## A Hopeful Mirror: Military Games as Visions of the Future Army

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# Introduction

Three hundred miles above earth, a U.S. satellite tracks enemy movements. On the ground, a U.S. special forces soldier on a hill overlooking an enemy airfield uses his Viper unit to obtain coordinate information for enemy targets. That information is instantaneously beamed via satellite to a formation of stealthy, unmanned combat air vehicles (UCAVs) orbiting just out of sight. Once they receive the information, they swarm the enemy airfield, dropping GPS-guided bombs which strike their targets with deadly precision. Simultaneously, Marines in their fast transport aircraft are pouring in from over the horizon while an Army Brigade Combat Team, armored vehicles and all, is delivered to the combat zone by a fleet of transport aircraft. Unattended ground sensors litter the battlefield while all types of unmanned aerial vehicles (UAVs) swarm in the skies above, providing real-time, god-like oversight to American commanders. Every vehicle, every weapon, every soldier collects data and feeds it back into the network. For the enemy, moving or staying still makes no difference; the result is always the same the Americans see him and destroy him. Being seen is as good as having already been destroyed.

Such is the vision of future warfare that begins one of the Army's most recent contributions to the world of videogames, Future Force Company Commander (F2C2). In this scenario, the enemy is a fictitious one (the country of Sabalan) but the vision that

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it depicts is very "real"; it is an accurate depiction of what the Army hopes will be its future capabilities and the fate of its future enemies. While the military has increasingly sponsored the development of videogames, especially for the purposes of recruitment and training, even a quick look at F2C2 reveals that its purpose is different. In this paper, we examine F2C2 from a rhetorical perspective, drawing specifically upon both the wellknown theory of "rhetorical situation," as well as the more recent notion of "procedural rhetoric." From this perspective, we can see that the game makes both a promise about the future, but also an argument about what can be done here and now to fulfill that promise. Thus, we argue that F2C2 is itself a form of rhetorical communication, a "persuasive game," that serves both as a hopeful mirror (a vision of what the military wants to become), but also as a tool for subject formation (a tool for making that vision a reality).

# Rhetoric, the Military, and Games

The close relationship that exists between war-gaming and war-fighting has a long history,<sup>1</sup> but it would be the First Persian Gulf War in 1991 that would provide one of the key sociopolitical catalysts for the reinvigorated study of military gaming.<sup>2</sup> Over the years, various military branches have invested millions of dollars in developing computer games that will help with military training, recruitment, war simulation and wartime

<sup>&</sup>lt;sup>1</sup> T. Allen, "The evolution of wargaming: From chessboard to Marine Doom," in *War and Games*, ed. G. Ausenda (Rochester: Boydell Press, 2002).; J. Bourke, *An intimate history of killing: Face to face killing in twentieth century warfare* (London: Granta, 1999).; Wayne M. Hall, *Stray Voltage: War in the Information Age* (Annapolis, MD: Naval Institute Pess, 2003).

<sup>&</sup>lt;sup>2</sup> L. Levidow and K. Robins, "Vision wars," Race & Class, no. 32. (1991)

strategizing,<sup>3</sup> and in the aftermath of 9/11 war gaming started to play a major role in the Pentagon's counter-terrorist policy-making.<sup>4</sup> A host of interdisciplinary scholars from a diverse number of fields—including business,<sup>5</sup> law,<sup>6</sup> medicine, social psychology,<sup>7</sup> history,<sup>8</sup> geography,<sup>9</sup> political science, anthropology, gender studies,<sup>10</sup> education, and communication—are looking into the various facets of the synergistic relationship that exists between military activities and the performative nature of war gaming.<sup>11</sup> Some of these researchers have theorized that the use of digital war gaming—for example, the circulation of the official U.S. Army game, America's Army—helps shape both military and public understandings of geopolitical situations.<sup>12</sup> What some have called the "virtualization" of war has also been linked to the justifications that are used for humanitarian military interventions.<sup>13</sup>

Within the subfield of rhetoric, there are a growing number of studies that have looked into how various rhetors and their audiences have written or talked about military persuasion or national security discourses. Some of the earliest of these studies focused

<sup>&</sup>lt;sup>3</sup> C. Haynes, "Armageddon army: Playing god, God mode mods, and the rhetorical task of

ludology," *Games and Culture*, no. 1. (2006); R. Stahl, *War games: Citizenship and play in post-industrial militarism* (College Station: Penn State dissertation, 2004).

<sup>&</sup>lt;sup>4</sup> P. E. Louw, "The War Against Terrorism: A public relations challenge for the Pentagon,"*Gazette* 65. (2003)

<sup>&</sup>lt;sup>5</sup> M. Chussil, "Learning faster than the competition: War games give the advantage," *Journal of Business Strategy*, no. 28. (2007)

<sup>&</sup>lt;sup>6</sup> A. Adrian, "The "soft power" of virtual reality,"*International Journal of Liability and Scientific Inquiry*, no. 1. (2007)

<sup>&</sup>lt;sup>7</sup> N. L. Carnagey and C. A. Anderson, "Changes in attitudes towards war and violence after September 11, 2001,"*Aggressive Behavior*, no. 33. (2007)

<sup>&</sup>lt;sup>8</sup> K. Schut, "Strategic simulations and our past: The bias of computer games in the presentation of history,"*Games and Culture*, no. 2. (2007)

<sup>&</sup>lt;sup>9</sup> L. Bialasiewicz, D. Campbell, S. Elden, S. Graham, A. Jeffrey and A. J. Williams, "Performing security: The imaginative geographies of current U.S. Strategy,"*Political Geography*, no. 26. (2007)

<sup>&</sup>lt;sup>10</sup> C. Herbst, "Shock and awe: Virtual females and the sexing of war,"*Feminist Media Studies*, no. 5. (2005)

<sup>&</sup>lt;sup>11</sup> Stahl, War games: Citizenship and play in post-industrial militarism

<sup>&</sup>lt;sup>12</sup> M. Power, "Digitalized virtuosity: Video war games and post-9/11 Cyber-deterrence," *Security Dialogue*, no. 38. (2007)

<sup>&</sup>lt;sup>13</sup> S. L. Carruthers, "New media, new war," *International Affairs*, no. 77. (2001)

on the governmental or military justifications that were used in public to explain the need for war,<sup>14</sup> but in the aftermath of 9/11 researchers have augmented these analyses with studies that have looked into the strategies and tactics of both terrorists and counter-terrorists.<sup>15</sup> Related studies have explained the rhetorical dynamics of missile defense projects,<sup>16</sup> military tribunals<sup>17</sup> and symbolic convergence theories have been applied in analyses of post-war genocide investigations.<sup>18</sup>

Only in recent years have rhetoricians started to investigate the role that video games play in a host of commercial, military, and entertainment contexts. Stahl, for example, has recently argued that video games create certain codes of war that are used in official productions that are aimed at the training and recruitment of would-be soldiers that creates representations that threaten to supplant traditional notions of civilization.<sup>19</sup> Research in games studies has analyzed games as means that produce discourse that allows the rhetoric of war while other work has analyzed how real world events articulate with games that implement over-aching discourses about the nature of current conflicts, noting how the format itself sets limits to that articulation. Work in STS has analyzed the construction of the Military Entertainment Complex with its origins in both academia and

<sup>&</sup>lt;sup>14</sup> R. L. Ivie, "Images of savagery in American justifications for war," *Communication Monographs*, no. 47. (1980); R. L. Ivie, "Metaphor and the rhetorical invention of cold war "idealists."," *Communication Monographs*, no. 54. (1987)

<sup>&</sup>lt;sup>15</sup> C. E. Dauber, "The shots seen 'round the world: The impact of the images of Mogadishu on American military operations," *Rhetoric and Public Affairs*, no. 4. (2001); P. &.Wolfsfeld G. Frosh, "ImaginNation: News discourse, nationhood and civil society," *Media, Culture & Society*, no. 29. (2007); C. K. Winkler, *In the name of terrorism: Presidents on political violence in the post-World-War II era* (Albany: State University of New York Press, 2005).

<sup>&</sup>lt;sup>16</sup> G. R. Mitchell, *Strategic deception: Rhetoric, science, and politics in missile defense advocacy* (East Lansing: Michigan State University Press, 2000).

<sup>&</sup>lt;sup>17</sup> M. ,Jr. Hasian, *In the name of necessity: military tribunals and the loss of American civil liberties* (Tuscaloosa: University of Alabama Press, 2005).

<sup>&</sup>lt;sup>18</sup> A. G. Mueller, "Affirming denial through preemptive apologia: The case of the Armenian Genocide Resolution," *Western Journal of Communication*, no. 68. (2004)

<sup>&</sup>lt;sup>19</sup> Stahl, *War games: Citizenship and play in post-industrial militarism*; R. Stahl, "Have you played the war on terror?,"*Critical Studies in Media Communication*, no. 23. (2006)

in the halls of powerful think tanks like RAND.<sup>20</sup> In games studies, Nieborg has discussed the persuasive power of video games and the "appropriation of game culture" by the military especially with regards to America's Army.<sup>21</sup>

Most recently, Bogost has developed the concept of "procedural rhetoric" as a supplement to more traditional forms of rhetorical analysis (e.g. textual, oral, visual). It is a concept that allows for the examination of how videogames can be used to make persuasive arguments about the world of the past, present, or future that are descriptive, normative, or both. Procedural rhetoric is the "practice of authoring arguments through processes"<sup>22</sup> and can have as its goal persuasion, expression, or both. The theory argues that developers of such "persuasive games" make arguments by coding into a game certain experience constraints such as necessary avenues of action or procedures that the player is forced to enact. Bogost takes time to look at one of the military games mentioned above, America's Army. His analysis centers on how the game is more than simply a recruiting tool, but rather, makes arguments about the Army's ideology, the nature of conflict from the perspective of the U.S military, and the political or apolitical nature of a soldier. While we recognize the larger ideological and political assumptions implicit within F2C2's argument, our analysis will focus more closely on the argument that F2C2 makes about the nature of 21st Century warfare and the capabilities of an ITdriven, "network-centric" U.S. Army.

<sup>&</sup>lt;sup>20</sup> Timothy Lenoir, "All but War is Simulation: The Military-Entertainment Complex,"*Configurations* 8. (2000); Sharon Ghamari-Tabrizi, "Simulating the Unthinkable: Gaming Future War in the 1950s and 1960s,"*Social Studies of Science* 30, no. 2. (2000)

<sup>&</sup>lt;sup>21</sup> David B. Neiborg, "Changing the Rules of Engagement: Tapping Into the Popular Culture of America's Army, the Official U.s. Army Computer Game" (Master's Thesis, Utrecht University, 2005).

<sup>&</sup>lt;sup>22</sup> Ian Bogost, *Persuasive Games: The Expressive Power of Videogames* (Cambridge, MA: MIT Press, 2007)., 29.

While the concept of procedural rhetoric is invaluable for recognizing and analyzing the way arguments get constructed within games, it does not provide the tools necessary to place a persuasive game such as F2C2 into a larger rhetorical context. Indeed, without taking the time to understand F2C2 as just one rhetorical response among many within a situation that is much larger than itself, we would miss much of what is interesting and important about the game. Thus, we will draw from the literature on the theory of rhetorical situation in an effort to view F2C2 in context. Bitzer explains that "a work of rhetoric...comes into existence for the sake of something beyond itself; it functions ultimately to produce action or change in the world; it performs some task. In short, rhetoric is a mode of altering reality...by bringing into existence a discourse of such a character that the audience, in thought and action, is so engaged that it becomes mediator of change."<sup>23</sup> He describes that "something beyond itself" as "a situation of a certain kind"--i.e. a "rhetorical situation."<sup>24</sup>

In Bitzer's initial formulation, beyond the speaker and the audience, the rhetorical situation is composed of two additional elements, the "exigence" and the "constraints." He defines an "exigence" as "an imperfection marked by urgency; it is a defect, obstacle, something waiting to be done, a thing which is other than it should be."<sup>25</sup> Next, both the speaker and the audience will be subject to a number of "constraints," which can be "made up of persons, events, objects, and relations which are parts of the situation because they have the power to constrain decision and action needed to modify the exigence."<sup>26</sup> Just as certain aspects of the situation will limit what the speaker can say,

 <sup>&</sup>lt;sup>23</sup> Lloyd F. Bitzer, "The Rhetorical Situation," *Philosophy & Rhetoric* 1, no. 1. (1968), 3-4.
<sup>24</sup> Ibid., 4.

<sup>&</sup>lt;sup>25</sup> Ibid., 6.

<sup>&</sup>lt;sup>26</sup> Ibid., 8.

they will also limit the possible decisions and actions of the audience. The speaker will seek to use the given constraints to his or her advantage, attempting to channel the thought processes of the audience and to constrain the realm of possible decisions and actions that could be taken by the audience such that those decisions or actions available to the audience would bring about the change to the exigence that the speaker seeks.

A number of other scholars have worked to re-interpret and re-construct the theory of rhetorical situation in light of the growing postmodernist sensibilities within the humanities and social sciences. For example, Biesecker addressed the relationship between speaker and audience in her attempt to rethink rhetorical situation through Derrida's thematic of *differánce*. Starting from the assumption that identities are never entirely stable, she asserts that rhetorical discourse "produces and reproduces the identities of subjects and constructs and reconstructs linkages between them," making "the rhetorical situation an event that makes possible the production of identities and social relations."<sup>27</sup> A number of other scholars have worked to refine the idea of "constraints." Jamieson points to the fact that particular forms of rhetorical response tend to recur even if the situations that initially spawned them do not. These rhetorical forms become traditions that can actually work as constraints upon both the speaker and the audience, shaping their perceptions and responses. This is particularly true in the case of large institutions where the "Establishment and maintenance of definable institutional forms of rhetoric serve to define the institution itself."<sup>28</sup> Combined with Biesecker's insights, this means that speakers and audiences are not only mutually constructing their

<sup>&</sup>lt;sup>27</sup> Barbara A. Biesecker, "Rethinking the Rhetorical Situation from Within the Thematic of Diff, rance," *Philosophy & Rhetoric* 22, no. 2. (1989), 126.

<sup>&</sup>lt;sup>28</sup> Kathleen M. Hall Jamieson, "Generic Constraints and the Rhetorical Situation,"*Philosophy & Rhetoric* 6, no. 3. (1973), 163. Garret and Xiao make a similar point. See Mary Garret and Xiaosui Xiao, ""The Rhetorical Situation Revisited","*RSQ: Rhetoric Society Quarterly* 23, no. 2. (1993)

own identities through the process of rhetorical discourse, but also helping to construct the identities of the organizations to which they belong, to which their own personal identities are intimately bound.

### War in the Year 2015

If the dramatic scenario that opens the game serves as a promise about the experience of future warfare, the gameplay in F2C2 constitutes an argument about how that promise can be fulfilled. Set in the year 2015, F2C2 is a real-time tactical strategy game in which the player assumes the role of a commander of an armored company of U.S. Army forces. The company that the player commands has been designated the Brigade Quick Reaction Force for a Brigade Combat Team that has been deployed to the fictional country of Dalilar. Dalilar, a U.S. ally, is under threat from its neighbor, Sabalan. In addition to using its armed forces to intimidate Dalilar, Sabalan is fomenting an insurgency in Dalilar by providing weapons and training to the insurgents. After failed attempts by the United Nations to stop the infiltration, interference, and intimidation, "The U.S. and key allies have responded to an urgent Dalilar request for military assistance."<sup>29</sup> The game is comprised of four missions that are geared around stopping the flow of Sabalan weapons, training teams, and regular forces into Dalilar, as well as protecting the nearby airbase where U.S. forces are landing and preparing for deployment.

Game entities are divided into two groups, the Blue Force (U.S.) and the Red Force (Sabalan). The Red Force is equipped with everything from RPGs and rifles up to multiple-launch rockets, surface-to-air missiles, the latest Russian main battle tanks, and

<sup>&</sup>lt;sup>29</sup> *F2C2: The FCS Videogame for Your PC* [Official Website], accessed 10/1/2007 ; available from http://www.army.mil/fcsold/f2c2/index.html.

even some UAVs of its own. On the American side, the Blue Force is equipped with the latest manned, armored vehicles and unmanned ground and air vehicles. But the most important "weapon" in the Blue Force arsenal is not a weapon at all. It is the network that ties all of the vehicles together, allowing for the real-time collection and distribution of information, both among units (horizontally) and up the chain of command (vertically).

For the player-commander, gameplay consists of using the available command, control, communication, computer, intelligence, surveillance, and reconnaissance (C4ISR) tools to plan and execute the assigned mission. These tools are accessed via the Warfighter Machine Interface (i.e. the screen) and include both a Plan View Display and an Execution View Display (i.e. maps) which provide a number of tools to assist the player-commander in planning and carrying out the assigned mission. In addition to a fully customizable map of the area of operations, Planning Mode includes a number of tools for analyzing terrain, assigning tasks to particular units, planning a "scheme of maneuver," employing ISR assets such as UAVs and unmanned ground vehicles (UGVs), and designating targets for pre-planned fire support missions. Once the playercommander has created a plan of attack, pressing the "Execute" button within the Warfighter Machine Interface sets that plan in motion and the player-commander is now in Execution Mode. In Execution Mode, a number of new tools are added to the suite of planning tools, most of which remain available during execution. The new tools are meant to provide the player-commander with real-time information from the battlefield. They include reports of various kinds from friendly units, as well as a "situational awareness" overlay that shows the current location of all Blue Force units, the location of all positively identified enemy units, and the suspected location of enemy units not yet identified. Most impressive of the Execution tools are the "sensor feeds." Since the various sensors on each of the vehicles are connected to a common network, the playercommander can double-click on a given vehicle to access the data from that vehicle's sensors, thereby gaining an "on-the-ground" view of the conflict. Views from individual feeds are displayed in a picture-in-picture (PIP) window, two of which can be open at any one time. Other than the PIP view from individual vehicle sensor feeds, the user interface consists entirely of maps, menus, and abstract military symbols.

There are a number of absences and limitations within the game. The first and most obvious is that the perspective of the individual soldier is absent as gameplay is limited to the company level. This is somewhat understandable. Since a company typically consists of anywhere between 60 and 200 soldiers, providing an individual soldier perspective would be both difficult and outside the scope of the argument that the game is making. More interesting is the absence in all but the last mission of any type of air support. The last mission does provide the player-commander the option to call for close air support from TACAIR (Air Force tactical aircraft) assets. However, there is no option in any of the missions to employ the only combat air assets organic to the Army, attack helicopters. Finally, there are no main battle tanks such as the M1 Abrams in the Army of the future. Thus, for the majority of gameplay, the player-commander is limited to the use of a host of light, fast-moving armored vehicles, stand-off missiles, and artillery for the generation of firepower on the battlefield. The conclusion to be drawn is that the Brigade Combat Team of the 21st Century is not only capable of deploying

quickly due to its "lighter footprint," but also of sustaining itself in most combat situations without the aid of "external" assets such as air support.

Success in the game/future combat (i.e. the fulfillment of the promise made at the beginning of the game) is the result of effectively using the available C4ISR tools. The tools are meant to give the player-commander the ability to "maneuver the network" first, then to maneuver physical units. Planning, executing, and even leading become a point-and-click exercise. Collecting and distributing information about the enemy's location and movements becomes the main activity of battle. The actual use of force becomes derivative. The undeniable conclusion is that a properly configured network makes victory virtually automatic.

#### F2C2 as Procedural-Rhetorical Response

By enacting the processes of company-level command, F2C2 makes an argument about the future capabilities of the U.S. Army. But to recognize and understand the implicit argument that F2C2 is making about what can be done in the present to fulfill the promise of future warfare, we must examine it in a wider context--i.e. we must understand it as a rhetorical response to a set of perceived exigences within a larger rhetorical situation. Who is the "speaker"? To what is F2C2 a response? Who is the intended "audience"? What effect does the "speaker" intend to have upon the "audience"? What larger factors serve as "constraints" upon F2C2 as rhetorical response?

In the case of F2C2, the "speaker" is an Army-contractor hybrid. Under contract from the Army, Science Applications International Corporation (SAIC) created the game "to help explain the Future Combat Systems (FCS) program to soldiers in an interactive environment."<sup>30</sup> According to the documentation provided with the game, "The F2C2 videogame lets you experience FCS today. F2C2 helps to demonstrate the operational concept for the Army's FCS program."<sup>31</sup> So, SAIC has used Army money to create F2C2 for the purpose of "explaining" FCS to the Army. This is ironic, to say the least, considering that the Army has already spent billions of dollars on the FCS program over the last seven years. In a sense, the Army is using F2C2 to explain FCS to itself.

But what is FCS, and who is SAIC? The Future Combat System is a series of eighteen armored vehicles all interconnected via a common network architecture--i.e. the FCS is "network-centric." SAIC, along with Boeing, is a lead system integrator for the multi-year, multi-billion dollar project. FCS is the result of an initiative begun in 1999 by then Army Chief of Staff, General Eric Shinseki, to create the "Objective Force," an armored force comprised of vehicles that are more easily deployed than the heavy Abrams tanks and Bradley infantry fighting vehicles of the current force. After the long lead-up time required before the start of the first Gulf War, followed by the Army's inability to deploy its forces in time to take part in U.S. operations in Kosovo in 1999—both of which led to the Air Force "stealing the show," so to speak—the Army decided that it needed a lighter, faster, more agile and easily deployable force. FCS was intended to be the solution to that problem.<sup>32</sup>

The timing for the beginning of the FCS program was fortuitous indeed, coming just as Defense Secretary Donald Rumsfeld and his Director of Force Transformation, retired Admiral Arthur Cebrowski, came into office with the mandate to "transform" the

<sup>&</sup>lt;sup>30</sup> Ibid.

<sup>&</sup>lt;sup>31</sup> F2C2 Manual (McLean, VA: SAIC, 2005).

<sup>&</sup>lt;sup>32</sup> Dan Caterinicchia, "Army gearing up for transformation," *Federal Computer Week*, March 3, 2002.; Frank Tiboni, "Army's Future Combat Systems at the heart of transformation," *Federal Computer Week*, February 8, 2004.

U.S. military into a networked force better able to meet the perceived demands of the "information age." As Rumsfeld and Cebrowski charged each of the services with developing plans for networking and transforming their respective forces, FCS quickly became the central focus of the Army's efforts. By 2002, the Army was spending ninety-five percent of its science and technology and seventy percent of its research and development budgets on its efforts to create the "Objective Force," most of which involved spending on FCS.<sup>33</sup> As such, FCS quickly became the "the material solution for the future force and...the Army's principle modernization strategy."<sup>34</sup>

If FCS is the heart of Army transformation, the Linux-powered network known as the System-of-Systems Common Operating Environment is the heart of FCS. Former Army Chief Information Officer, Let. Gen. Peter Cuviello, has argued that "the most important part of FCS is not the weaponry but the advanced command, control, communications, computers, intelligence, surveillance, and reconnaissance technologies it will use. 'It's not about new tanks... It's about the C4ISR.'"<sup>35</sup> The FCS-equipped Brigade Combat Team will be lighter and more deployable not only because its vehicles will be smaller and lighter, but also because the network promises to replace mass with superior information and speed of action.

If the promise of FCS is so great, why the need for a videogame to "explain" it? Like most large-scale, complex, and expensive defense procurement projects, FCS has suffered from a number of technical difficulties that have resulted in delays and increased costs. It is not surprising, then, that FCS has increasingly been the target of critics both

<sup>&</sup>lt;sup>33</sup> Caterinicchia, "Army gearing up for transformation."; Dawn S. Onley, "Army, DARPA award contract for combat program," *Government Computer News*, April 1, 2002.

<sup>&</sup>lt;sup>34</sup> Future Combat Systems (Brigade Combat Team) (FCS (BCT)): 14 + 1 + 1 Systems Overview (McClean, VA: SAIC, 2007).

<sup>&</sup>lt;sup>35</sup> "Army FCS Readies for Next Phase," Washington Technology, May 12, 2003.

inside and outside the Army. Difficulties, delays, and cost-overruns, combined with the ongoing costs of military operations in Afghanistan and Iraq, have led to a number of negative reports about FCS from both the Government Accountability Office and the Congressional Budget Office, both of which have recommended scaling back the program. Congress has been listening and has moved to reduce FCS funding in the FY2008 and subsequent budgets.<sup>36</sup> For its part, the Army has seen the problem, or "exigence," as stemming for a failure to properly explain and communicate, both to itself and to outsiders, what FCS is all about. After interviewing the Army's top procurement officer, Lt. Gen. Joseph Yakovac, one trade industry publication summed up the problem by explaining, "The network, not the tank, is the most crucial element of the service's multibillion-dollar program to build its next-generation fighting force. But most soldiers and policy-makers cannot visualize it and therefore do not understand it." They quote Lt. Gen. Yakovac, who said, "We have a hard time communicating when it comes to building a network and its requirements. I find there is a great misunderstanding to what we're doing... We want to provide a commander the ability to maneuver his network."<sup>37</sup>

F2C2 is clearly a rhetorical response meant to address that exigence. Both SAIC and the Army have a lot to lose if FCS fails. Of course, SAIC will lose a lot of money. But the Army stands to lose too. It has put all of its transformation eggs in the FCS basket. If FCS fails two or three years down the line, it has lost ten years of effort at

<sup>36</sup> See Dawn S. Onley, "Future Combat Systems contract overhauled," *Government Computer News*, April 7, 2005.; Dan Caterinicchia, "Army makeover under scrutiny," *Federal Computer Week*, March 31, 2002.; Clifford J. Rogers, "DOD modernization yields to war demands," *Federal Computer Week*, February 12, 2007.; Kerri hosteller, "DOD 2007 budget authorized," *Government Computer News*, October 2, 2006.; Rob Thormeyer, "CBO finds 'substantial' challenges for Army's combat systems program," *Government Computer News*, August 10, 2006.; Dawn S. Onley, "Army pushes ahead with Future Combat Systems," *Government Computer News*, October 10, 2005.; and Dawn S. Onley, "GAO: Army's FCS initiative faces uncertain future," *Government Computer News*, July 5, 2005.

<sup>&</sup>lt;sup>37</sup> "Visualizing the Army's new tank: Why the network is the main battle piece in the Future Combat Systems," *Federal Computer Week*, April 10, 2006.

modernization, leaving it with the same equipment developed in the 1970s and 1980s that had the Army seemingly playing second fiddle to the Air Force throughout the 1990s. F2C2 seeks to effectively express the promise of FCS-enabled, network-centric future warfare and to lead the audience of player-commanders and observers alike to the inevitable conclusion that support for FCS in the present will have more than paid for itself the first time that FCS is demonstrated in real-world combat. While the Army itself constitutes an important "audience" for the game, it is not surprising to find that Congress has also been an intended audience. The October 2006 SAIC press release that announced the release of F2C2 reported that the company had "recently exhibited F2C2 at the Congressional Modeling and Simulation Caucus held in July 2006 in Washington, D.C."<sup>38</sup>

But the conclusions reached as a result of F2C2's procedural rhetoric are not unique to the game, nor could they be. Rather, they are constrained by larger patterns of institutional rhetoric related to "military transformation" and "network-centric warfare." Indeed, there is great institutional pressure to prove that service-level programs such as FCS are sufficiently "transformational." Nonetheless, F2C2 does make a unique contribution to the overall debate about FCS, precisely because the videogame format is more expressive than the other media used to make similar arguments. Ultimately, the persuasive power of F2C2 (if it has any at all), will derive from its powers of expression.

Finally, to the degree that F2C2 is not a stand-alone response--e.g. there's much else out there that "says" the "same thing," just in a different way—it provides a unique reflection of how the military envisions itself now and in the future. But it also serves as

<sup>&</sup>lt;sup>38</sup> "SAIC Produces Future Force Company Commander (F2C2); The Future Combat Systems Videogame for the PC," *PR Newswire*, October 16, 2006.

a tool for making that vision a reality. To use some military terminology, it serves as a tool for creating "situational awareness" among a diverse and distributed group of actors. But, in this case, we are not talking about battlefield-level "situational awareness;" rather, we are talking about situational awareness at the level of subject formation, collective "imaginaries," and future visions. It will be successful to the degree that it becomes a self-fulfilling prophecy. The "hopeful mirror" does not only reflect; it helps to create as well.

### Conclusion

Although it is too early to know for sure whether F2C2 has been effective, there are some early indications that, like the network-as-weapon at the heart of FCS, F2C2 has also been misunderstood. For example, the game received the most attention (and the harshest criticism) in an article which appeared on the Wired Magazine website in November 2006. The article reported that the game was "commissioned by the U.S. Army as a recruiting tool" and that it is a "follow-up to its successful America's Army shooter." After claiming that the game is a recruiting tool, the article goes on to criticize it for not being a very realistic training tool.<sup>39</sup> Aside from the fact that the article is internally inconsistent, there is no evidence to support the claim that F2C2 is either a recruiting tool or even a training tool. The game is clearly targeted at players with "a working knowledge of Army concepts and terminology," which would presumably not be a potential recruit.<sup>40</sup> The Army does not recruit officers at the level of Captain (the level of officer usually in command of a company) directly from the civilian population.

 <sup>&</sup>lt;sup>39</sup> Marty Graham, "Army Game Proves U.S. Can't Lose," Wired, November 27, 2006.
<sup>40</sup> F2C2: The FCS Videogame for Your PC

Finally, the documentation for F2C2 makes it clear that the game is not meant as a training tool for existing soldiers: "The FCS systems depicted in F2C2 do not model actual FCS capabilities."<sup>41</sup> Beyond the popular coverage on the *Wired* website, the coverage of the game in the defense industry trade press has been limited and the reception mixed, with some authors taking *Wired's* view and others exhibiting a better understanding of the game's purpose.<sup>42</sup>

It has become common to assume that a military videogame must have been created for purposes of either recruitment or training. While other military videogames such as America's Army enact procedural rhetorics, they are not primarily meant for this purpose--i.e. American's Army is first and foremost meant as a recruiting tool. F2C2, on the other hand, seems to be the best (possibly only) example to date of a military videogame created not for recruitment or training, but specifically for the purpose of making an argument. If anything, the reception of F2C2 thus far indicates that there is much work left to be done, both where F2C2 in particular is concerned, but also on the use of procedural rhetoric in games and the role of persuasive games in larger rhetorical discourses, military or otherwise.

<sup>&</sup>lt;sup>41</sup> F2C2 Manual

<sup>&</sup>lt;sup>42</sup> See "And another thing...," *Government Computer News*, December 11, 2006. and Susan Miller, "Network-centric Warfare Sim Game?," *Federal Computer Week*, November 27, 2006.

### **References:**

- "And Another Thing..." Government Computer News, December 11, 2006.
- "Army Fcs Readies for Next Phase." Washington Technology, May 12, 2003.
- F2C2 Manual. McLean, VA: SAIC, 2005.
- *F2C2: The FCS Videogame for Your PC* [Official Website]. Accessed 10/1/2007. Available from http://www.army.mil/fcsold/f2c2/index.html.
- *Future Combat Systems (Brigade Combat Team) (FCS (BCT)):* 14 + 1 + 1 *Systems Overview.* McClean, VA: SAIC, 2007.
- "Saic Produces Future Force Company Commander (F2c2); the Future Combat Systems Videogame for the Pc." *PR Newswire*, October 16, 2006.
- "Visualizing the Army's New Tank: Why the Network Is the Main Battle Piece in the Future Combat Systems." *Federal Computer Week*, April 10, 2006.
- Adrian, A. "The "Soft Power" of Virtual Reality." *International Journal of Liability and Scientific Inquiry*, no. 1 (2007): 10-17.
- Allen, T. "The evolution of wargaming: From chessboard to Marine Doom." In *War and Games*, edited by G. Ausenda, 231-50. Rochester: Boydell Press, 2002.
- Bialasiewicz, L., D. Campbell, S. Elden, S. Graham, A. Jeffrey, and A. J. Williams. "Performing Security: The Imaginative Geographies of Current U.s. Strategy." *Political Geography*, no. 26 (2007): 405-22.
- Biesecker, Barbara A. "Rethinking the Rhetorical Situation From Within the Thematic of Diff, rance." *Philosophy & Rhetoric* 22, no. 2 (1989): 110-30.
- Bitzer, Lloyd F. "The Rhetorical Situation." Philosophy & Rhetoric 1, no. 1 (1968): 1-14.
- Bogost, Ian. *Persuasive Games: The Expressive Power of Videogames*. Cambridge, MA: MIT Press, 2007.
- Bourke, J. An intimate history of killing: Face to face killing in twentieth century warfare. London: Granta, 1999.
- Carnagey, N. L., and C. A. Anderson. "Changes in Attitudes Towards War and Violence After September 11, 2001." *Aggressive Behavior*, no. 33 (2007): 118-29.
- Carruthers, S. L. "New Media, New War." International Affairs, no. 77 (2001): 673-81.
- Caterinicchia, Dan. "Army Gearing Up for Transformation." *Federal Computer Week*, March 3, 2002.

—— "Army Makeover Under Scrutiny." *Federal Computer Week*, March 31, 2002.

- Chussil, M. "Learning Faster Than the Competition: War Games Give the Advantage." Journal of Business Strategy, no. 28 (2007): 37-44.
- Dauber, C. E. "The Shots Seen 'Round the World: The Impact of the Images of Mogadishu on American Military Operations." *Rhetoric and Public Affairs*, no. 4 (2001): 653-87.
- Frosh, P. &.Wolfsfeld G. "Imaginnation: News Discourse, Nationhood and Civil Society." *Media, Culture & Society*, no. 29 (2007): 105-29.
- Garret, Mary, and Xiaosui Xiao. ""The Rhetorical Situation Revisited"." *RSQ: Rhetoric Society Quarterly* 23, no. 2 (1993): 30-40.
- Ghamari-Tabrizi, Sharon. "Simulating the Unthinkable: Gaming Future War in the 1950s and 1960s." *Social Studies of Science* 30, no. 2 (2000): 163-223.
- Graham, Marty. "Army Game Proves U.s. Can't Lose." Wired, November 27, 2006.
- Hall, Wayne M. *Stray Voltage: War in the Information Age*. Annapolis, MD: Naval Institute Pess, 2003.
- Hall Jamieson, Kathleen M. "Generic Constraints and the Rhetorical Situation." *Philosophy & Rhetoric* 6, no. 3 (1973): 162-70.
- Hasian, M., Jr. In the name of necessity: military tribunals and the loss of American civil liberties. Tuscaloosa: University of Alabama Press, 2005.
- Haynes, C. "Armageddon Army: Playing God, God Mode Mods, and the Rhetorical Task of Ludology." *Games and Culture*, no. 1 (2006): 89-96.
- Herbst, C. "Shock and Awe: Virtual Females and the Sexing of War." *Feminist Media Studies*, no. 5 (2005): 311-24.
- Hosteller, Kerri. "Dod 2007 Budget Authorized." *Government Computer News*, October 2, 2006.
- Ivie, R. L. "Images of Savagery in American Justifications for War." Communication Monographs, no. 47 (1980): 279-94.

Lenoir, Timothy. "All But War Is Simulation: The Military-Entertainment Complex." *Configurations* 8 (2000): 289-335.

Levidow, L., and K. Robins. "Vision Wars." Race & Class, no. 32 (1991): 88-92.

- Louw, P. E. "The War Against Terrorism: A Public Relations Challenge for the Pentagon." *Gazette* 65 (2003): 211-30.
- Miller, Susan. "Network-Centric Warfare Sim Game?" *Federal Computer Week*, November 27, 2006.
- Mitchell, G. R. Strategic deception: Rhetoric, science, and politics in missile defense advocacy. East Lansing: Michigan State University Press, 2000.
- Mueller, A. G. "Affirming Denial Through Preemptive Apologia: The Case of the Armenian Genocide Resolution." *Western Journal of Communication*, no. 68 (2004): 24-44.
- Neiborg, David B. "Changing the Rules of Engagement: Tapping Into the Popular Culture of America's Army, the Official U.s. Army Computer Game." Master's Thesis, Utrecht University, 2005.
- Onley, Dawn S. "Army Pushes Ahead With Future Combat Systems." *Government Computer News*, October 10, 2005.
  - —— "Army, Darpa Award Contract for Combat Program." *Government Computer News*, April 1, 2002.

------ "Future Combat Systems Contract Overhauled." *Government Computer News*, April 7, 2005.

- Power, M. "Digitalized Virtuosity: Video War Games and Post-9/11 Cyber-Deterrence." Security Dialogue, no. 38 (2007): 271-88.
- Rogers, Clifford J. "Dod Modernization Yields to War Demands." *Federal Computer Week*, February 12, 2007.
- Schut, K. "Strategic Simulations and Our Past: The Bias of Computer Games in the Presentation of History." *Games and Culture*, no. 2 (2007): 213-35.
- Stahl, R. "Have You Played the War on Terror?" *Critical Studies in Media Communication*, no. 23 (2006): 112-30.

*— War games: Citizenship and play in post-industrial militarism.* College Station: Penn State dissertation, 2004.

Thormeyer, Rob. "Cbo Finds 'Substantial' Challenges for Army's Combat Systems Program." *Government Computer News*, August 10, 2006.

- Tiboni, Frank. "Army's Future Combat Systems at the Heart of Transformation." *Federal Computer Week*, February 8, 2004.
- Winkler, C. K. In the name of terrorism: Presidents on political violence in the post-World-War II era. Albany: State University of New York Press, 2005.