (Barron & Huntemann 2003, Halter 2006, Power 2007). From this perspective, one can argue that games such as *AA* cannot only be approached as a form of propaganda that promotes the values and ideas of specific military organizations, but also mounts a procedural rhetoric that promotes warfare as something that is required to solute problems (also see Thomson 2008, Otossen 2008). Dyer-Witheford and de Peuter make a similar claim when they say that military video games represent a *banalized* war, as "quasi-war conditions tend to become a way of life—"the new normal"" (2009, p. 100).[33] Most military-themed games "do not teach the wrong ethics, they teach that ethics are superfluous" (Power 2007, 285).

Another interesting phenomenon is the fact that players create teams and form clans, formations of individual players that play together. These clans play against each other in tournaments. This form of meta-gaming is often reliant on practice and many clans practice together on their tactics and cooperative teamwork. Being able to adjust game setting to experiment with, for example, maps, vulnerability and objectives, provides a large advantage. The U.S. Army actually stimulates this behavior and acknowledges in the manual that "sometimes enabling multiplayer cheats can be an aid to practicing individually or as a team" (U.S Army N.D., p. 135). Therefore, the U.S. army allows players to use *AA* as a platform for experimentation with simulation, something that definitely broadens the freedom of the player to actively participate in the creation of meaning. However, the adjustments that players can make only change their ability to gain an understanding of tactical combat as these cheats allow the player, for example, to gain infinite ammunition and thus explore shooting positions and tactics, or gain infinite stamina in order to find effective ways to get from one point to another as soon as possible. Thus, the meta-rules that allow cheating, or the

[33] Professor of Geography Marcus Power notes that this does not only influence gamers, but also soldiers that play these games on active duty (2007, also see Otossen 2008). To back up this claim Power draws upon a very compelling example from Hayden 2004: "Sergeant Anyett didn't want to wait.... A dozen loud booms rattle the sky and smoke rose as mortars rained down on the coordinates the sergeant had given. 'Battle Damage Assessment – nothing. Building's gone. I got my kills, I'm coming down. I just love my job'... Lt. Jack Farley, a US Marines officer, sauntered over to compare notes with [US Army] Phantoms. 'You guys get to do all the fun stuff. It's like a video game.' (p.1, in Power 2007, p. 271)

adjustment of normal rules allow for further exploration of the tactical combat-oriented game design.

Further modification of the game and its mechanics is now allowed and, although they have been promised, modification software tools have never been available. According to Nieborg (2006) this has two reasons: 1) The game is constructed in a particular way to portray the U.S. Army in particular and way in terms of education, marketing and propaganda and modifying these messages could destroy these predetermined messages, and 2) the game could become a tool for cheaters, culture jammers, academics and disgruntled gamers. Thus, meaningful exploration of the political, social, cultural and ethical implications of (tactical) military conflict situations are severely limited. It is by no means surprising that the creation of a common base of understanding so that players can expressive their opinions is thereby ruled out and the U.S. army maintains its strong sender role at the top of the communication hierarchy. A similar point has been made by social scientist Zhan Li who has examined the potential of *AA* as a civilian-military public sphere (2003). Li describes that there are three fatal weaknesses that restrict the game to become a space to argue and deliberate over military conductions and policies, two of which relate to the game and one that related to the related Internet forums. First, the intended purpose of *AA* is to communicate military values and ideas through a (relatively strict) system rationality which might influence the capacity of the player to rationality argue (for example, Li notes that the in-game chat options are almost never used to discuss the legitimacy of military policies and the credibility of its goals). Second, the game is centered around non-discursive player actions in gameplay which "are antithetical to basic premises for meaningful discussion" (2003, p.63). Third, debate on the forums might be seen as "a mask of publicity that asserts a techno-libertarian democratic ideal that obscures the far more crucial economic logic of the project" (Ibid., p. 63), i.e. discussions on forums are not considered important by the army in a way that they generate critical ideas, but only because it shows active engagement that is needed for the sustainment of the platform.

In general, *AA* utilizes a range of restrictive rules that make procedural claims in terms of both the representation and the simulation of tactical military conflict with strong, hard power-oriented message. Players are allowed to carry out specific missions within specific amounts of time, using specific, hard power-oriented methods to take out the enemy in accordance with the U.S. Army values and the *RoE*. In terms of tactical combat, the game can indeed be seen as a game of emergence, as players have a relative large amount of freedom of manipulation and tactical and individual decision-making are not at all predetermined. Players are capable of conducting tactical military combat in all its facets and are free to design and carry out their own strategies. What works

best in which situation has to be found out by the player. Building upon rules that privilege teamwork and effective use of instruments such as information and communication devices and weaponry, *AA* is a game that propagates a message of the U.S. army is a highly specialized and well-trained force that is only leveraged to exert dominance *over* others.

However, outside the framework of hard power-oriented tactical combat *AA* provides a poor common base of understanding about the reasons behind military violent force in order to solve conflicts. *AA* seems designed (and restricted) in such a way that it seems to limit any critical examination of the political, social, cultural and ethical implications of military affairs. *AA* maintains a high focus the representation and simulation how military conflicts without a relation to civilian activity, asymmetrical enemies and irregular, stabilization-, peacekeeping and humanitarian aid provision operations, and the atrocities of heavily wounded and dead humans are supposed to be settled through the leveraging of hard power capabilities. *AA* communicates a strong predetermined message to the player that the only way to win is to destroy the enemy. The player takes on the role of a passive receiver that can only adapt to the rules that comply to the political and ethical message: you can either kill the enemy soldier, or decide to play a different game. In short, *AA* seems to be a form of wielding soft power, taking on a rather narrow soft power approach to strategically communicate its message. *AA* tries to generate soft power with the representation and simulation of hard power: It persuades and attracts the player with the idea that force and coercion are preferred behaviors in military affairs.[34]

[34] The main aim of this study is to show how games are designed to persuade and attract. However, I want to give an example of how this can backfire and games can be counterproductive in terms of effectiveness. *AA*'s 3D environment and objects within this environment are promoted as being realistic in terms of graphical representation and the representation of U.S. military warfare, Galloway criticizes the game for being socially unrealistic (2006). Contrasting *AA* to *Special Force*, a FPS created by the Lebanese organization Hezbollah, and Syrian publisher Dar Al-Fikr's *Under Ash*, both games that have a narrative in which the player fights against Israelis and Americans rather than with. Galloway points out that the youth in the countries in the Middle East that play these games are confronted with games that relate to their social and political contexts. These players "have a personal investment in the struggle depicted in the game, just as they have a personal investment in the struggle happening each day around them" (2006, p. 82). The creation of these games can be seen as a reaction to the post 9/11 flow of American military games that most often present representations and simulations of hard power-oriented solutions to win "the war on terror" (see Thomson 2008). Galloway writes: "Realizing that Palestinian youth will most likely want to play shooter games one way or another, the designers of *Under Ash* aim to intervene in the gaming market with a homegrown alternative allowing those youth to play their own perspective as Palestinians, not as surrogate Americans (2006, p. 82). That the ideas that these games disseminate find positive resonance among the youth in the Middle East is shown by Middle East scholar Helga Tawil Souri. Her 2007 article is full of personal experiences of conversations with Arabic youth about these games: One thirteen-year-old in East Jerusalem explained, "I love that I am able to shoot Israelis. Of course it's because I'm not able to shoot them in real life... But it feels almost like the real thing, especially levels one and two, where the sceneries are from around here." Or as another seventeen-year-old in Gaza expressed about *Under Ash*: "I have to tell you that there are times when I play this game and I imagine that I really am able to shoot [Israeli soldiers].... I just have to think of all those times when I was angry but unable to do anything about the occupation. When I sit at the [computer] screen, I think of the real anger I feel and I play much better." (Tawil Souri 2007). Although these are just examples, it shows that soft power, whether intended

Virtual Battlespace 2: Smart Power Simulation for Soldiers

Before I analyze *VBS2* in terms of how the game is leveraged to persuade the player, I want to make an ontological clarification: *VBS2* is not a typical ready-made game as one downloads from steam or buys it in the shop. The reason for this is that the game does not contain any levels next to the standard training scenarios. Because of the fact that the platform is open source and content can be created and added in an instant, most of the scenarios that are currently used for training and education purposed by military organizations such as the U.S. Army, the British Army and The Royal Netherlands Army (RNLA) have been created by military personnel. VBS2 comes with a scenario editor Simulations such as *VBS2* can be used to model such complex situations. For example, the RNLA use models of current conflict zones so that the soldier can already familiarize with the situation and acquire a form of situational awareness. Armies that use VBS2 are often in possession of terrain databases that allow the modeling of 3D environments, which are (ideally) geographically exact copies potential conflict areas such as Baghdad, Kabul, John F. Kennedy Airport in New York or Rotterdam port. Furthermore, unlike most military-themed FPS games, armies are in possession of digital content libraries which incorporates military, civilian and governmental models and objects, and this database is open in terms of incorporating new models. Not only does the Royal Netherlands Army, for example, have their own sets of models which depict NL soldiers, they also actively contribute in making new models, geographical content, scripts and scenarios which can be shared with and modified by other users of the platform. In this way, all organizations that use the tool can mutually benefit from the 3D content that they create.

how can *VBS2* then be defined as MSG? This matter is doubtful and needs to be clarified. Sometimes *VBS2* is referred to as a training game but also as a game-based platform. On the official website of its creator, Bohemia Interactive (BI) it is defined as "a comprehensive open platform with proven capability for training, simulation and development. Next generation gaming technology is adapted to provide collective military and first responder tactical training and mission rehearsal worldwide" (BISimulations.com 2013). Although *VBS2* can be used for other activities (such as experimental simulation), one of the main reasons it is used in military organizations is the fact that the content that is created with the tool, can also be played. Armies make scenarios that support them in training and education processes and these scenarios mimic commercial games as they are structured as, for example, multi-player cooperative mission such as in *Call of Duty Modern Warfare*

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or not, can also fail to attract and persuade *AA* leads to repulsion among the Middle Eastern youth. However, the reaction to western games, so-called "pro-Arab" games, likely undermines U.S. soft power and the ability to achieve national priorities.

2: Players enter a scenario and carry out a mission with a certain objective such as invading or defending an area from artificially controlled enemies. Similarly, soldiers in training play scenarios in which they are to secure a bridge or carry out a social patrol. Furthermore, *VBS2* is based on the same game technology as its commercial counterpart *Armed Assault 2* (*ArmA2)* from which it borrows many components, but not the narrative. Where *ArmA2* is delivered as a read-to-play game with a storyline and a predetermined sequence of ten missions, *VBS2* is basically the tool to create new missions *and* the possibility to play and explore these created virtual environments, either from a FPS view or from a birds-eye, or "god" view, which means that the player can hover through the environment and choose the viewing angle herself. Nevertheless, if a game is "a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" (Salen & Zimmerman 2004, p. 80), we can disagree about seeing *VBS2* itself as a game. However, it is arguable that the scenarios created by *VBS2* can be seen as games: Soldiers in training enter a 3D environment with its own rules in which they have to solve a conflict at which they either succeed or not (they "win" or "lose").

Once the player starts up *VBS2*, she is able to play the only single-player scenarios that the game has incorporated: the training missions and the object library. The training missions focus mainly on the controls that are required to perform actions as a squad member. The library allows the player to familiarize herself with weapons and vehicles that are included within the game. However, the utilization of *VBS2* as a standard for multi-player training scenarios on an international-military level is a relatively new development. For the RNLA this is also true, although it is spreading the availability and possibilities among its branches and the scenario database is growing. Just as *AA* and other military serious games frame the goals of a game in terms of mission and objectives, so do scenario creators and instructors with *VBS2.* While the environment itself allows for exploration and experimentation, scenario creators and instructors limit this ability to do so because of the requirements to train soldiers for specific situations that might occur in reality. This is to confront the player with specific complex problems which will enhance the probability of competence acquisition.

Nevertheless, if every military organization uses different scenarios, a certain frame of reference is required to avoid the wrong associations and ambiguous claims. Therefore, I will focus on three scenarios that are often used within the RNLA: 1) *School patrol,* a scenario in which a squad of players has the mission to check up on a primary school in an unknown location in Afghanistan where there have been reports of armed man molesting the children, 2) *bridge security*, in which a group of players has to take and hold a bridge in a rural area, and 3) *market patrol*, a mission in

which a group of players need to patrol a busy market where there have been reports of armed men. These scenarios are multi-player scenarios, yet not focused on team combat. On the contrary, these missions are often focused on the cooperation *with* other actors, including artificially controlled characters such as civilians. This means that soldiers in training are usually not fighting against each other, but with each other.

It is already clear that two of these *VBS2* scenarios are by definition providing a more complex situation in which both civil as antagonistic actors are present. As we have seen in chapter one, in 21st century conflict soldiers are likely to find themselves in complex situations (*three block war*) in which soldiers can find themselves in and rather focusing on only hard-power oriented skills such as shooting and using equipment, soldiers need to create a form of cultural awareness and communication skills that seemed less relevant in most of the wars of the 20th century. According to simulation researcher Bruce W. Knerr, there are three major requirements for dismounted soldier tactical simulation training:

> First, soldiers and small unit leaders need to be adaptable and capable of responding to and taking advantage of rapidly changing situations.
>
> Second, they must be attuned to cultural conditions and knowledgeable in the culture, history, and language of the area of operations.
>
> Third, they must be able to rapidly and accurately assess the evolving situation using all of the tools at their disposal. Officer and junior noncommissioned officers must also be able to communicate effectively with a variety of different governmental and non-governmental organizations, to include media representatives. (2007, p. 1)

VBS2 sessions are not intended to let the soldier in training perform a tactic, technique or procedure, but to let the soldier experience a problem and think about the complexity of the situation (see Xenos et al. 2009). In other words, soldiers are not trained for authentic situations in which most variables are predetermined, but are supposed to be confronted with new situations. As such, the scenarios created with *VBS2* are often designed to not only encompass regular combat-oriented operations where the enemy is identified, employing regular warfare strategies, and it is very clear what to do to "win the battle" in terms of mission success. These scenarios also simulate situations in which the enemy is a potential threat, disguised among civilian actors and in which the nature of the mission can instantly swap from, for example, peacekeeping activities such as social patrolling to combat situations in which the security is compromised.

Take for example the *school patrol* scenario. A squad is ordered to get in contact with the headmaster of a school in an urban area of Afghanistan as there have been reports about molesting armed militias compromising the security of the children and their teachers. The squad is subsequently ordered to perform a stabilization mission and seek out these men to solve the conflict. Upon closing in upon the compound in which these men are holed up, the squad is fired on and the mission turns into a combat situation in which the compound needs to be cleared and secured. This shows how military conflict can rapidly change in nature and requires soldiers to be on their guard.

Scenarios cannot only be modified before a training session, but also during a training session. *VBS2* comes with a *Real-Time Editor* (RTE) which allows experimenters and instructors of training sessions to intervene during a simulation process. This also becomes a means to create new ways of experimenting with simulation. However, civilians and enemies are often controlled by the computer itself. As the scripts of the behavior of the artificial intelligence are accessible scenario creators can predetermine the behaviors of the non-playable characters (NPCs).[35] This allows them to create complex situations in which object behavior can also be determined by probability to create new situations. For example, virtual artificial intelligence (AI) soldiers can be scripted in such a way that they either run, do nothing, or fire back. If the AI always runs, the player will know this after a few times and internalize this, yet if the player simply does not know what the soldier will do, it forces the player to stay alert, which is often an important aspect of the gameplay experience. In some cases, the rules that control the behavior an AI object are not predetermined and allow space for the emergence of unexpected situations, even if an object is not controlled by a human player. As such,*VBS2* scenarios often avoids making procedural arguments about civilian behavior.

The bridge security scenario focuses on the taking and securing of the area around a bridge in a rural conflict zone. Mission details report a high chance of enemy activity in the area, but it states nothing about the likeliness of civilian activity. However, the scenario is designed in such a way that, once the soldiers have taken a position to watch the parameter, a civilian bicyclist moves in upon the road to the bridge and, on top of that, enemy forces are absent. Here, a critical situation is presented. The civilian might be a potential threat and might compromise the mission. However, a too harsh decision in terms of the utilization of force might be too costly for the chances of the entire military operation to become a success as Krulak (1999) argued that the decisions made on the lower—technical and tactical—levels of military activities affect the ability to achieve success on

[35] Technically, this is incorrect because all characters can be controlled by an instructor during the training. However, AI is often used to behave in a predetermined way to steer the progress towards the scenario goals.

the higher—operational and strategic—levels, dimensions that are usually left out of military serious games.[36] For example, shooting the civilian might conflict with the RoE, yet if the civilian carries weapons or bombs, he might comprise the security of the squad or the chances of mission success. A warning shot could be fired but what if the bicyclist does not respond? The same counts for the *market patrol*. The nature of the mission is to keep the market and the civil actors secure, i.e. to keep the peace. However, once men with a weapon enter the market—something that is not an uncommon sight in certain cultures and countries—a potential threat arises and the playing soldiers have to be on their toes. In the case of the market scenario, the situation is even more complex as the militiamen starts shooting and the civilians start running all over the market. Such a scenario is able to show how hard it becomes to *both* take out the aggressors *and* keep the civilians and the military squad from being harmed. The question in such situations is how to respond in the most effective way, and often has no singular answer.

However, although the development of a kind of smart power-oriented awareness is part of the goal of such scenarios, there are no predetermined consequences for their manipulations. In other words, the game makes no procedural claims about actions. If the squad commander decides to take down the civilian, whether this is right or wrong in terms of ethics or politics, he is not punished or rewarded through the mechanics of the game. For example, a procedural claim in such situations would be: *If* two or more civilians are heavily wounded, or worse, on the market, *then* the mission will be unsuccessful and the game ends in a loss. However, no such claims are made as the simulation just keeps running when civilians are wounded. Furthermore, there is no honor or advancement system that steers players to undertake certain actions. This is not to say that the

[36] There have been several attempts to show this on an operational level. For example, Paul Waddell's *UrbanSim* focuses on simulating urban warfare in which counter insurgency (COIN) missions are emphasized. COIN operations are complex as they tend to incorporate warfare elements such as fighting versus terrorist and insurgents but also rely on undermining the local civilian support for these groups, which requires efforts to persuade and attract the local governmental, civil and corporate actors. The game looks like a strategy game and has a rules system which entails a complex set of algorithms (Waddell & Ulfarsson 2004). However, the simulation game is not being used to make accurate predictions of COIN operations but, as writer for the Foreign Policy website (www.foreignpolicy.com) Michael Peck points out: "The point was to begin to understand them. What staggered me was the almost infinite number of possible decisions and consequences in UrbanSim. I could kick down doors, bribe local leaders, smash insurgent cells, and fix sewer lines. But I didn't have enough resources to do everything, nor could I foresee how each action would help or hinder the other actions. Tomorrow I will probably read about a battalion commander struggling to simultaneously fight the Taliban, build schools, and establish a rapport with villagers. I can't fully sympathize with his plight because I have never walked in his shoes (a fortunate thing for all concerned). But I can now understand his dilemma a little better. If the Army were smart, it would make a game like UrbanSim available to the general public. It won't change anyone's mind about the war. But it will give them a greater appreciation for the challenges of counterinsurgency" (2011, p.5). What *UrbanSim* tries to show on an operational level, is what *VBS2* is utilized for on a tactical level. In other words, *UrbanSim* simulates the command and control (C2) level, whilst *VBS2* simulates the "boots on the ground". The RNLA has succeeded in leveraging VBS2's linking both C2 support technologies, showing VBS2's potential of interoperable, i.e. the ability of simulation systems to effective operate together. Although in its infancy, such advances show a potential for an extra dimension for military training and simulation.

game makes no procedural claims. On the contrary, *if* you shoot a squad member, *then* he dies and his screen will turn black, disallowing that player to continue playing. Only such choices seem to have no consequences for the player that chooses to shoot, either at team members or at civilians. The same counts for the successfully completing a mission or failing to do so: Nothing changes if the compound of the armed militia in the *school patrol* mission is cleared and the militiamen are neutralized. The mission just ends without making a claim that victory has been achieved or the squad is rewarded. But if such quantifiable outcomes lack, can we still label these *VBS2* scenarios as games?

Although such predetermined messages are not aimed at the player by the incorporation of restrictive rules in the structure of the game, the group discusses what happens in an *After Action Review* (AAR). Military computer games for entertainment purposes often also include some form of After Action Review. However, notes Thomson, these usually frame key performance indicators in terms of friendly and enemy casualties, vehicles destroyed, time taken to complete a mission, etc. (2008). Often in the form of information visualizations, such statistical information provides tools assess the performances of players, for example, by comparing the individual performances of team members and conclude who did best (also see Medler & Magerko 2011). In case of *VBS2* the entire simulation and the soldiers' performances are recorded and can be watched back and analyzed with a wide variety of measurement tools (line of sight, bullet impact locations, etc.). The AAR sequence is, arguably, the most important part of the training session as it emphasizes a critical reflection of the soldier on his own and his squad's performance. The AAR is not only used to look at *how* the mission was performed, but also *why* certain choices were made. Such reflections are usually accompanied by an instructor who steers the discussion: For example, if in the conflict zone it is culturally accepted that men carry weapons, how can soldiers be one step ahead to ensure the peace is kept? In contrast, where entertainment MSGs show a tab with, for example, kills and deaths for often less than a minute before the new map starts, soldiers in training usually take between thirty minutes and an hour to discuss actions, choices, what went good and what did not, and why certain choices, whether hard- or soft power-oriented, were made.

The *AAR* is what Bogost would call meta-gaming as it forms the experience but lies outside the game itself. However, it is during this part of military serious gaming session that the outcomes are quantified: The discussion takes place between the players as they consider their performances in relation to the success and effectiveness of the mission, the objectives, the situations in which the RoE becomes questionable, and political, ethical, cultural and social implications of the conduct of military activities and their relation to military affairs in general. As such, we can see *VBS2* as a MSG

with a rather *lenient* game design in terms of representation and simulation rules. The scenarios that are created for the platform often employ a small amount of restrictive rules and the game's inherent mechanics is relatively low on procedural claims. Players, however, have to be constantly aware of the complex nature of the situation and the dangers that potentially compromise the achievement of the mission objectives. However, the outcomes do not lead to rewards or punishments because the goal of the simulation sessions are not to drill a soldier to internalize predetermined messages about how to prevail in a specific situation (although this is not to say that some aspect are not internalized) but to let them be aware of the possibilities that he or she might have and what the potential consequences might be.

Meaning derives from the communication between the players rather than from a predetermined message that is being procedurally expressed towards the player of the game. This is not to say the relation is between designer and player is fully non-hierarchical as the instructor mediates and steers the discussion and, in practice, not every player has an equal share in the conversation. However, *VBS2* is relatively more like a common base that actors can use to create an understanding of certain subjects, a platform that facilitates networked communication between soldiers in training and the instructors that create scenarios to discuss and debate the meaning of military affairs on tactical and technical levels and their implications for the military operational-,strategic- even grand strategic levels. Thus, the *VBS2* platform and the scenarios that are created for the platform seem to be designed from a relatively broad soft power approach where the users are imagined as active interpreters that use the scenarios in support to their network-based communicative discussions and debates.

America's Army versus Virtual Battlespace 2: A Small Comparison

The cases above provide a good opportunity to examine how both MSGs take on approaches to influence the understanding, i.e. persuade and attract their players, of military affairs in the 21st century. Put simple, how do both games teach their players about tactical military operations and what do they teach them?

As shown, *AA* seems to rely heavily on its restrictive, *ludus* rules to make procedural claims about military affairs. In terms of its *unit operations*, *AA's* honor and advancement system, mission and objectives structures and the underlying rule structure of the RoE steer the player towards the idea that military conflict—in which the U.S. Army, a force that excels because of its well-trained soldiers that make effective use of high-end technology such as advanced weaponry, body protection and information and communication devices—is always solved through combat against a

clearly identified foreign but faceless enemy force that employs similar tactics. Nieborg is right to add that *AA* is a game of emergence in terms of its simple rules as the game allows for detailed exploration of tactical combat to resolve international conflicts. However, in terms of the political, social, cultural and ethical dimensions of modern 21st century military affairs *AA* shows almost no alternative to hard power-oriented solutions and puts forward a strong argument to combat. *AA* represents hard power-oriented methods as a legitimate means to achieve a credible goal: That of the simulated destruction of anyone that opposes the U.S. Army.

In terms of how it transmits its message *AA* relies on a strong, predetermined message that flows from the creators of the game to the international publics that play it. Furthermore, it remains closed for the ones who would want to critically examine and express their opinion on military activities and policies in reality through the experimentation and modification of its *AA's strict* game design as such activities are disallowed by its creators. In this way, the U.S. Army maintains a strong position as the sender of a particularly hard power-oriented message and the player takes on the role of the passive recipient who either just accepts this message and plays the game as the U.S. Army wants her to, or has to find another game to play. So on top of the relatively *strict* game design *AA* seems—except for the freedom it allows the player concerning hard power-oriented, tactical an technical level warfare—to adapt a relatively *narrow* soft power approach to transmit its procedural ideas.

VBS2, on the other hand, relies on a its lenient, *paidia* rules to create an environment that makes almost no claims about what is right or what is wrong. Furthermore, the MSG is so lenient that it allows for modification and change—a possibility created through *meta-rules*—even during the execution of training scenarios. This is not to say that there are no restrictions in *VBS2* scenarios that are used by the RNLA: Getting shot means that you virtually die and shooting at a vehicle with a rocket launcher will make it explode. However, these actions seem to have no consequences in terms of reward of punishment and the simulation will keep running at all time. Regardless, this creates an environment in which players are allowed to choose and even, in terms of politics and ethics, make choices that are unintended by the scenario instructor. Such decision-making processes are often part of the goal of military serious gaming sessions as they steer the player towards critically assessing the situation, or *filling in the simulation gap*. (Relative) mission success, fails and arguments for certain choices considering tactical and technical military activities—whether military, ethical, political, cultural or social in nature—are discussed in an AAR in which the experience is made relevant. Players ventilate their opinions and discuss it with their peers.

It is there where the (largest part of) meaning-making takes place and, as such, *VBS2* scenarios as expressive media rely on their ability to create a common base of understanding from which to leave in a critical discussion. Through the ability of modification the scenarios other representations of "how it could also be" are easily created and this extra dimensions allows soldiers in training and instructors to create new possibilities in terms of persuasion. Rather than relying on a predetermined message, *VBS2* scenarios rely on active interpreters who discuss military matters and its political, ethical, cultural and social dimensions. The message is thus created through such a discussion and as the meaning-making process is influenced by the players of the scenarios, the outcomes may vary. Thus, *VBS2* takes on a relatively *broad* soft power approach.

I do not want to claim that one tool is more effective or more politically or ethically correct than the other as the measurement of soft power has remained omitted in this thesis. Relying on its hard power-oriented, predetermined message *AA* is a large success in terms of the numbers of player it has enjoyed and how it positively influenced U.S. Army recruitment rates (Nichols 2010, in Huntemann & Payne). *VBS2* might be successful in showing soldiers how complex future situations can be and learn them that problems need both hard and soft power solutions, i.e. smart power solutions, although hard, empirical evidence still lacks. How effective games are in persuading their players is still not entirely clear. [37] Furthermore, how military serious gaming with *VBS2* affects their performance in real conflict situations is hard to measure and determine. There has been some research on how training within virtual environments such as *VBS2* increases the likeliness that soldiers succeed in live training sessions (see Hill 2008, Roman & Brown 2008), yet clear evidence of the success of these games to improve a soldier's smart power competencies are non-existent.

Furthermore, although a platform as *VBS2* might be interesting for individuals to create and participate themselves, it is still only being used by governmental organizations and corporate companies whilst games such as *AA* are easily downloaded and free to play. Regardless, there are some external restrictions that still severally limit the possibility of *VBS2* becoming a tool for civilian-government relations or strategic communication purposes: First, the game is practically not available for public use as one single license can range from a couple of thousand US dollars to dozens of thousands of dollar.[38] Although a seemingly high price, these license agreements also give the buyer the right of support, updates, new content, etc. However it seems that the development of *VBS2* is driven by economic logics, rather than ideological ones. Second, the forums which are used to cooperate and discuss on *VBS2* related issues and to share content, are also only accessible

[37] See Lavender (2006) for a small attempt.

[38] See the pricelist on the official website of Bohemia Interactive.

for members. One reason for this is to protect the content is the sensitivity of leaking of classified content, but it also ensures that only licensed buyers have access to this content, a privilege that comes with the purchase of a license.

Furthermore, creating scenarios can be rather simple and quickly done when using an already existing scenario, but creating, testing and playing large scenarios requires a lot of effort, expertise and time, which not all players have. On top of this, extensive courses are given to teach soldiers to work with the complex system on several levels so *VBS2* is not exactly as easy to use as, for example, ready-to-the-last-gaiter-button level editors that are available for games such as Microsoft's *Age of Empires II: The Age of Kings*. I have written elsewhere that:

> The open-endedness is as much an advantage as a disadvantage. VBS2 is a potential training tool for an extensive set of training goals and enables soldiers to train in a variety of complex, yet realistic, environments. On the other side, it has to be carefully tailored into training sessions, exerting the proper functionalities the system has to offer in order to fit specific education- and training objectives. These many, often explicit, optional settings are something training developers and instructors should always consider. (Post 2012).

Finally, the development of *VBS2* model behavior has mainly been focused on the objects (bullet trajectories, gravitation, dynamic collapses), but the AI often displays very apathetic, unrealistic behavior. Although scenario-building instructors often leave the AI in this state and control the characters themselves if more complex behavior is required—a rather practical convention as the military serious gaming scenarios are at any time modifiable—such concerns would severely limit the use of *VBS2* to train for cultural awareness and civil-military relations. However, this is a problem for many simulation platforms.

Conclusions

The following message was posted on the America's Army: the Official U.S. Army Game Facebook page on the 5th of April 2013:

Wanted: Beta Testers

We bet that got your attention, huh? That's right, we're looking for volunteers for our Beta Tester team to help test the next version of America's Army which is due out this year!

Let's say that again, THIS YEAR!

Go to http://portal.americasarmy.com/ to register your Soldier name for a chance to be selected as one of our new Beta Testers!

Good Luck Soldiers!

Screenshots and small videos were released on the official *AA*-forum, Youtube and other Internet sites in the weeks after. Players and fans are flocking to these platforms to check them out and communicate their anxiety—"OMG I can't wait! HOOAH!"—about the upcoming game. After the first release of *AA* in 2002, the fourth PC game in the series, *America's Army Proving Grounds,* is going to be available for all of us this year. After eleven years of U.S.-led online warfare, *AA* still seems a very popular game—or we should say a very popular *brand*—with a very large fan-base. In short, the U.S. Army is likely to keep a strong tie with gaming youth worldwide.

Although enjoying less attention Bohemia Interactive has already released *VBS2 2.0* in 2012*,* a new version of VBS2 with more realistic graphics, better AI behavior, new models, new environmental effects such as sandstorms, new editing options and plenty more new features. Among the first to adopt this new version were the New Zealand and Australian Defence forces, who bought enterprise licenses in June 2012 (BISimulations.com 2012). As the last U.S. troops officially left Iraq in December 2011 and the planned withdrawal of Western forces from Iraq in 2012 Australian, U.S and European forces of from foreign conflict zones such as Afghanistan, investing in these games seems like a smart move to maintain the skills, knowledge and attitudes of soldiers who are stationed at home. Although the military organizations have been developing and utilizing simulations and games for a long time, it seems this trend is likely to keep growing in the near future.

I started this thesis by describing how the technological, organizational and ideational changes in the 21st century are contributing to a more soft-power oriented international relations climate. This trend has serious implications for nation-states' ability to use hard, military power. As we have seen, military power is effective in winning wars, but has often lacked capabilities to maintain peaceful relations with foreign publics, organizations and governments. Therefore, military activities and policies need to be accompanied by some form of soft power component that is utilized to create legitimacy and credibility for military activities. From a political science perspective, I have made a distinction between a *narrow* soft power approach, which emphasizes sending a predetermined message through one-way communication channel at a passive recipient who is either persuaded and/or attracted or not, and a *broad* soft power approach, one that attempts to create a common base of understanding first in order to establish a form of network-based communication between different actors that engage in a discussion. Such attempts are able to create meaning than predetermining a message.

In the second chapter we saw how games not only represent military activities and policies, but also make claims about them through the restriction of rules that structure the simulation. Interacting with these game is always restricted in a sense, yet there is also always a freedom to act, to make choices that can lead to different outcomes. Although restrictive rules can lead to procedural arguments that try to persuade the player by showing how things work, the player's background and performance can always interfere with this struggle between simulation and interpretation. I proposed *strict* game design to describe games that put forth a predetermined procedural argument by restricting the player to perform only certain types of manipulations and has a strong emphasis on keeping the player to play the game as intended by the designer. On the other side of the hypothetical spectrum I defined *lenient* game design, which starts with a game with a relatively open, often modifiable, rules system that can be used by players as a platform for experimentation and discussion from which meaning derives. On top of this, I argued that the *narrow* soft power approach shows similarities with *strict* game design, and, subsequently, that a *broad* soft power approach shows similarities with a *lenient* game design approach.

In the third chapter I focused on the cases of *AA,* a military serious games that is used by the U.S. army to strategically communicate to domestic and foreign publics, and *VBS2* which is a platform to create serious gaming scenarios and is used by several military organizations to train and educate soldier about tactics, techniques and procedures. To answer the question of how military serious games are designed to persuade its players with ideas about (tactical) military affairs, activities and policies—In short, what do (*tactical) military serious games teach the player about*

military affairs?—, I used Bogost's (2006) method of *unit operation analysis* to look at how both MSGs make procedural claims about how tactical military affairs such as conflicts "work". *AA*, I argued, has been designed to incorporate a set of rules that allow for emergent gameplay in relation to tactical combat but restrict the player in terms of examining the political, social, cultural and ethical dimensions of (tactical) military affairs. As such, *AA's* representation and simulation of warfare is limited in terms of the framing of the often highly complex situations of 21st century, as it mainly simulates hard power solutions for situations that only seem to be solvable through hard power-oriented methods. Furthermore, the U.S. Army maintains a strong role in the communication hierarchy in order to transmit its message to the player as behavior that is in line with Army values and the Rules of Engagement is rewarded and unintended behavior is punished. On top of this modification options are ruled out which disallows further experimentation through the manipulation of the simulation system. In short, ***AA* wields soft power through the promotion of hard power and adopts a rather *narrow* soft power approach to convey its predetermined message to the player.**

VBS2,on the other hand**, can be seen as a MSG that uses a respectively *broad* soft power approach as it tries to create soft power through a process in which the platform is leveraged for a form of network-based communication which a group of users utilizes to discuss (tactical and technical) military affairs and policies in relation to the *smart power* solutions 21st century international conflict asks for.** Furthermore, the tool's modifiability allows for further simulative exploration of military, political, ethical, social and cultural dimensions of military operations. Because of their relative *lenient* game design, *VBS2* scenarios make only a few procedural claims and keep player reward and punishment to a minimum and thus does not put forward a strong, singular message. In this way *VBS2* serious gaming scenarios can be seen as a simulation platform of emergent gameplay through experimentation and exploration from which to start creating discussions and debate on military activities and policies in terms of its ideologies and values. from which a wide range of meaning can derive. However, this tool is—in contrast to *AA*, which is freely downloadable—mainly out of reach for civil use, which excludes the possibility of it becoming a means of strategic communication that also emphasizes, as Stahl would put it, the "*why* we fight" instead of only the "*how* we fight".

Nevertheless, the ideal of a common base of understanding between military and non-military actors based on simulation technologies which allow governmental and military organizations to persuade and attract others by framing their activities and policies as legitimate and credible—in short, a platform to generate soft power—is neither inherent to the *strict* design

of *AA* and its hard power-oriented representation and simulation of tactical warfare, nor to the *lenient* design of *VBS2* that requires active participation, time, patience and a fair amount of money, but is able to portray and simulate the complexity of 21st warfare that often requires both hard *and* soft power solutions. One can argue that both military serious games contribute to the generation of soft power that allows governments to leverage their military components to further their national priorities. *AA* creates a simplified view of warfare, but has been attractive to its players which can be seen by looking at its large fan base that enjoys playing the game. Furthermore, it has contributed to an increase of U.S. youngsters signing up for the U.S. Army. This implies that *AA* hard power-oriented view on military conflict has at least some resonance with its players. Regardless, the exact effects of military serious gaming have not been measured by the game-centered methods employed in this work. Similarly, although hard figures are missing, *VBS2* shows promising in educating and training soldiers for the complex situations in which they might be going to be deployed in the future, and that require both hard and soft power activities and smart power thinking. However, the exact ideas that soldiers develop through serious gaming sessions with *VBS2* are not discernable with the game-centered methods employed throughout this work.

However, the examination of the abovementioned games points at the possibility of a simulation platform for civilian-military relations that can be used to create understanding of the ideas, norms, values, ethics and laws of the multitude of actors that are involved in 21st century international conflict. In 2011 the U.S Navy, in collaboration with the Institute for the Future (IFTF), created the *Massively Multiplayer Online War Game Leveraging the Internet* (*MMOWGLI*), a "message-based game to encourage innovative thinking by many people, connected via the Web"(*MMOWGLI* Players Portal, N.D.) The goal of the game is to bring together military, governmental and civilian actors to tackle complex problems from which they can all benefit. For example, piracy around the horn of Africa has become a huge international problem for many different actors (industrials, merchants, security companies, maritime businesses, insurance companies, etc.) involved, and "without a policy of fixing the problems of Somalia or a policy that requires direct military action on the ground (which is not popular or necessary, piracy will continue and the Navy will not be able to effectively suppress piracy" (Hutchins 2013).[39] After sending invites and allowing people to sign up, the Navy launched the first game session in May 2011 with 832 players. First, the players play idea cards in which write down ideas (with a maximum of 140 words) about how to innovate or defend from risks in order to solve the problem. Then they use cards to either expand, explore, counter or adapt the plans from others. Finally, the players create action plans on which they actively add and comment. Players receive points for actively contributing and

[39] See the introduction on Youtube: *PiracyMMOWGLI 2012 Orientation* (Youtube 2012, last visited 12-7-2013).

there are some rules that allow them to gain more points, for example, by getting honorable mentions for contributing to a plan. This process takes a couple of weeks.

Although more a kind of "gamified" forum instead of a (3D) simulation game[40], *MMOWGLI* is not only a platform that allows military and other-than-military actors to critically debate and discuss military problems, what kind of activities to conduct and what kind of policies to carry out, but it forces the players to do so through its strict but simple mechanics. The game is not about visualizing detailed "*what if*" simulations, but about determining what might be successful strategies to tackle the problem through adding and commenting on ideas. As such, the message (i.e. the action plan) is created during the process. And it is not just one message: Five sessions on the piracy problem were held in 2011 with a total of 2.165 players who generated 14.978 idea cards and 68 action plans. However, the success was not only measured in performance as U.S Navy researchers looked into the validity of these plans using discrete event simulations and concluded that some of these action plans were indeed effective and thus helpful for military policy- and strategy-making (Hutchins 2013). Where *AA* and *VBS2* are focused on the military operator in the field, *MMOWGLI* is focused on military policies on strategic and operational level and seeks to engage a diverse and intellectual public to generate durable solutions to the complex 21st century problems.

The *MMOWGLI* game exemplifies that there are indeed possibilities to, as R.S. Zaharna would put it, create soft power, instead of wielding it through civilian-military relations. By listening to others and incorporating the opinion of others into their policies and looking for mutual benefits—power *with* others—, governments and military organizations might generate a form of soft power which helps them to achieve their goals and priorities. The question remains if this active participation and engagement between military and non-military actors can be leveraged by providing specific simulation tools such as tactical MSGs. Nevertheless, **with the current investments of military organizations in the developments of both MSGs or strategic communication and training and education efforts, it is likely that we will see more virtual activity that may lead to new possibilities to generate soft power.** And with the remaining threat of pirates around the horn of Africa, North Korean use of full scale combat including chemical weapons and weapons of mass destruction, and both criminal and large terrorist organizations hailing from the Middle East, Asia, Africa and Latin America, there is by no means a sign of an end to warfare, and subsequently, to the use of tactical military serious games for both training and education as for strategic communication efforts.

[40] This and the exceeding length of this thesis are the main reasons I did not make a case out of this game in chapter 3. Although *MMOWGLI* would make a very interesting case, my main focus is, above all, on tactical MSGs.

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