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## **FIRST PERSON PARADOXES: THE LOGIC OF WAR IN COMPUTER GAMES**

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### **ABSTRACT**

The primary aim of this paper is to contribute to the understanding of the different modalities of virtual battlegrounds, i.e. maps, in multiplayer First Person Shooter games. The frequent usage of such games has consequences for thinking about games and simulations and the use of these interactive texts for advertisement, education, analysis and propaganda. On the one hand the representation and simulation of the logic of war will be reflected upon from a theoretical perspective. On the other hand, the interaction of gamers with the game's simulation model will be explored by examining the spatial design of *America's Army* and *Counter-Strike*.

**Keywords:** Games, Simulations, War, First Person Shooters, Level-Design.

### **INTRODUCTION**

Today's mass media seem to have incorporated militarised themes in every way possible. During the second Gulf War television newscasts showed embedded reports live from the battlefield, Hollywood movies use every special effect at their disposal to bring an even more spectacular view of war while various forms of digital interactive entertainment facilitate hyperrealistic immersive experiences (paradoxically) disguised as play (Nieborg, 2004). As a result, war has become increasingly delightful to those who have no experience of it. The very nature of digital games resolves around direct or indirect conflict. Gamers interact, alone or in groups, directly with a digital game as a rule bound construct. Playing a game equals a constant struggle to fulfil the goal(s) of a game, whether it is a race against time to reach the finish line in a racing game or a fight against a giant computer controlled dragon. Game designers Zimmerman and Salen aptly define a game, both digital and non-digital as "a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" (2004: 80). And by doing so, they acknowledge the inherently competitive nature of gameplay.

War, as one of oldest and most well know forms of inter-human conflict, is and always has been an easy pick for game designers and is a popular and common theme in any

game genre on any platform. The Cold War fears, represented and simulated in early games as *Spacewar*, *Space Invaders* and *Missile Command*, have transformed into games referring to a new kind of fear – i.e. the more ubiquitous and anonymous fear of ‘terrorists’. Games, even more so than movies and television series, explicitly use themes of and references to very recent military conflicts, such as the first and second Gulf War, Operation “Restore Hope” in Somalia and the ongoing War on Terror. The War on Terror, fought by Special Forces and para-militaristic units in what is called asymmetrical warfare, is for a great deal implicitly represented in various popular game genres such as Real Time Strategy games or First Person Shooter (FPS) games.

The primary aim of this paper is to contribute to the understanding of the different modalities of virtual battlegrounds, i.e. maps, in online multiplayer FPS PC-games. On the one hand the representation and simulation of modern war in commercial PC-games will be reflected upon from a theoretical and philosophical perspective. The theoretical reflections on the genre will stress the ludological nature of games as rule-bound constructs. The simulation models of two popular online FPS games, *America’s Army* and *Counter-Strike*, will be compared with “the logic of war and peace” as described by military historian Luttwak (2001). In comparison to television series or a movie, games are unstable texts and especially PC-games can be under constant development. Both games have various reincarnations; as of October 2005 the most recent version of *America’s Army* is called *America’s Army: Special Forces (Direct Action) v2.5*. *Counter-Strike* and its sequel *Counter-Strike: Source* are perpetually updated as well. The analysis of FPS games points to several, what I will call, “first person paradoxes”. War is a highly contradictory activity, only in a war can something ‘bad’ be ‘good’, to defend something one must attack, and if you want ‘A’ (e.g. peace) strive (or prepare) for ‘B’ (e.g. war). The paradoxical nature of war is reflected in acts of play.

### **Counter-Strike & America's Army**

In FPS games the player navigates through a virtual world from a first person perspective and interacts in single- or multiplayer combat sequences with multiple enemies by using a range of weaponry in order to complete an objective. Several sub-genres can be distinguished, depending on the nature of the mission and the theme of the game. The tactical FPS sub-genre features games with a contemporary or historic militaristic theme, instead of for instance a science-fiction theme. The two case-studies each have their respective goals as to define its relation with an empirical reality. *America’s Army* is developed and distributed for free by the U.S. Army as an advergame, an edugame, a test tool and a propagame and serves as a training tool for U.S. Army soldiers (Nieborg, 2005). *Counter-Strike* and *Counter-Strike: Source* on the other hand, are the most played commercial FPS games. The original *Counter-Strike* was developed as a *Half-Life* modification, a game developed by an amateur game developer.

The main focus of analysis will be on online multiplayer FPS games. Many FPS games feature two modes – a single player mode where the gamer plays solo against computer controlled components and a multiplayer mode where two teams are pitted against each other. Not all FPS games have a single player mode. *Counter-Strike* does not have one and *America’s Army* does have single player training sessions, but no ‘campaigns’ – i.e. carefully constructed heavily scripted narratives. Conversely, multiplayer online FPS

games are purely based on (combat) spectacle, having one-dimensional narratives (e.g. plant a bomb) which have to be deduced through engaging with the text. Players operate together and fight towards the objective of the game – creating a string of spectacular unscripted events – i.e. war. The spatial design of single player and multiplayer maps differs considerably. While the single player components of FPS games are often played only once, gamers tend to play their preferred multiplayer maps over and over again.

Single player maps tend to be much larger, asymmetric, often have a linear spatial organisation, can be purposely unbalanced, and feature an architecture aiding storytelling. Consider *Call of Duty 2*, a World War Two-themed FPS with a single player and multiplayer mode. During the single player North Africa-campaign the player has to defend a building against waves of German soldiers. The player arrives by truck, a scripted scene serving as a short introduction into the campaign having a similar function as an establishing shot in a movie. In the multiplayer part of *Call of Duty 2* such an event is nonexistent. There is no narrative to be told, gamers ‘spawn’ at a designated area in a multiplayer map and immediately commence their fight. Later on during the single player campaign, the player can call in artillery strikes by looking through his binoculars. He is able to destroy half a dozen tanks and when the computer controlled enemy comes too close, the player can shoot the German soldiers himself. Again such an unbalanced event, the player aided by three computer controlled allies on a rooftop triumphing over hundreds of enemies, cannot be part of today’s multiplayer online FPS games. Comparing single player virtual environments to multiplayer maps, it seems that there are various stringent design constraints to fully simulate the logic of war in multiplayer FPS games.

In this paper I will argue that with current design principles, war cannot be simulated in online multiplayer FPS games. To substantiate this claim and to gain a deeper understanding of the interaction of gamers with the game space, a more in-depth analysis of the games’ level design will focus on different design choices. At first sight the design of static FPS maps may seem identical. In practice they have differing spatial principles as players develop diverse strategies to interact with the game space and its inhabitants. Each game favours a particular style of gameplay and spatial design, which is a direct result of the games’ different simulation models – i.e. the differing rule sets constituting the virtual playground. As it turns out, to simulate the logic of war in online FPS games, which will be discussed hereafter, is highly problematic - depending on the nature and rationale of the game. The impossibility to simulate war can be partly bypassed by innovative (spatial) game design. To contextualize the relation between war and computer games, the institutional history of games and simulations will be discussed hereafter. The nature of war changes constantly, but it seems that multiplayer online FPS games only incorporated those doctrines which provide meaningful play.

### **Military Entertainment**

With the end of the Cold War, the structure of the U.S. military and the way U.S. forces would wage future wars, changed dramatically (Binnendijk, 2002). The U.S. military is deliberately undergoing a process of transformation in their ongoing struggle to keep up with the modern ICT technologies, newly developed high-technology military weapon systems as well as confronting present-day terrorist threats and waging several wars at the same time. The end of the Cold War and the Industrial Age and the advent of the War on

Terror and the Information Age profoundly changed the role of U.S. military forces, a process that will prolong for decades to come (Toffler and Toffler, 1993). The process of army transformation constantly channels different military research and development tracks with the ultimate goal of removing the human agent from the battlefield. The perpetual innovative character of military technologies corresponds with the logic of war as described by Luttwak (2001). It is the primary task of any military community to gain an advantage over its adversary. Therefore, the logic of war describes combat as a purposely unbalanced activity. Conducting war is constant fight to outsmart or mislead an opponent by any means necessary. Paradoxically, it is only in the realm of strategy that the weaker party can triumph over a stronger opponent.

A great deal of modern warfare nowadays is electronically mediated through radar screens, night vision goggles and infrared monitors. As the logic of war fully enters the age of digital reproduction, the yearning for post-human war is just one of the aspects causing a further (re)mediating and derealization of modern combat. Simultaneously, the research and development into modelling and simulation techniques flourishes in the commercial entertainment industries. The booming innovation of commercial simulation technology did not go unnoticed by the U.S. military and during the last two decades, the military-industrial complex transformed into the military-entertainment complex (Lenoir, 2003). The reach of the military-entertainment complex is beyond the realm of games/simulations. Co-developed films, television series, toys, and various other entertainment products are direct outputs of the complex as well.

Since the military-industrial-academic complex provided the base from which the information age would be launched, military communities could easily tap into the electronic entertainment industries and deepen their ongoing symbiotic relationship (Kline et al., 2003). By the appropriation and adaptation of successful commercial game technology, the U.S. military contributes to specific areas of research and development and as a result it taps directly into youth popular culture (Nieborg, 2005). Since this vast military apparatus uses the same simulation technologies as commercial game designers do, for marketing purposes, military training and testing, there is a blurring between commercial (military themed) games and governmental military simulations. The same games used by soldiers to prepare for war serve as entertainment for gamers who are eager to experience the virtual battlefield.

The continuing growth of the military-entertainment complex has implications for thinking about modern-day warfare. The FPS genre and the tactical FPS subgenre in particular, include many games referring in various degrees to some aspects of modern war. The discourse of a supposedly realistic portrayal of (counter-terrorist) warfare is a result of the close relation between military and game development communities. Yet, the static game space of multiplayer FPS maps does not correspond with the logic of war as it is fought over the last decades and in the years to come. The logic of war collides with the design of virtual battlefields resulting in two interesting paradoxes.

### **Paradox of Reductiveness**

War is full of paradoxes. For many, war is associated with pain and sorrow, death and destruction. For others it is a force that gives meaning to their lives, fuelled by the myths

surrounding all wars, myths built on discourses of heroism, freedom & liberty and good versus evil (Hedges, 2002). Hall (2003) acknowledges the contradictory logic of war where the act of killing is naturalised as an act of institutionalised violence by a nation-state, and so becomes legitimate. War can bring peace and freedom to those who need it the most or bring death to those who do not deserve it and it is only in the realm of strategy, that such paradoxical propositions are accepted as valid (Luttwak, 2001). The paradoxical nature of war is reflected in acts of play, the representations and simulations of something so horrible and frightful is a source of joy and happiness for any other. Merging the logic of war with play, results in two interesting paradoxes: the ‘paradox of reductiveness’ and ‘the paradox of fairness’.

Wargames are fun as well as frustrating and, especially in the tactical FPS genre, there is a constant negotiation between the goal to entertain and offering an authentic experience. The complex and paradoxical nature of war is modelled in a less complex form of entertainment. The result of the reductive character of simulations is that game/simulation designers have to make choices in design; hence games/simulations are “media of expression rather than a form of calculation” (Crawford, 2003: 4), turning the development of a simulation into an inevitable subjective exercise. And as Salen and Zimmerman remark, FPS games as wargames “Can never contain every aspect of the phenomena being simulated. Historical wargames have been wrestling with this challenge for at least a century, making it a wonderful case study for the design of simulations” (2004: 242).

Take the design of the maps of *America’s Army*. The game’s design rationale was to create a virtual replica of the U.S. Army. This rationale is emphasised in the games’ official taglines: “No other Army game is this real, because nobody gets the Army, like the Army. Designed, Created and Developed By The U.S. Army” and “The Most Authentic Army Game Ever! The power to succeed. The courage to exceed” (Army Game Project, 2003: 12). Two FPS games which inspired *America’s Army*’s design the most were *Tom Clancy’s Rainbow Six* and *Counter-Strike* (Zyda et al., 2000: 4). The analyses of Nieborg (2005) made clear that both *America’s Army* and *Counter-Strike* are based on certain aspects of ‘reality’, each emphasizing different aspects in its simulation model. It is in the design choices constituting the simulation model (and its accompanying ruleset) that set the games apart. *Counter-Strike* uses a rather simplistic model of a battle between an undefined group of ‘Terrorists’ fighting against U.S. Navy SEALs (the ‘Counter-Terrorists’). *America’s Army* on the other hand uses the U.S. Army and the wars it fights, as the basis for its simulation model and will only deflect from certain aspects of reality when forced by FPS genre conventions (and this includes preferring entertainment over authenticity) or being forced by one (or more) of the four games before mentioned dimensions – i.e. marketing, education, testing and propaganda.

Balancing both fun gameplay and authenticity proved to be an ongoing challenge for the members of the game’s design team (Zyda et al., 2004). Every map in the official U.S. Army game has to be vouched for by ‘real’ U.S. soldiers who ascertain that a particular scenario is in line with situations the U.S. Army encounters. Reflecting on the scope of the simulated levels of strategy in *America’s Army* shows the reductive character of tactical FPS games and their simulation of combat. In order to make a distinction between

the different games/simulations used by both gamers and the military, the different levels of strategy as described in Luttwak's book *Strategy: the Logic of War and Peace* (2001), provides a useful tool for analysis. The levels of strategy are used by military strategists to describe the scope and level of the actions performed by opposing governments and their military forces.

The scale of *America's Army* as a military simulation is extremely limited taking the five levels of strategy into account. Only the tactical level (2) of strategy is elaborately simulated in the game, while aspects of the technical level (1) are present as well. The tactical level of strategy simulates the human factor in combat, mostly on a unit or squad level, representing "the intangibles of leadership, morale, discipline, and unit cohesion" (ibid: 105). The tactical level is the most notable level of strategy simulated by First Person Shooter games. The operational level of strategy (3), simulating battles "in their dynamic totality", is absent in *America's Army*. Nor are the levels of theater strategy (4) or grand strategy (5) in any way simulated in the game. Tactical FPS games as *Counter-Strike* and *America's Army* are thus solely focusing on the lowest levels of strategy and as a result these games could therefore be labelled as extremely abstract simulations of certain specific aspects of 'real' war.

As a gamer you get a first-person view of a battle, as if you are there, in the middle of a real war. Obvious elements as the logistical factors of war (water, food and ammunition), the spoils of war (human disasters, dying children, women and innocent men), the dullness of war (waiting for a battle, lying in an ambush for hours), the rules of war (taking Prisoners of War and interrogating them), the intrusion of war (by journalists, Non-Governmental Organisations and civilians), dismemberment (physical and mental hurting of civilians, enemies and comrades) and the inevitable death (the permanent loss of life of civilians, enemies and comrades) are conveniently absent in FPS games. The constant negotiation between the goal to entertain and offering an authentic experience, resulted in a settlement where the behaviour of weapons is carefully balanced and combat is up-close and personal, instead of following the perceptual trend of a distant war. In the end, the paradox of reductiveness is a result of the reductive character of games as simulations, while on the same time discursively framed as authentic or in the case of *America's Army* as: "The Most Authentic Army Game Ever".

### **Paradox of Fairness**

The ironic outcome of the modelling of the two teams fighting head to head in online FPS games, is the impossibility to emphasize the role of technology within the U.S. military (i.e. military transformation). Since both teams consist of online players, the gameplay has to be balanced. Weapons, gear and ammunition are carefully balanced and war in *America's Army* and *Counter-Strike* is in perfect symmetry. The two fighting parties in *America's Army* are, setting the game apart from all other FPS games, in perfect symmetry. Through the use of a software trick every gamer sees himself and his team as U.S. soldiers and the other team as the Opposing Forces (OpFor) and vice versa. Thus both team handle U.S. weapons. In addition, there are no artillery strikes, no Tomahawk missiles, no reinforcements, and no cavalry, there are only boots on the ground. The one thing that can destabilise this equilibrium is to revert to "extra-mechanic conflict" – i.e. cheating, grief playing or violating local norms (Smith, 2004). Neither of the two teams

can be outfitted with superior weapons as team balancing is one of the most critical elements in any multiplayer FPS. In *America's Army* you are a member of "the world's most premier land force" and you are outfitted with the most advanced weapons for the job. Conversely, as the developers strive to minimize the effects of online emergent gameplay, they are unable to simulate the use of different weapons and their specifications. The emphasis on sophisticated technology, as well as being well-trained, is a crucial factor in the representation and simulation of the U.S. Army. Paradoxically, both teams use the weapons which have the same effect while being different and so on the level of weaponry no team has an advantage. As a result other factors have their respective influence of the outcome of the (virtual) battle, such as individual skills (e.g. proficient in handling various weapons) and the will to co-operate and communicate (e.g. Carley, et al., 2005)

Thus, the paradox of fairness makes it impossible to simulate the (supposedly) superiority of American soldiers, due to the FPS game design conventions – i.e. balance issues. Where a Hollywood movie such as *Black Hawk Down* and the single player part of the game *Delta Force: Black Hawk Down* are able to represent the technological and logistical supremacy of an outnumbered group of well trained U.S. soldiers fighting against an armed crowd of both civilians and insurgents, *America's Army* is unable to simulate this in their game. Most interestingly, this led to the conception of a future version entitled *America's Army: Special Forces (Overmatch)*. This version is in accordance with recent lessons learned from the ongoing War on Terror, where "21st century 'overmatching power' is more important than 'overwhelming force' " and where the speed, jointness, intelligence and precision are key (Rumsfeld, 2003).

In the *Overmatch* maps, gamers will cooperate (co-op) as a squad of outnumbered U.S. Special Forces soldiers who wage war against an artificially intelligent-operated enemy, simulating past military operations in the Iraqi and Afghani theatres. The version will also include artillery, vehicles and (fire-and-forget) missiles. This release will be a blatant break with the hegemonic multi-player FPS conventions, demonstrating that the unbalanced nature of modern war can only be simulated by a removing the human agent from the virtual battlefield by using an AI-operated enemy. This example shows that as war transforms so do games and military simulations. The logic of war has found its way into FPS game design and through innovative design, the reductive character of combat simulation gives a completely new twist to its contradictory logic.

### **Emergent game spaces**

It seems that the paradox of reductiveness and fairness are both indissoluble connected to the simulation of the logic of war in squad-based multiplayer FPS games. However, a closer examination of spatial design of the different maps of *America's Army* and *Counter-Strike* and their accompanying rule sets shows that both paradoxes can have an alternate meaning. Both games are regarded as tactical FPS games. The tactical dimension is the outcome of the possibility to make choices that affect the virtual battle. These choices can be made on the lowest (i.e. technical) level of strategy, choosing the right weapon for the right circumstances or the right role (e.g. sniper, medic or machine gunner) in combat, or on the tactical level of strategy by using certain military tactics of movement such as flanking an enemy or using smoke to conceal ones position. Two other

constituting gameplay elements of tactical FPS games are its objective based character – e.g. planting a bomb or preventing this from happening, and the impossibility to respawn, i.e. coming back alive during a time-limited game-session. The tactical dimension is a matter of degree and depends as much on style of gameplay (deathmatch versus tactical) as on those who play the game.

Both games differ greatly as to how the respective simulation models allow for tactical gameplay. To come as close as possible to simulating the logic of war, the range of tactical options should correspond with authentic military tactical possibilities. It is in this respect that both games diverge from each other, not in the least as a result because of their alternating spatial design. The spatial design of the most played *Counter-Strike* maps, is rather open. There are very few interactive environmental elements (e.g. doors), and its maps are mostly horizontal. The game's "environmental rules" (Järvinen, 2003) are static and quite simplistic. According to Güttler and Johansson (2003), the basic spatial principle of the level design of *Counter-Strike* resolves around so called "collision points". These points are a result of the starting (or spawn) points of the players and the gamers' experience of previous gameplay sessions. The tactical choices of the players are directly related to getting beyond these collision points. By playing a map over and over again players can refine their tactics in accordance with a level's spatial design and by mastering the game space gamers can gain an advantage over their opponents. The emergent and random character of the logic of war is therefore absent in *Counter-Strike*.

*America's Army* on the other hand is used and developed by U.S. military communities and has very specific training objectives and goals that go beyond entertainment. One of the goals of *America's Army* then is to simulate the logic of war as accurately as possible (authenticity), still acknowledging the first person paradoxes (fun). Playing a game is a configurative practice resulting in emergent gameplay (Juul, 2002). Salen and Zimmerman go as far as to say that: "[...] one of the sweetest pleasures as a game designer is seeing your game played in ways that you did not anticipate" (2004: 540). While this may be true for games such as *The Sims* or *Counter-Strike*, where emergent behaviour is a crucial part of the gameplay, *America's Army* breaks with this trend in a radical way. As gamers interact with *America's Army* as a rule-based text, they come up with desirable emergence (from a designers perspective), such as co-operation with fellow gamers, or undesirable emergence, such as 'spawn killing'. By practicing the throwing of a grenade at the beginning of a round to the opposing forces, players are able to learn to kill a less experienced enemy with a single grenade. These kinds of 'tactics' are much criticised, for it relies not so much on the use of (tactical combat) skills but more on memorising a map's spatial design. 'Spawn nading' is a result of the static nature of the gamespace and the use of this grenade-throwing tactic is counter-immersive and shows the attitude of many gamers - valuing the game as an interactive simulation model without an external reality.

As a result of the multi-dimensional character of *America's Army* and being the virtual equivalent of the U.S. Army, the undesirable emergence during the online play, resulting in "extra-mechanic conflict", is as limited as possible. The spatial design of *America's Army* is both horizontal and vertical – e.g. maps feature multiple storey buildings and mountainous terrain. The gameplay of *America's Army* could be labelled as more top-

down, having more and stricter rules. Using the topology of rules by Järvinen (2003) shows that the game has a more closed character (more stringent “procedure rules”), more complex interface rules, as well as more dynamic environment rules – e.g. fog, sun flare doors, sand storms. Most importantly, *America's Army* adds some innovative procedure rules.

The latest *America's Army* maps incorporated these more innovative environment and procedure rules. The map *SF Blizzard* is worth an honourable mention. Set in a dark and snowy Alpine forest environment, the map has two differing objective scenarios, randomly assigned each consecutive round. The attackers spawn randomly, preventing spawn grenades. The first possible objective is located on the uppermost floor of a multiple storey building; the second objective is located outside, next to the building. Thus giving both defenders and assaulters a wider array of tactical options. The compound has two sets of doors. Regular door which can be opened by all players and breachable doors which can only be blasted open by specific members of the assault team. To add even more randomness to the map, the compound is surrounded by a concrete wall. Special members of the assault team have weaponry to puncture the wall at the place and time of their choosing. The assaulters can make more than one break in the wall, rendering *Counter-Strike's* collision point design insignificant. During an assault, players can deploy smoke to conceal their attack, distract the defenders and flank or surround them. *America's Army* players can no longer take the spatial design of the game's most recent maps for granted and gamers fighting a virtual war in an emergent game space have to refocus their attention.

## CONCLUSIONS

In order to avoid extra-mechanic conflict and offer a wider choice of authentic military tactical gameplay options, level designers who want to simulate the logic of war in FPS maps should focus on procedure rules and design the virtual battlefield accordingly. The spatial design of squad-based multiplayer FPS games should resolve around exploration instead of mastering the game space by playing the same map over and over again. The paradox of reductiveness might rule out various spatial designs and the paradox of fairness forbids the presence of any unbalanced rule set - whether they are interface, theme, environment or component rules (c.f. Järvinen, 2003). Yet, the interactive nature of the medium of computer games should be harnessed to its full potential.

For a game to accurately simulate the logic of war, means to facilitate truly emergent gameplay. The next revolution in game design will not be the increasing amount of polygons, but the random character of a map's spatial design. Collision points should be scattered and unexpected, and geometry should be wholly destructible in order to open up a new range of tactical options. The scale of *America's Army* and *Counter-Strike: Source* as military simulations is extremely limited. Only the tactical level of strategy is elaborately simulated in the game, and war in both games still is always up close and personal. The current trend of the derealization of combat, the perceptual character of a distance war, and the simulation of technological superiority of recent U.S. military operations, is still absent in the closer-quarters-combat sessions in *America's Army*. But the innovative spatial design and creative repurposing of the environment and procedure

rules in the game demonstrate that military modelling and simulation initiatives are slowly regaining a technological lead in the area of combat simulation.

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