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Videogames, persuasion and the war on terror: escaping or embedding the military-entertainment complex?

Introduction

Video games have the power to make arguments, to persuade, to express ideas. But they do not do so inevitably. As we evolve our relationship with video games, one of the most important steps we can take is to learn to play them critically, to suss out the meaning they carry, both on and under the surface. ... We need to play video games in order to understand the possibility spaces their rules create, and then to explore those possibility spaces and accept, challenge, or reject them in our daily lives (Bogost, 2008, p. 137).

This article argues that Ian Bogost's call for videogames to be treated seriously is vital.¹ According to Bogost, games matter because they are uniquely persuasive, allowing the player an almost unprecedented capacity to explore and question the rules which underpin politics and society as a whole; yet they have hitherto been largely ignored by political scientists (the honourable exception to this is the work from within international relations and critical security studies on the changing nature of war - in particular on net-centric war and war as simulation - some of which specifically relates to videogames. See for example Baudrillard, 1995; Virilio and Lotringer, 1997; Der Derian, 1998; 2009; Gray, 2005). Such neglect is curious, given both that the global videogame industry is the world's fastest

¹ The terms 'videogame' and 'game' as discussed here encapsulate both console-based videogames and those played on personal computers and range from commercially produced boxed retail products to activist games made freely available for download.

growing entertainment industry, with combined hardware and software sales of \$7bn in 1994, rising to \$42bn in 2007 and projected to grow to \$87bn by 2012 (Markoff, 1994; PricewaterhouseCoopers, 2008; 2010), and that games have increasingly been demonised by media and social commentators and the political establishment as the embodiment of deteriorating public health and declining social and cultural standards.² Gaming is an industry whose scale and cultural reach, and the implications thereof, we cannot continue to ignore.

Indeed, accompanying this growth in videogames as a social, economic and cultural phenomenon has been the growth of games-related academic scholarship from a variety of disciplines, raising genuinely interesting issues for political science. This evolving literature has led to a lively debate over the 'disciplinary home' for videogame studies, with some calling for continued disciplinary plurality (e.g. Wolf and Perron, 2003), while others have called for game studies to develop as a specific discipline (e.g. Aarseth, 2001. See Bogost, 2006b, pp. 49-54 for a critique). However, political science has not yet systematically engaged with videogames; if this continues, the scope for the discipline to make a lasting contribution may well be constrained, as the study of games becomes dominated by a narrow sub-field which shapes the perception of both what issues we should study and how we should study them. In order to demonstrate the importance of the study of videogames for political science, the article specifically analyses the link between games and the militarisation of politics and society.

The article begins with a brief review of the theory developed as to the persuasive potential of games. Bogost's work is particularly important here, with its claim that the interactive nature of games allows them to use processes (procedural rules) that can be used to make arguments about the nature of social and political life, and so challenge the preconceptions of the player. While not all games do this, those which do so include rules which can either restrict or enable behaviour, so allowing for the exploration of the rules which underpin society as a whole and enabling games to be instrumental to social critique and reflective learning. The persuasive potential of games does not however always necessitate social critique; the article argues that games can also be used to reaffirm dominant positions.

The discussion then shows the ways in which games have been important in embedding support for militarisation through the operation of the so-called 'military-

² In the UK, 37% of the population (48% of males and 29% of females) aged between 16 and 49 describe themselves as active gamers (Nielsen Games, 2008, p.5). In the USA the pattern is similar, with estimates that 65% of American households play games (ESA, 2008b, p.2) and 38% of American homes have a video game console (ESA, 2008b, p.4); of those who play, 60% are men and 40% are women (ESA, 2008b, p.3), with an average age of 35 (ESA, 2008b, p. 2).

entertainment complex', which has seen close collaboration between the military and videogames industry, the widespread development of military games and the spread of the military into the production of commercial games. While the majority of military games are produced by Western developers for consumption by a Western audience there are also a number of military games produced by Middle Eastern developers which look at conflict from a non-Western perspective. I argue that persuasion works through all these games to encourage players to support militarisation, both tacitly and explicitly.

Analysis of the 'military-entertainment complex' has largely focused on mainstream, Western-produced videogames. In contrast, the final section of the article demonstrates the ways in which games are also being used to challenge the Western-led militarisation of society. Reflecting on the role of games as both sites and forms of protest, it discusses the impact of activism within game spaces, subversion of games for protest ('mods') and the production of games, particularly within the Middle East, which offer an alternative perspective, albeit one which, in drawing on the format of military games, may reinforce persuasion in favour of indigenous militarisation. Taken together, the persuasive effects of these alternative game spaces work to encourage players to challenge the Western-led military-entertainment complex. While the use of games' powers to persuade have thus far been limited, for a number of reasons discussed here, the article concludes that the potential of games to reach, and persuade, significant and growing sections of society is one that political science can no longer afford to ignore.

Theorising the Persuasive Capacity of Games

Any discussion of the political potential of games must begin with the work of Bogost, who has developed into one of the leading scholars on the persuasive power of games (Bogost, 2006a; 2006b; 2007; 2008).³ Bogost (2007, p. 43) begins with the observation that every game has rules and parameters which are 'made up of processes it supports and excludes'. Of course, no game, even those which claim to allow the complete freedom of the player, can be developed without structures and rules which constrain the player. But for Bogost, this act of constraint is essential to the capacity of games to inform the player, for in exploring the constraints imposed upon them by the game world they identify what he terms the 'possibility space', which refers to the process of experimentation through which the boundaries which the game imposes are revealed (2007, p. 42. See

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³ In focusing on Bogost's work I am not suggesting that he is unique either in his theoretical contribution to the study of persuasion in relation to videogames or in producing insights which enable us to reflect on the political potential of games. My contention, however, is that Bogost usefully builds upon earlier work and is particularly clear in terms of his exposition of the argument.

also Murray, 1997, pp.152-3 who similarly talks of spaces of 'narrative possibilities'). 'The rules do not merely create the experience of play - they also construct the meaning of the game' (Bogost, 2008, p. 121).

Bogost reiterates the earlier literature from computer science and media studies which sets out the concept of procedurality (see for example Weizenbaum, 1966. See Crawford, 1997 on 'process intensity' and Murray, 1997 for a comprehensive discussion). Procedurality emphasises a combination of the notion of procedure as rules or process – such as the experiences of officialdom or the rule of law that citizens in modern society experience in myriad ways every day – and the structures imposed by computers due to their reliance on algorithmic language (Bogost, 2007, pp. 3-11). Procedurality thus highlights the fact that the structures imposed by games are not caused by the nature of programming per se but rather by conscious decisions taken to code certain possibilities in and out of the game space such that the game can give 'representations of the ordinary world that might give players new perspectives on the world they inhabit' (Bogost, 2008, p. 122).

In his usage of the term 'rhetoric' Bogost draws on both contemporary and classical understandings of the term: rhetoric as used by artists and writers for both expressive and persuasive goals (2007, pp. 15-28; on digital rhetoric see Losh, 2009, pp. 47-95). As Bogost (2007, p. 20) argues, '[h]ere, persuasion shifts from the simple achievement of desired ends to the effective arrangement of a work so as to create a desirable possibility space for interpretation'. While he shares the view of those who argue that rhetoric can include visual forms such as photographs and videogames, he rejects the view that visual rhetoric is in itself as important as process. As he goes on to argue, 'in procedural media like video games, images are frequently constructed, selected, or sequenced in code, making the stock tools of visual rhetoric inadequate. Image is subordinate to process' (Bogost, 2008, p. 124).

With this in mind, Bogost's concept of 'procedural rhetoric' draws all these terms together and refers to the 'practice of using processes persuasively' (2008, p. 125).

Thus, according to Bogost, games allow spaces for the exploration of rules through a process of experimentation (the possibility space) and can be used as metaphors to explore the rules which underpin society as a whole (procedurality), often in ways which are highly critical, yet expressive (procedural rhetoric). It is through this combination of possibility and process – reflected in the actual experience of the player – that games attain their persuasive power and become instrumental to social critique and reflective learning. As Flanagan argues (2009, p. 249) '[g]ames are frameworks that designers can

use to model the complexity of the problems that face the world and to make them easier for the players to comprehend. By creating a simulated environment, the player is able to step away and think critically about those problems'.

Galloway's Gaming: Essays on Algorithmic Culture (2006) and McAllister's Game Work (2004) similarly address the critical possibilities of games. Galloway differentiates between 'realistic' and 'realist' games, with the latter defined as 'those games that reflect critically on the minutiae of everyday life, replete as it is with struggle, personal drama, and injustice' (p.75). Central to the critical capacity of such 'realist' games is their interactivity (pp.83-4) which Galloway argues allows ideology to be coded into game-rules and communicated to the player (pp.91-2; 95-8).

While McAllister discusses the rhetorical power of games in ways which overlap significantly, and usefully, with both Bogost's and Galloway's work, he places greater emphasis on the ways in which the videogames production process – influenced by 'developers' and marketers' idiosyncratic, homological, and inclusive ideologies' – works alongside the player's interactions with the game to construct their rhetorical and ideological meaning (2004, pp.31-2). For McAllister, 'gamework' places emphasis on 'rhetorical events that work to make meanings in players'. Furthermore, games are seen as being intended to 'transform players in some way'. Central to this is the process of 'dialectical struggles', with the message within the game being connected to messages and struggles in society at large (2004, pp. 31-2).

The links between all of these authors' work on the persuasive potential of games are clear. For all of them, games are produced within a social context within which there is a struggle over social and political meaning. Games contribute to that struggle in two key ways - both through the messages which they contain and through their dynamics of play, which can be analysed in terms of Bogost's procedural rhetoric. They thus contain real potential to challenge dominant orthodoxies and ideologies. The capacity of games to challenge the militarisation of society is explored in the last section of this article.⁵

However, it is important to note that while these authors are primarily concerned with games that encourage critiques of society, this paper argues that there is nothing

⁴ While the book is entitled Game Work, McAllister uses the phrase 'gamework' throughout the text.

⁵ No systematic attempt to critique/criticise Bogost's work has yet been attempted. However that is not to say that his approach might not be open to question in terms of methodological issues – around measuring the persuasive effect of video games or the difficulty of disaggregating persuasive effects from other experiences/contexts affecting the particular player, for example – or on the basis that Bogost's focus on the game itself does not explore 'virtual games within a system of global ownership, privatized property, coercive class relations, military operations, and radical struggle' (Dyer-Witherford and de Peuter 2009: p.xxix). While such methodological criticisms would misunderstand the focus of Bogost's work, this article does indeed seek to combine such a systemic approach alongside insights from Bogost.

intrinsic to this theory to suggest that games' powers to persuade cannot also be used in a 'small c' conservative way. Persuasion could potentially yield a critical transformative outcome but could serve equally well to consolidate the status quo or ameliorate against change. From this latter perspective, games have considerable powers to constrain political challenges and, through their procedural rhetoric, the power to actually reinforce dominant ideologies, as the following section shows.

The Military-Entertainment Complex⁶

This article argues that the videogames sector can be understood in terms of a military-entertainment complex.⁷ In doing so, Bogost provides a framework for understanding the work that such videogames do in terms of both normalising and legitimating support for the militarisation of social and political life, with the ultimate consequence that society can be seen to be evolving into a state of permanent war (Crogan, 2003).

...the military-industrial complex, contrary to initial expectations, did not fade away with the end of the Cold War. It has simply reorganised itself. In fact, it is more efficiently organised than ever before. Indeed, a cynic might argue that whereas the military-industrial complex was more or less visible and identifiable during the Cold War, today it is invisibly everywhere, permeating our daily lives. The military-industrial complex has become the military-entertainment complex (Lenoir and Lowood, 2000, pp. 36-7).

Literature on the military-entertainment complex explicitly draws on C. Wright Mills' earlier conceptualisation of a military-industrial complex, in which he saw power within American society concentrated within a triangle between political, military and industrial institutions

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⁶ Der Derian (1998; 2009) uses the expression Military-Industrial-Media-Entertainment Network(MIME-NET) to refer to the same phenomenon. However, the term military-entertainment complex is preferred here as it has entered into more general usage. While the existing literature overwhelmingly focuses upon developments in the USA, the themes raised have application elsewhere: many of the best selling games across Europe, Canada and Australia are military-based games; the military in all of these contexts use games-based simulators as part of military training; and the relationship between videogames and the legitimisation of a state of pure war (frequently manifested in terms of securitization) has become increasingly widespread post 9/11.

⁷ Other explanations of the role of military games are of course possible, key among them those focused on the political economy of the games industry itself. Seen in this light, the growth of military games could be seen not as a product of the military-entertainment complex but as a rational strategy pursued by developers and publishers in response to market demands. However, the production and consumption of video games in general, and military games in particular, is highly geographically contingent, as this article's discussion of the Metal Gear Solid series shows (See Deuze, 2007, p.224; Johns, 2006, p.172 for a general comment on the geographical basis of videogames production).

(1958, p. 32; Der Derian, 2009, p. 243). The consequence of this, according to Mills, was to make the American economy a 'permanent-war economy':

Virtually all political and economic actions are now judged in terms of military definitions of reality: the higher military have ascended to a firm position within the power elite of our time (1958, p. 33).

Mills' explanation for the stability of this power elite pointed to three key factors: the unity between group members resulting from their similar education, style of life and outlook, ensuring a ready circulation of elites; the structure of institutional linkages which placed a premium on hierarchy and interconnectedness, and an active desire to ensure coordination between members (1958, p. 34). Lenoir's research on the military-entertainment complex makes the parallels with Mills' work clear, identifying a symbiotic relationship between the military, academic institutions and industry, with research funded and driven by military priorities and extensive labour mobility between military and commercial industries in related fields (2000, pp. 292-8; Lenoir and Lowood, 2000).

This symbiotic relationship is visible in the history of increasing collaborations between the military and the games industry since the early 1980s, with the military initially developing much of the technology which drove the industry (Herz, 1997, pp. 201-5). By the middle of the 1990s, the position had reversed, with the military commissioning adaptations to commercially available videogames such as tank and helicopter simulators (e.g. Battlezone and Apache respectively) and military-combat games (e.g. Doom) for military use (see Poole, 2000, pp. 219-20 and Power, 2007, p. 276 on Battlezone; Herz, 1997, p. 209-11 on Apache; Lenoir and Lowood, 2000, pp. 26-8 on Doom).

While development was initially motivated by cost considerations, following the Gulf War of 1991 the success of game-based simulators in both replicating the interfaces used in modern weapons systems and providing a realistic approximation of the combat experience rapidly convinced members of the armed forces of their effectiveness (Power, 2007, p. 277):

To get the job done, the Force XXI Army will depend on advanced simulations, powerful computer workstations, realistic computer images, multi-media digital transmission and global networking to generate information, to share knowledge and to operate on a plateau never possible before. Simulators, constructive simulations

and the synthetic battlefield will be central and essential features of this Army (US Army Modelling and Simulation Master Plan cited in Herz, 1997, pp. 199-200).

The commitment of the US government to simulation and modelling, and the importance of the military-entertainment complex, is shown by the rapid growth of resources committed to this area. Following the 1991 Gulf War, the US army created the Simulation Training and Instrumentation Command (STRICOM, now the 'Programme Executive Office for Simulation, Training and Instrumentation', PEOSTRI), with an annual budget for computer simulation of over \$3.5 billion in 2008 (PEOSTRI, 2009, p. 26). In 1999 the military also established the \$45 million Institute for Creative Technologies (ICT) at the University of Southern California to facilitate an ongoing pattern of collaboration between the military and entertainment industries (Power, 2007, pp. 277-8). And in 2002 the US military released the game *America's Army*, costing an initial \$7.5m and with an annual budget of \$4m (Stahl, 2006, p. 122), which had attracted nearly 10m registered players as of February 2009 (US Army, 2009. America's Army is discussed in detail below).

In the UK, too, the role of videogame-based simulation is becoming increasingly important, with the army preparing troops for deployment in Iraq with simulators such as Virtual Battlespace 2, developed by videogames developer Bohemia Interactive and based on their best selling PC-games Operation Flashpoint and Armed Assault (see MoD, 2008; BBC, 2008).

The growth in the use of military simulations has been accompanied by what some have seen as the development of a change in military ethos towards 'net-centric warfare' in which computer technology has become increasingly integral to military supremacy on the battlefield: 'information and speed were the key variables in warfare: whoever has the fastest network wins' (Der Derian, 2009, pp. 241-2). As Virilio argues, '[a]s the first great global manoeuvre in "Information Warfare", what we see here is the launch of a new logistics, that of the cybernetic control of knowledge: politico-economic knowledge, in which the single market affords a glimpse of its military and strategic dimensions in terms of "information transfer" (Virilio, 2000, p.133).

The links between such developments and the permeation of the military-entertainment complex are clear, with this shift of military ethos towards net-centric warfare leading to what the US military has referred to as 'full spectrum dominance' – a military strategic 'phrase that implied total control over land, sea, air, space, time, and information' (Stahl, 2010, p.36) – reaching out into all aspects of society.

Crogan's work on the idea of 'pure war' suggests that the effects of the military-entertainment complex are even more far reaching than those of the military-industrial complex it replaced, permeating not just the structures of society but the private lives of citizens through the playing of military-combat games. Crogan (2003, p. 277) draws on Virilio's concept of 'pure war' to show that society is progressively developing into a permanent war economy, where it is increasingly difficult to maintain a clear distinction between periods of war and peace. This phenomenon, manifested initially in terms of planning for logistics and transportation, has progressively spread into all other areas of economic, political and cultural activity (2003, p. 278). Crogan argues that while the historical development of the military-entertainment complex is central to the development of 'pure war', military-themed games are also influential in its continued legitimisation:

The military-entertainment complex proliferates as the computer simulation of reality becomes more compelling and more central to our audiovisual milieu ... [Thus], it represents not so much a loss for the military in its failure to remain at the cutting edge of research in computer technology, but a major leap forward in the merging of the military and the domestic spheres in the realm of audiovisual cultural forms (2003, pp. 279-80. See also Stahl, 2010, p.36).

The Militarisation of Videogames⁸

This merging of military and domestic spheres has both facilitated and been caused by the militarisation of videogames, with important political implications. The content of games has of course been shaped by real world events, particularly following on from the conflict-centred turn in US foreign policy: following Operation Desert Storm in 1991, the videogames industry produced a raft of military games such as Super Battletank, Desert Strike and LHX Attack Helicopter, all set in the Middle East and enabling the player to participate in a variety of conflicts (both 'real' and imagined) (Herz, 1997, p. 207-9). There was a similar trend post 9/11: 'September 11, 2001 and the ensuing wars in Afghanistan and Iraq ushered in a boom in sales of war-themed video games for the commercial market' (Stahl 2006, p. 118).

As Poole argues, many of these games, relying on a shoot and destroy mechanic, promote a highly problematic assumption that complex social and political problems such as the 'war on drugs' can be solved militarily: 'the more naturalistic videogames become in

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⁸ Whilst, there are a limited number of commercial mainstream games that explicitly offer a critique of contemporary military and security policy, as I argue later, these are in a minority because of the pervasive nature of the military-entertainment complex.

their modes of representation and modelling of real-life phenomena, the more they will find themselves implicated in political questions, and will need to have their ideology interrogated' (2004, unpaginated).

Such problems - where the procedural rhetoric of the game, in Bogost's terms, enforces a particular view of, and response to, conflict situations - are highlighted by the game, Army of Two (2008), which casts the player as a mercenary engaged in a number of contemporary conflicts such as those in Afghanistan and Iraq. The game's narrative constructs an alternative, convincing version of history for its players in which weapons of mass destruction existed in both Afghanistan and Iraq and in which Bin Laden (or his equivalent) actually did have a highly organised network, with sophisticated command structures and extensive military facilities. The game, therefore, re-iterates and confirms the position taken by many American media outlets at the time of the 9/11 attacks, even though these 'facts' have subsequently been called into question.

The fictional scenario of this game is reinforced by the game's possibility space in two crucial ways. First, reflecting Poole's comment above, it promotes the view that the only solution to the political problems in states such as Afghanistan and Iraq is through the use of force: the war on terror is only to be won by indiscriminate killing. Secondly, in casting the player as a private military contractor (PMC), it enables that killing to occur outside the rules of formal military engagement: such organisations are above the law and hence beyond the control of the state, suggesting that in a post 9/11 world while extramilitary activity is justifiable it is largely uncontrollable. While such insights reflect some of the critiques which have been offered of the proliferation of PMCs in conflicts around the world, the overall procedural rhetoric of this game can be seen to reinforce an alternative version of reality and history which underpins support for militarisation.

In addition to the growth of military-combat games, post 9/11 there has also been a proliferation of what Stahl (2006) has termed 'insurgent hunting games' (such as the Rainbow Six and Splinter Cell series), which place the player as part of a secret national security team charged with neutralising terrorist threats. He argues that such games 'mobilize rhetorics consistent with the War on Terror', often positioning the enemy as a 'rogue state', beyond the boundaries of reason and diplomacy:

The appearance of such themes plays a part in the naturalisation of the U.S. military's ongoing self-transformation to a global police force that functions secretly with small rapid deployment teams in a context of low-intensity warfare (2006, p. 118).

Here, both content – what Stahl calls the 'rhetorics' of the War on Terror – and form – Bogost's procedural rhetoric – combine in an individual shooting game which positions the player as representative of the US state, upholding national values through the kinds of secret military action argued for by the Bush administration during that 'War'. In doing so, the player becomes an example of what Stahl conceptualises as a 'virtual citizen-soldier', a hybrid identity produced 'by the changing configurations of electronic media, social institutions and world events' (2006, p. 125). According to Stahl, this development marks a fundamental change to the nature of citizenship: the citizen is no longer central to a process of deliberation in the deployment of state violence but has instead become increasingly acquiescent towards the state: 'Netwar reproduces the social field in its own image, progressively redefining the citizen as a member of the ranks' (2006, pp. 125-6).

America's Army

Launched in 2002, *America's Army* is the most spectacular example of the militarisation of videogames, and of this reprogramming of the citizen as a participant in Netwar. Purporting to model the realities of military life, and explicitly developed by the US military as a recruitment tool, the game has over 10 million registered players.

The player begins *America's Army* as a new recruit who is unable to undertake the combat missions until they have undergone a programme of basic training. Training consists of assault course activities, marksmanship and battlefield medical education - all of which must be passed to the prescribed standard before the player is allowed to proceed to the combat missions. Central to the games' structure is its enforcement of the US Armies 'Rules of Engagement' which promote teamwork and appropriate combat behaviour. Missions reflect this and centre on 'realistic' scenarios such as escorting refugees out of a combat zone or capturing an enemy-held building (*America's Army*, 2010). As designer Mike Zyda puts it:

All players abide by rules of warfare. If a player violates the Uniform Code of Military Justice, rules of engagement, or laws of land warfare, reprisal is instant. He will find himself in a cell at Fort Leavenworth, accompanied by a mournful harmonica playing the blues. Continued violation of the rules may cause a player to be eliminated from the game. To rejoin, he must create a new ID and restart (cited in Bogost, 2007, p.76).

The incentive to avoid such punishment is embedded in the games reward structure which operates with a system which 'bears much in common with the actual practice of military decoration', with medals and other decorations awarded for professional development, treatment of battlefield injuries and the successful completion of missions (Bogost, 2007, p.77). Thus the gameplay mechanics serve to reinforce the values which the US military wishes to communicate to players (Stahl, 2010, p.109; Nieborg, 2010).

However, the game has been heavily criticised for its sanitised portrayal of war: 'In contrast to other popular computer games, in America's Army limbs are never blown off. Instead, wounds are marked by a puff of red smoke. Maimed foes never writhe or scream in agony.' (Schiesel, 2005, p. 3). These restrictions on gameplay are justified by the US military on the basis that the game can/should be playable by teenagers, as Chris Chambers, a retired Army major who is now the project's deputy director, explains:

We want to reach young people to show them what the Army does, and we're obviously proud of that. We can't reach them if we are over the top with violence and other aspects of war that might not be appropriate. It's a choice we made to be able to reach the audience we want (quoted in Schiesel, 2005, p. 3).

According to Power (2007, p. 281), this censorship is intentional and is reflective of broader trends within US society: 'The deliberate censorship of explicit violence in this game further mimics the US government and media censorship of images of dead US soldiers and coffins – in the game bodies vanish after being killed. No matter how many waves of enemy troops come at the virtual solider, body counts do not pile up visually'. Thus the game is a 'bold and brutal reinforcement of current American society and its positive moral perspective on military intervention, be it the war on terrorism or "shock and awe" in Iraq' (Galloway, 2006, p. 79).

America's Army is an important symbol both of the pervasiveness of the military-entertainment complex and of its effects, symbolising the controlled militarisation of society designed to legitimate a dominant ideology and role played within that by the videogames sector. Both this game and Army of Two, then, offer their players an experience which utilises procedural rhetoric to reinforce through both story and gameplay mechanics an uncomplicated view of war and militarisation: the solution to conflict and the threat of terrorism within these games is always dependent on their shoot and destroy mechanics, as Poole points out, with no capacity to negotiate or use diplomacy. Bogost's theory directs our attention to this in-game work of persuasion; as political scientists, we need to

investigate the potential effects of such persuasive yet limited views of the world beyond the game itself. With such games being sold and downloaded in huge volumes, how does this persuasive rhetoric affect political ideologies in the 'real' as opposed to the virtual world? Echoing Stahl's view of the reprogramming of the citizen through Netwar, Galloway suggests that it has important potential effects:

Statistics on public opinion illustrate that the average American teenager playing America's Army quite possibly does harbour a strong nationalistic perspective on world events (even though chances are he will most likely never fight in America's real army). The game articulates this perspective ... like it or not, it is a real articulation of the political advantage felt by and desired by the majority of Americans (2004, unpaginated).

Challenging the military-entertainment complex - exploiting the persuasive potential of videogames.

While the preceding section has shown that the military-entertainment complex serves to legitimate the militarisation of Western society through close links between games developers and the military in the US and elsewhere, the final section of this article explores some of the emerging ways in which games are being used to challenge such pressures, and the problems they confront in so doing. There are three key ways in which these protests have evolved: the use of existing game spaces as sites of political protest and activism; the use of modifications to existing games to create spaces for social protest, and the production of games which are specifically designed to challenge the dominant social order. Bogost's theory is based on the potential of games such as these to create social critiques; the developments examined here exemplify the kinds of 'possibility spaces' he advocates, and are important in showing that games have real persuasive potential. However this section, while identifying the possibilities for such games, also highlights the limitations which currently restrict the critical potential of games and game-based activism as a whole: on balance games have thus far been relatively ineffective in challenging the dominance of the military-entertainment complex. Some of the reasons for that failure are explored here.

⁹ It is of course also possible to see the decision by consumers not to purchase military games as a form of resistance. However, such resistance 'outside the game' is beyond the scope of this article. I am grateful for the comments of one of the reviewers on this point.

Games as Arenas of Social Protest

Games are increasingly being used as arenas of social protest, with protests within game worlds replicating the form of those within the real world, with virtual marches, petitioning and protest. For example, Guest discusses the activities of Joseph DeLappe, Associate Professor at the University of Nevada, Reno, who under the moniker 'dead in Iraq' logs into the servers for *America's Army* once a day and types in the names of American service personnel killed in action (2007, pp. 203-5), continuing to do so until he is ejected from the servers by other players. ¹⁰ A common response to his actions has been confusion or outright hostility, resulting in a number of players banning him from their servers (Guest, 2007, p. 204; Chan, 2010). Yet direct action within existing game spaces, directed specifically against militarisation, has been relatively rare: on February 15th, 2003, the day that over 1 million people marched in London against the war in Iraq, 'the first anti-war protest in a virtual world took place' attracting a group of only 100 virtual demonstrators (Guest, 2007, p. 210).

The principal reasons offered for the limited scope of in-game protests have been the conservative nature both of players and the possibility spaces they inhabit, which have been designed for different ends. Bogost's notion of procedural rhetoric would here necessitate not the implantation of real world rhetorics of protest – the virtual march, for example – but rather an engagement with the architecture and gameplay of the game itself. Williams et al's (2006) exploration of the nature of virtual activism within the West's leading massive multiplayer online game, World of Warcraft (WoW), which sought to explain the relatively limited activism by 'conventional players' using the game world for political protest, supports this argument:

WoW players exhibit a wide range of emergent, original, and downright rebellious behaviours ranging from the creation of their own computer codes to in-world protests. However, the structure and rule set of the game world have a clear impact on what kinds of people play, what they do, and how and why they interact with one another (p. 340).

Williams et al. also found that almost two-thirds of players had very casual social interactions in WoW, centred on the game, and they 'felt uncomfortable with more adversarial topics like politics and religion' (p. 353); a finding reinforced by Chan's view in

¹⁰ The URL for DeLappe's work is at: http://www.unr.edu/art/delappe/gaming/Dead_In_Iraq/dead_in_iraq%20JPEGS.html

relation to 'dead in Iraq' that there is a general reluctance for players to engage in political activity within game worlds which are overwhelmingly seen as 'escapist' and 'fun', such that protest will almost inevitably be greeted with hostility by other players (2010, pp. 280-3). Thus informal and formal procedurality (the rules within the game) work alongside the perception of a limited possibility space available for political activism, so reducing the capacity of many gamers to make use of existing game spaces for critical reflection and social protest.

Subversion of Games: the Modding Culture

In addition to working within the existing possibility spaces in games, activists have increasingly used modifications (mods) to create new possibility spaces for social protest by altering the processes of games.

The most notorious politically-based mods are perhaps those made in the aftermath of the attacks on the USA on September 11th, 2001. Poole (2004, unpaginated) describes how, following Bush's post 9/11 statements, there was a 'surge of jingoistic online gamers', with modifications made to games such as the tactical first person shooter Counter Strike enabling players to hunt down and kill virtual versions of Osama Bin Laden, in a show of support for US action in the war on terror (see also Dovey and Kennedy, 2006, p. 139).

In turn, a number of protesters developed modifications which critiqued the war on terror. For example, Velvet Strike 'allowed users to intervene in online games of Counterstrike by downloading patches that would allow them to decorate the in-game environment with anti-war and subversive messages' (Dovey and Kennedy, 2006, p. 139). Designed as a form of in-game graffiti, Dovey and Kennedy (2006, p. 139) argue that modifications such as Velvet Strike can be seen as 'tactical arts', produced by artists and designed for critical social commentary.

While those mods which are less subversive and challenging to the status quo are generally welcomed by game makers, Pearce suggests that in creating the tools for usergenerated creation, games have unwittingly instigated significant social change: 'These trends fly in the face of the status quo of centralised, hegemonic, broadcast, and distribution models of media creation', which has been the pattern for at least a century. 'A dynamic, two-way medium in which the "audience" has just as much power to create content as the "producer" threatens to upend this power structure' (2006, p. 19; Flanagan, 2009, p.180).

The potential of mods as a form of political act is suggested most powerfully by Haynes in a strident critique of the US military's game, *America's Army*, where she makes

a normative call for their use for 'critical/social purposes' (2006, p. 92), envisaging a modification called Disarmageddon Army which would offer a social critique of the war on terror (p. 94). Haynes' call opens up the possibility for research based not only on the scope, scale and importance of evolving forms of cyber-activism but also on the desirability (or otherwise) of cyber-activism in normative terms.

However, while mods seem to enable the construction of new possibility spaces and thus, in Bogost's terms, the possibility for different procedural rhetorics enabling critical social commentary, there are still considerable restrictions on the capacity of mods to fulfil this potential for successful social protest. Mactavish (cited in Dovey and Kennedy, 2006, p. 134) identifies two key issues: first, the high end computing and programming skills which 'restrict access to a particular kind of "technicity", and second, the ways in which games' 'End User Licence Agreements' contain clauses which can restrict certain forms of content and which generally prevent the commercial development of mods. Modding is thus currently a minority activity, limiting its potential to explore the critical capacity of games, but the examples above demonstrate the possibility of transforming the procedural rhetoric of a game in order to change its value system and challenge the player.

Critical Military Games

The final, and perhaps most successful, way in which activists have begun to explore the possibility spaces of games is by specifically developing their own. Such games include mainstream commercial releases, 'indie games' and games developed in the Middle East, all of which are designed to offer a critique of the dominant social position (for a number of examples see Bogost, 2006a; Bogost, 2007).

Mainstream Games

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As I will show below, the vast majority of games which are explicitly critical of the dominant position are 'indie games', with only a limited number of commercial games offering a critique of contemporary military policy (e.g. Black, Blacksite: Area 51, and the Metal Gear Solid series). Given the argument offered here for the existence and importance of the military-entertainment complex, the reasons for their limited numbers can be seen as a product of that complex:¹¹ however, their potential importance is nevertheless considerable given the substantial sales that many of these games have achieved.

¹¹ Referring back to the political economy explanation of the videogame sector offered in footnote 7, a different explanation for the lack of mainstream commercial critical games might be located in the concerns

The most significant of all critical commercial releases is the Japanese-developed Metal Gear Solid (MGS) series of games, one of the most successful game franchises ever made with total sales of 26.5m to date (CVG, 2009). The games illustrate the importance of Bogost's concept of procedural rhetoric, combining both a political critique and a mode of gameplay that reinforces rather than contradicts their message. In content terms, the games show the capacity of power to corrupt the highest echelons of government, with the narrative within MGS, for example, showing the 'treacherous goingson in DARPA' (Poole, 2000, p. 239), the agency within the US Defence Department responsible for the maintenance of technological superiority by the US military (DARPA, 2009) and revealing the dangerous power of the military-industrial complex. This anti-war message is, crucially, reflected in terms of gameplay, which rewards players who use stealth to avoid conflict with a 'higher grading the fewer guards he or she has had to kill' (Poole, 2000, p. 239). Thus a message designed to promote alternatives to violence in order to solve problems is delivered through a play mechanic which rewards non-violence: in Bogost's terms, the game offers a mainstream example of the consistent use of procedural rhetoric to offer a social critique of militarisation.

However, while the game seems to contain the potential for challenge to the power of the military-entertainment complex and the militarisation of society, there are problems with this assumption. For Bogost, being able to interpret such games requires what he terms 'procedural literacy' (2007, p. 64) which entails 'learning to read processes as a critic': it may be that the average player does not yet have the procedural tools to fully decipher the game's message. As Higgin (2006) points out in relation to the use of satire in Grand Theft Auto, 'The problem, as with any form of satire, is that the audience will not get the joke or that players will feel the need to continue the joke outside of virtual space and into real space' (p. 78). If it has generally been the case that society 'does not get the joke', not least because of the pure war economy in which it functions, then games' capacity to offer a critique of the militarisation of society will be limited by such misreadings.

The main problem, however, is that MGS is arguably the only mainstream critical game series which uses such consistent procedural rhetoric; the majority of mainstream anti-war games still rely on a gameplay mechanic which rewards shooting with success. The UK-produced game Haze (2008) is typical: set in the year 2049, the player is cast in

of publishers and marketers over sales. However the success of the Metal Gear Solid series suggests that such an explanation is not sufficient; and given the argument developed here around the symbiotic relationship of media and military within the military-entertainment complex, would be hard to sustain as a separate factor.

the role of Shane Carpenter, a high-tech soldier fighting a war against a rebel force in an unnamed South American country. Crucial to the narrative is the role of Nectar, a performance-enhancing drug which desensitises the user to their actions and allows the player (in their role as a soldier) to gain greater capacity to see (and so eliminate) rebel opponents. The critical element to the game is developed as the drug begins to malfunction, causing Carpenter to become increasingly aware of his role as an agent of war and to question the morality of that war as a whole. Yet despite this gradual transformation into a reluctant agent of war, the dynamics of play do not change: success is still achieved through shooting opponents, though they are now former allies. This failure to link the message of the game to its dynamics of play is typical of the majority of critical games (such as Black (UK, 2006), Blacksite (US, 2007), etc.), limiting the capacity of games to challenge the militarisation of society.

Independent games

While of more limited impact in terms of sales and distribution, the indie games scene has been much more successful in developing games which provide a coherent critique of society's values in general, and the war on terror in particular.

September 12th, ¹² developed by the independent developer 'Powerful Robot Games', provides one example of the synergy between protest and games, being designed as 'a simple model ... to explore some aspects of the war on terror' (Newsgaming, 2004). A simple Flash game, it offers an aerial view of a non-specific Middle Eastern town populated by sims, with one or two carrying guns. The player has the option of non-intervention or intervention to destroy the 'terrorists' but each time they act, 'more gun toting "terrorists" are produced' (Dovey and Kennedy, 2006, p. 140): in releasing a missile a huge explosion destroys everything under the cross-hair, inevitably killing civilians in the collateral damage, which leads to one or more of the other civilians grieving, before themselves becoming terrorists. The game thus affirms that a militarised response to the war on terror is ultimately counter-productive (Bogost, 2006b, pp. 119; 131-133).

September 12th, while offering a critique of Western responses to terror, is written from a Western perspective. Outside the realm of the Western military-entertainment complex, a number of games have been developed by Middle Eastern publishers that are designed to look at the Middle East conflict from a non-Western perspective. Such games offer an alternative view, and open up new possibility spaces, in Bogost's terms: the publisher of the game Under Ash, discussed below, has said that, 'The main purpose of

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¹² Available from: http://www.newsgaming.com/games/index12.htm

the game was to [offer alternatives in an area] previously filled with foreign games distorting the facts and history, and planting the motto of "Sovereignty is for power and violence according to the American style." (cited in Halter, 2006, p. 3). The final section of this article explores the potential of such games to develop a sustained political critique.

Under Ash (2002) places the player in the role of a young Palestinian who becomes involved in the Intifada, undertaking a variety of tasks such as reaching the Al-Aqsa mosque (an important Islamic site in Jerusalem), helping injured Palestinians, finding weapons and attacking Israeli soldiers (Gee, 2007, p. 155; Souri, 2007, pp. 538-9). According to Souri, Under Ash sold 50,000 units commercially and was downloaded from the game's servers 250,000 times; the prevalence of piracy suggests estimates of between 10 and 100 further copies in circulation for every one sold (2007, p. 538). Under Siege, 13 the sequel to Under Ash, is similarly based on participating in the Intifada. Set during the second Intifada, and covering the period 1999-2002, it tells the story from the perspective of five members of the same family (Afkar Media, 2006; Frasca, 2005).

These games see themselves as a 'call for peace' (Gee, 2007, p. 156). The authors of Under Siege argue that it legitimates itself through offering levels which are 'inspired by real stories of Palestinian people, that were documented by United Nation records (1978-2004)', and that while the game contains simulation of conflict with military personnel, it does not contain shooting civilians or suicide bombings, and is justified on the basis that the 'West Bank and Gaza strip are occupied land according to UN law, and military actions performed by local fighters against occupying forces is considered eligible' (Afkar Media, 2006). In addition, they emphasise that the gameplay does not allow for consequences which would not be achievable in reality: 'Under Ash is about history. So in our modern history there is no solution for the conflicts and the game is some kind of a mirror' (Ghattas, 2002).

The games Special Force (2003) and its sequel Special Force 2 (2007)¹⁴ are more explicitly militaristic in tone, placing the player in the role of a Hezbollah operative fighting during the conflicts between Israel and Lebanon in the early 1980s and 2006 respectively. Both games allow players to re-enact key battles in the conflict which, in the words of the publisher, allow the player to 'fight, resist and destroy your enemy in the name of victory' (cited in Souri, 2007, p. 539; Perry, 2007). Published by the Central Intelligence Bureau of Hezbollah (suggesting an attempt to establish an alternative military-entertainment

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¹³ Available from: http://www.underash.net/en_download.htm. It is worth noting the claim by activists such as Gonzalo Frasca that in accessing the game's website the user 'may be accused ... [of] being involved with terrorist activities' (Frasca, 2005).

¹⁴ Available from: http://www.specialforce2.org/english/index.htm

complex in the Middle East), they are FPS games which replicate the feel and form of most Western games in the genre (Galloway, 2004, p. 9; Souri, 2007, p. 539). The game is seen by Hezbollah as an important part of its communication strategy, in terms which seem to mirror the US Army's justification for *America's Army*:

"This game presents the culture of the resistance to children: that occupation must be resisted and that land and the nation must be guarded," said Hezbollah media official, Sheikh Ali Daher. "Through this game the child can build an idea of some of ... the most prominent battles and the idea that this enemy can be defeated" (cited in Perry, 2007).

From the perspective of the authors and publishers, all of these games are part of a struggle to overthrow the dominant social order, albeit in different ways, with Special Force 'unapologetically vehement in its depiction of anti-Israeli violence' whereas Under Ash and Under Siege take 'a more sober, almost educational tone' (Galloway, 2004, p. 10), with violence against the occupying army seen as necessary rather than welcome.

Both games do indeed seem to offer a radically alternative perspective to those examined so far which work to reinforce the power of the Western military-entertainment complex. For Galloway, Special Force and Under Ash are 'among the first truly realist games in existence' (2006, p. 80), where 'realist games' are – as we have seen above – embedded within social and political struggle. While the gameplay is similar to that of a conventional first person shooter, Galloway argues that the critical difference is that these games offer a different relationship between player and game:

Realizing that Palestinian youths 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 these youths to play from their own perspective as Palestinians, not as surrogate Americans... Under Ash players, then, 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).

However in understanding the implications of these games for activism and political persuasion, the perspective of the player is of course critical (Kücklich, 2006, p. 105). The context in which such 'alternative' games are developed, marketed and played may complicate their persuasive effects: Galloway argues that 'fidelity of context is key for

realism in gaming' (2006, p.84). While for a Palestinian living under Israeli occupation these games become a counterpoint to a dominant ideology which supports Israel's control over the West Bank, an Israeli citizen will see the game as illegitimate, promoting terrorism (Galloway 2004, p. 10; see also Souri, 2007, pp. 546-50). Of course, an individual Israeli may just as conceivably see such games as a counterpoint to the dominant ideology as an individual Palestinian; but the content of the games does work to 'involve the player deeply in the Palestinian cause and Palestinian perspectives' (Gee, 2007, p. 155). It also challenges Western assumptions about the nature of legitimate targets: while the Under Ash games only allow the player to attack 'non-civilians', the 'possibility spaces' of the game, in Bogost's terms, reflect 'the different [Palestinian] perspectives embedded in the game's virtual world' (Gee, 2007, p. 155), so that both soldiers and settlers are considered to be legitimate targets. Western players of these games would thus actively experience, and interactively work through, a different and challenging perspective which engenders reflective patterns of play (Bogost, 2008, p. 130).

However, the question remains whether these game series, while critiquing Western/Israeli ideology, simply reproduce the military-entertainment complex from a different perspective, here generated by Hezbollah rather than the West. Even Under Ash (less obviously militaristic in tone) does not allow or suggest alternative ways in which political accommodation could be reached, for example through the use of a court of law or the promotion of policing (see Delwiche, 2007, p. 92 on the militaristic parallels between *America's Army* and Special Force): the possibility spaces of the games are still limited to military solutions.

In any case, the potential of such games to reach, and persuade, Western audiences is limited. Outside activist and academic circles their impact has been localised, largely ignored by the West and, where noticed, accused of promoting terrorism: Power (2007, pp. 282-3) argues that they have been characterised as posing a 'threat to the US', and there are concerns that downloading them may be interpreted as a criminal act. At present, then, only players who are largely supportive of their message are experiencing them; for these games to fully realise their persuasive potential – which is considerable – they would need to be played by those within the West such that they had the effect of subjecting their existing world view to critical scrutiny.

Conclusion

This article calls for the political science community to begin to look seriously at videogames: if we do not acknowledge their increasing cultural importance, then not only do we neglect an important element of the political system but we are in danger of being marginalised as other disciplines shape the way in which games should be studied.

In illustration of this wider claim, the article has set out to explore one crucial area of videogames' importance for politics. Following a discussion of Bogost's work on the persuasive capacity of games, which demonstrates how games can be a force for both social stability and social change, the article has examined the different ways in which games have impacted upon the militarisation of society. First, it argued that the pervasive nature of the military-entertainment complex from the 1980s onwards has created a cycle whereby militarisation has affected the content of games, at the same time as games have aided in the militarisation of society. Second, it examined the way in which games have increasingly been employed to challenge creeping militarisation, showing how games are being used as sites of activism (through virtual protest and modifications to the game world) and as forms of political activism (with the procedural powers of games being exploited in order to produce games which challenge the dominant ideological position of the West). Although there are presently limitations on the critical power of videogames, as this article has demonstrated, the utilisation of Bogost's theory of the power of procedural rhetoric suggests that they have vital potential to embed real social critique in players' experiences of their virtual worlds.

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