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Who Are the Enemies? The Visual Framing of Enemies in Digital Games¹

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Digital games are among the most popular forms of entertainment media. Despite their ubiquity, the fields of political science and International Relations and political communication have generally overlooked the study of digital games. We take up this void by examining the international enemies depicted in combat games—specifically, first person shooter (FPS) games—which can speak to the process in the construction of international threats in society. Our review of framing the enemy gleans perspectives from multiple disciplines including International Relations, political communication, and digital gaming. Our empirical analysis traces the evolution of images in digital games from 2001 to 2013 to reveal the identity of the enemies and protagonists, and to examine the context of the game—including the setting for where each game takes place. We find that Russians are a popular form of enemy in FPS games even after considering terrorists as a broad category. Our review of the literature and our empirical analysis together present a foundation for the future study of digital games as a process of framing of enemies and transmission of threats.

Today digital games are ubiquitous—on our phones, tablets, laptops, and on dedicated gaming consoles and personal computers.² Games offer an experience that is distinct and novel from other forms of entertainment in that they are possible avenues of transmission of attitudes and beliefs. Despite their rising popularity among mass audiences, digital games have received only peripheral attention from scholars of political science and International Relations. Within International Relations, several studies have pointed to the importance of entertainment media more generally—particularly the film industry (see Valeriano 2013b for a review in International Relations; Adkins and Castle 2014, Bartsch and Schneider 2014, and Mulligan and Habel 2011 and 2013 for work in political communication). Here we hope to draw wider interest in the properties of games as they apply to international contexts and relations in order to articulate the need and potential agenda of studying digital games in the field of International Relations and political science more generally. Games can reflect the realities of international politics for a wide audience—and in our analysis, we focus on how video games communicate who enemies and friends are to audiences, an important question for the construction of threats. In short, games can shape individuals' interactions with the "other," which may then feed into the method of constructing an enemy in international affairs.

Researchers have shown that new technologies and shifting media landscapes can have profound consequences for society (see Bimber 2003). Evidence suggests that advances in technology, such as the advent of the Internet, have created opportunities for individuals to navigate away from the news and current affairs, and as a result, disparities in political knowledge among those with high levels of political interest and those more captivated by entertainment have widened (Prior 2007). For these reasons and more, leading scholars have called for a broader and deeper understanding of individuals' media choices and of entertainment media particularly (see Williams and Delli Carpini 2011). In International Relations specifically, researchers have recognized that entertainment media speaks to citizens and can capture political culture, although again studies of games have been limited. It is incumbent upon researchers to devote greater attention to digital games and their consequences, as so many individuals devote a substantial portion of their leisure time to the activity.

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² Examples include Xbox and current Playstation systems.

Our turn to digital games encompasses all "videogames"—console games, computer, phone and tablet, virtual reality, and arcade. Audiences have embraced this form of media such that revenues from the industry surpass that of films, with reports of 15.4 billion dollars spent in the US alone in 2013 (Hinkle 2014). Although some might perceive gaming as a mere distraction of little intrinsic value, a budding literature in social psychology and communications suggests that the playing of video games can have important consequences for the audience—affecting real world understandings of violence, sexuality, and gender, for example. In these disciplines, few would dispute that games can affect players, or more generally, that the study of gaming is warranted, nor that games can affect audience understandings.

Political Science and Digital Games

Digital games have entered the public dialogue through various international contexts. In one salient example, China preemptively banned the game Battlefield 4 due to some of the game's campaign missions that were set on mainland China. Although the controversial component—downloadable additional content called China Rising—was not part of the original release, nor had the public seen the expansion as the game had yet to be released, Chinese authorities nonetheless argued that the game embodied "cultural encroachment" (Good 2013). Russian politicians also contemplated banning shooters with negative images of Russia after Call of Duty: Modern Warfare 2 featured Russian nationalists committing domestic terrorism, known as the "No Russian" chapter. In these examples, we see that concerns over how players could be affected by the setting and context of games led to a preemptive ban or consideration of one. Perhaps one might attribute such censorship as not entirely out of the ordinary in China, but a similar ban took place in Venezuela over the setting of the game Mercenaries 2 and related charges of U.S. propaganda (Apperley 2010). Even Australia has refused to rate certain games that are deemed to be excessively violent, sexual, or criminal, thereby issuing de facto public bans on them (see Apperley 2010: 118-119). In these illustrative examples we see that government officials in a wide range of situations have been attentive to the context of games or the portrayal of enemies and the possible accompanying effects on mass society.

We have also seen modifications of existing released games in order to present some rival or feared entity as the enemy. The counter terrorism game *Counterstrike* was modified by Argentines to make the British the terrorist enemies, with gameplay focused on killing the invaders of the Malvinas (Falklands) (Alexander 2013). The reaction against this effort was so forceful in the United Kingdom that hackers launched a DDoS cyber attack against the relevant servers in order to shut down the game

(Tomlinson 2013). Moreover, the recent uproar of the conflict in the China Sea over island claims between China, Japan, Taiwan, and the Philippines have also generated their own crossover controversy in the digital game world. The Chinese army developed their own FPS with the context of a battle set in Japan over the disputed Diaoyu/Senkaku islands (Dewey 2013).

Despite some of these very public examples highlighting concerns over enemy imagery in games, scholars have not systematically investigated the ways in which digital games represent enemies or protagonists or the settings of game conflict. In this article, we delve into how images of enemy combatants and protagonists are transmitted and framed visually by the gaming industry. We provide an overview of the relevant literature on digital games as it is related to international interactions, and then we turn our attention to literature on the social construction of the enemy and rivalries which informs our work on enemy and protagonist portrayals in games and provides a theoretical worldview of why an enemy is important and how one is created. We follow this discussion with an empirical investigation of which enemies and allies are most commonly depicted in popular present era digital games, specifically popular first person shooter games (FPS) released between 2001 and 2013. Taken together, our study represents a novel exploration of digital games from a political science and international relations perspective, and suggests a path forward that would integrate the study of digital games into the construction of international contexts and enemies.

Studies of Digital Games

The largest body of work investigating digital games comes from the disciplines of social psychology and communications with a particular focus on issues of gendered presentations and the effects of sex and violence in digital games on audiences. A study by Dill, Brown, and Collins (2008) examined sex-typed presentations versus professional presentations of men and women in games, finding that those exposed to such presentations were more tolerant of sexual harassment, with stronger effects among male players. Concerning violence, scholars have for example shown that those playing a violent game (Mortal Kombat: Deadly Alliance) can increase levels of arousal and hostility when experiencing the game (Barlett, Harris, and Bruey 2008). Building on past work in the area, these authors posit a General Aggression Model where the outcome of aggression—conceptualized as the intent to harm—is a product of personal factors including gender, age, and past exposure to games and situational factors, such as playing a violent game. Alternatively, many studies have demonstrated positive learning effects from gaming (see Bavelier, Green, Han, Renshaw, Merzenich, and Gentile 2011 for a discussion). Playing cooperatively with other gamers, even in a hostile game setting, can reduce aggression and increase

cooperation (Velez, **et al.** Forthcoming). Thus there remains a healthy debate both empirically and normatively on whether digital games can have negative, positive, or mixed effects on players (see Bavelier et al. 2011 for a debate in *Nature*, see also Wouters, van Nimwegen, van Oostendorp, and van der Spek, 2013 for a meta-analysis of game studies). It remains true that scholars in these disciplines perceive games to have important implications for viewers: what is displayed, experienced, and perceived in digital games matters for audiences and mass society.

Turning to the study of games in political science and international relations, a recognizable body of work investigates the linkage between the military and the gaming industry, a theme differing for our own, but still of importance to international interactions. For example Robinson (2012) discusses the concept of the military entertainment complex, which a number of scholars have used to capture the relationship between the entertainment industry and the military in the production of games, a topic that many have written on (see also Der Derain 2009, Dittmer 2010, Huntemann and Payne 2009, Jahn-Sudmann and Stockman 2008, and Stahl 2006 and 2010). Studies such as Leonard (2004) have noted concern over the relationship among the military and the game industry in the wake of the terrorist attacks of 9/11 and the subsequent War on Terror. In this vein, particular emphasis has focused on the game America's Army (see Halter 2006, Haynes 2006, Susca 2012), a First Person Shooter game published in 2002 by the US Army and perceived as a tool for recruitment. Indeed Allen (2009) also focuses on games and recruitment, discussing the employment of the "Virtual Army Experience" simulator as a tool by the military to recruit participants and inform the public. Power (2007) speaks to the geographies of militarism that the gaming culture has produced, with especial concern over the deployment of games by the United States military. In fact, current games such as the Call of Duty series even employ a military advisor (Smith 2010). Finally, Schulzke (2013a) provides a helpful overview of the literature and notes that arguments surrounding the maintained harmful relationship among the military and the entertainment industry have limitations including their reach and popularity. Indeed among the very popular games we subsequently discuss and analyze here, very few represent a significant coordination and collaboration among the armed forces and the gaming industry.

Several studies have more direct implications for our research on enemy and protagonist images in shooting/combat games. Gangnon (2010) conducts a content analysis of the *Call of Duty* series concluding that the imagery glorifies war and elicits consent for state violence. Sisler (2008) examines the portrayal of Arabs, particularly Muslims, in popular video games, finding that depictions of Muslims have been largely along stereotypical lines with hostility as an oft-occurring theme. (Although not related to digital games, Sides and Gross [2013] show that the acceptance of such stereotypes has

important consequences for policy attitudes, with those believing Muslims to be more hostile having more favorable views of the War on Terror.) Further, Chan (2005) explores racialized representations in games. These works individually and collectively suggest that the experience of playing a game and encountering imagery therein can shape the political attitudes of users and their understandings of international affairs.

Several studies delve further into the consequences of FPS gameplay for audiences. Schulzke (2013b) argues that the demonization of terrorist threats in digital games and the intensification of terrorist threats have contributed to distortions in media understandings and in public perceptions of the War on Terror. In contrast, Festl, Scharkow, and Quandt (2013) conduct a 5000-sample survey of gamers in Germany to examine the relationship among gameplay, including FPS gameplay, and militaristic attitudes. They did *not* find evidence of a significant relationship among gameplay and militaristic attitudes, concluding instead that socio-demographic and individual characteristics mattered more for militarism. Still these studies suggest, in a way similar to work in social psychology and communications, that games can transmit messages to audiences that could matter for the ways in which players understand and navigate their political world given their own background and biases. What is missing is a clear conception of who the enemy is, how the threat is constructed, and how it is communicated.

Finally, some work has focused on the context of games—a theme we likewise explore—including the settings where battles take place, and how settings, particularly realism in games, could affect audiences. For example, Höglund (2008) argues that gamers' perceptions of the Middle East as a war zone and their willingness to partake in battles have been influenced by several prominent games using the Middle East as a setting. A parallel argument is voiced by Bialasiewicz, Campbell, Elden, Graham, Jeffrey, and Williams (2007), who are concerned with the influence of geopolitical representations in games on audience support for the War on Terror. In our work here, we also examine the context and settings of the battle with the understanding that settings that are more life-like and resemblance to reality may be more likely to influence gamers' perceptions of enemies and friends. To illustrate, one might observe stronger negative effect among gamers toward a certain type of enemy while shooting the enemy on earth as opposed to outer space. Indeed Mulligan and Habel (2011) found that those who perceived the fictional drama, *Cider House Rules*, to be more like reality were also more likely to be influenced by the film's framing.

Popular Culture and Influence

Our own exploration of digital games and international relations can be situated broadly among a larger literature related to the study of popular culture. Nexon and Nuemann (2006: 6) attribute the rise of constructivism and post-structuralism as having pushed scholars to recognize the importance of cultural forces. According to these authors, a focus on *representations* is an important starting point, and with this in mind, here we explore representations of the enemy in digital games. We follow their notion of a second-order representation in that our enemy is constructed to accomplish some end (Nexon and Nuemann 2006: 7). The conceptualization of the enemy as the opposition in the game, the party that is to be fought, killed, and destroyed, can be a form of data about representations of the enemy (Nexon and Nuemann 2006: 12), and this information is important if we believe that there could be a transmission of attitudes from the gaming experience. There is also the process by which attitudes, interests, and marketing will influence who the enemy is in these games. Thus one could expect feedback from culture and society on content producers' choices of enemies, and then subsequent effects on audiences' views from the enemies utilized.

As a broader aspect of the constructivist field within International Relations (Wendt 1999; Onuf 1989), we examine how the enemy was developed---beyond obvious examples of outright conflict evident in recent wars---to discover who the enemy is to the viewer or user, which may then lead to feedback loops. As Herrmann and Fisherkeller (1995: 426) note in their review of the subject, the enemy image is mainly developed through an examination of threat and capability. In fact, many studies appear to focus on the enemy image as a given. Herrmann and Fisherkeller (1995: 415) explicitly suggest that the empirical explorations of the mental construction of the enemy image are an important avenue of research in International Relations scholarship. While it is difficult to accomplish this task, as Herrmann and Fisherkeller note (1995: 421), examining ideal images rather that the enemy itself is the preferred avenue for research in their work. The idea of an ideal image of the enemy is important because whom society perceives as a threat often has little relation to the actual nature of the threat. Instead, by focusing on the images created by games and who the enemy is, we can grasp who the public sees as an enemy and what impact this might have. Digital games can speak to the difficulty of deconstructing the enemy image and offer a solution. As a constructed process, both the preferences of those making the game and their experience will feed into their choices of context and setting, while at the same time these contexts will then influence the user illuminating the complicated process of constructing an enemy. Thus there are feedback mechanisms inherent in the process.

For our work, the framework of rivalry (Wendt 1999; Diehl and Goertz 2000) can help us point to who the enemy is and the state's role as an existential threat in popular media. The enemy is the

"other" that presents an existential threat to the referent entity, empirically coded as a rival. In international interactions, the existence of such a threat is not to be taken lightly; it often is literally a question of life or death. There are extant studies of how rivalries are created (see Valeriano 2013a), but scholars know little about how the image of the enemy is formed in individuals or even by collectives in relation to modern technological presentations. Certainly part of the process is the dual transmission of who the enemy threat is to society, but also who the personal enemy is to individuals. For example, Maness and Valeriano (2015) argue that although Russian elites would prefer to put their rivalry with the United States behind them, Americans nonetheless remain the greatest perceived threat among their citizens according to public opinion polls. Therefore populist leaders such as Putin use anti-American sentiment strategically to demonize the United States and foster the enemy image. Such rhetoric both satisfies public demand and ensures that a rivalry continues. Thus there is a self-enforcing, paradoxical mechanism here: societies need enemies as they serve a purpose, but societies also loathe having them because they are feared.

Depicting an enemy is, of course, necessary in first person shooter (FPS) digital games and thus could be an avenue to foster the continuation or construction of the enemy image and, as cultural representations, give us an understanding of the social construction of enemies. FPS games thrive on tension and victory and therefore are modern forms of communicating threat. While it might humorous to see an enemy portrayed, as for example a rampaging group of teddy bears out to hug us into everlasting sleep, such a choice would obviously not make for a very popular game. Game developers need to focus on a plausible enemy (a rival) to communicate danger and threat. Thus our work focuses on digital games and their depiction of the enemy, both developing a theory of how this transmission might occur and examining the empirical evidence of the "other."

Considering the Enemy: Applying a Theory of Transmission to Digital Games

Our theory relies on notions of constructed transmission of enemy frameworks to the audience. Thus we turn to studies of visual framing from news media, which has demonstrated that modes of organizing stories and presentation of images can affect audiences. Scholars have defined framing in a variety of ways, conceptualizations that typically speak to the ability of elites, campaigns, the news media, or entertainment media (Mulligan and Habel 2011) to organize and package information for audiences that highlights certain aspects of reality over others (see Chong and Druckman 2007 as an example), or what some have referred to as "second-order agenda setting" (Scheufele and Tewskbury 2007). Thus frames not only raise salience, but they promote a certain interpretation and evaluation.

Researchers have noted that such framing can take place in text, or through images, or both (see Entman 2010).

Leading scholars have for decades drawn attention to the need for more investigations of visual framing (for an early example, see Graber 1990). In one prominent contemporary example of visual framing research with international relations' implications, Aday (2005), shows that images of war causalities can be conveyed in frames of "shock and awe" or "conquering troops." These frames can have heterogeneous effects on audience attitudes toward conflict. In their work on the Israeli-Palestinian conflict, Wolfsed, Frosh, and Awabdy (2008) contrast Jewish and Palestinian media coverage of similar events and show that journalist's routines, the ways in which they collect information and report it, have implications for their reporting and the imagery invoked, which can be used to demonize the enemy and even intensify the conflict. An earlier work by Ottosen (1995) demonstrated that even news articles written objectively can be biased by the ways in which enemy images are conveyed and audiences' subsequent understandings of these images.

For our understanding of visual framing in video games, we borrow from Coleman (2010), who notes that visual framing involves selecting a certain view or scene. According to Coleman (2010: 237), "When a journalist chooses which photograph or piece of video to use, it is an act of framing." Content producers have control over what the shooter encounters, when, and why. To illustrate, consider the *Call of Duty* series, where the producers often end the first act of play by depicting a scene where the shooter or someone in his/her team witness the enemy commit a personal tragedy, presumably designed to reify the enemy in the shooter's mind. We therefore argue that when content producers select enemies or shooters to visualize in video games, they are engaged in acts of framing, and that these acts can affect audiences' understandings of who the enemies and protagonists are and further shape the audiences' political attitudes and understandings toward real world enemies or allies. Of course we must first understand who the enemy is and why they were chosen as the opposition in digital games before exploring more deeply the effects of these frames in digital games on audiences.

Several possibilities emerge in discovering what motivates content produces to choose certain enemies. First, it could be that enemy choices are driven with future sales in mind. If so, we might expect content producers to shy away from real world enemies and focus instead on aliens and monsters. Or, if human enemies are used, perhaps generic enemies or non-identifiable ones will be common, so as to avoid alienating a potential market for games. It could also be that there is some

³ Similarly, but in application to games, Machin and Suleiman (2006) contrast production houses of games located, one US located and the other Arab produced, for a conflict in Lebanon.

inertia in enemy choices since content producers gravitate toward enemies who are already popular in the marketplace or media. Finally, it could be that content producers rely on contemporary enemies, such as rivalries and threats communicated through actual combat. Indeed we have argued from a constructivist perspective that political culture and society can affect content producers choices for enemies. If combatants from these rival states appear in games, do content producers choose prominent enemies, or those states with more recent hostile disputes to depict?

The rivalry dataset by Klein, Goertz, and Diehl (2006) and the militarized interstate dispute dataset Ghosn, Palmer, and Bremer (2004) are valuable in understanding expectations for enemies in games. These data tell us that there are 11 ongoing rivals of the US and West as of 2001. The most prominent examples are Russia with 59 disputes and China with 36 disputes for the period from 1946 to 2000. Other rivals include the Axis of Evil: Iraq, Iran, and North Korea, and less prevalent, Libya, Syria, Serbia, and Afghanistan. From the Western Hemisphere, Cuba and Canada are also included.⁴ This data provides an important context for our empirical accounting of who the enemies are and their relationship to actual exhibited threats. It would be interesting and telling to find a large deviation between who actual exhibits threats are and what threats are constant in digital games. We now explore who is constructed as the enemy in FPS digital games.

Data and Method

First person shooters are an obvious choice for us to study the transmission of enemy and protagonist images to audiences. These games immerse the player in a conflict setting where s/he is to carry out mass destruction on enemy combatants. We focus on games that have a militarized nature, with the context either being war, insurgent hunting, or conflict centered games – those games with clear enemies and objectives. Few other game genres can offer this sort of interaction between player and enemy. We leave role playing/strategy games for future research. In role playing/strategy games there is less of a relevance to international relations issues given that the context is, ostensibly, not

⁴ Canada is included in these data because of fishing disputes, and as such, might not qualitatively be considered a rival.

⁵ A more comprehensive account of games that includes third person open-world games such as *Grand Theft Auto* IV and *Assassin's Creed* could prove interesting, but including it here would move our paper further afield from military settings. Regardless, it is interesting to note that the protagonist and antagonist in the *Grand Theft Auto* games have sometimes been of Serbian descent, an outcome that we have yet to witness in FPS.

militarized or based in any form of reality generally.⁶ Thus we trace the evolution of enemy and shooter images in FPS digital games over the period 2001 to 2013, to identify who the enemy and shooters are, if this enemy is a rival of the United States or the West, and what video game visual frames convey to audiences about societal threats.

Our research examines the most consequential and important shooter games released since 2001. We begin in 2001 so as to not only speak to the influence of the September 11 attacks on the gaming industry and its audiences, but also to capture the modern era of FPS and online gameplay after the release of *Halo* that year, a multi-billion dollar science fiction series that takes place in the context of interstellar warfare. Since development time for digital games can run the course of years, if not longer in some well-known cases, we would *not* expect that the September 2001 terrorist attacks on the United States changed the digital landscape immediately; rather we might see the emergence of certain enemies such as terrorists over time.⁷ The beginning of our period of analysis in 2001 allows us to examine who the enemy is during the period prior to the attacks, during the subsequent "War on Terror" era when the US and allies entered wars with Iraq and Afghanistan, and over the current postwar period. Do content producers pick targets that are allies of the West? Do the enemies in these games conform to contemporary rivals, or do game producers choose enemies of the imagination? And although it is beyond this course of this study to delve into effects of enemy images, we surmise based on the literature on framing and more recently the influence of entertainment media that the audience's real world perceptions and social understandings of enemies can be shaped by these choices.

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⁶ There are some third person style games in our dataset but these games focus on the gun as the point of view. Some franchises have alternated between third person and first person. Our coding rules focused on shooter games with the main objective being to kill or eliminate the enemy. For this reason some of the Tom Clancy series of games and 007 games are covered. We exclude puzzle based first person games like *Portal 2* since the objective is not necessarily the elimination of a target. We obviously exclude third person games that have brief periods of shooter style action like *Red Dead Redemption*, *Assassin's Creed, Metal Gear Solid*, and *Grand Theft Auto* since these are also puzzle based/objective games. These games are an obvious point of expansion for this project in the future.

⁷ However some recent releases have a much quicker turnaround, with the *Battlefield* and *Call of Duty* franchises producing games nearly annually at this point. The *Call of Duty* franchise has dueling teams collaborating on a three year production cycle.

We examine and code the enemies, context, and setting for all major FPS from 2001 to 2013.⁸ In our dataset of 57 games, we have included the top selling games moving over 1.5 million units each.⁹ We choose not to include games that have less commercial viability and more limited audiences because we wish to speak to the potential for influence on society, and thus it is sensible to focus on the transmission of ideas and visual frames as it relates to large numbers of individuals.

We do recognize two caveats related to analyzing this body of digital games. First, using sale figures to select our games may be missing the impact of both pirated games and rentals, and there is reason to believe that popular games might be underreporting audience exposure to games. Second, there is some concern over focusing solely on Western released games. However, Western games dominate the medium, and there are few examples of non-Western games that would motivate us to expand our coding at this juncture. It is important to note that we did not preselect any games based on who the enemy was—our selection criteria were motivated solely by sales and the date of release. We did exclude third person survival and adventure games such as *Grand Theft Auto* and *Red Dead Redemption*, which are different both stylistically and experientially, and as aforenoted, we excluded role playing/strategy games.

For the unfamiliar, players can participate in a game in single player mode (campaign mode) and in most games, the multiplayer mode, which can be in person through split screen or online. ¹⁰ We code first the campaign mode of the game, as it permits the most reliable coding of the enemy in particular, and also multiplayer modes where sides are often chosen at random in order to focus on the true opponent as this can be unclear in a campaign as it unfolds since some games include multiple enemies. The multiplayer mode is often what drives video game production, as participating online with a high-speed interaction is the predominant means of playing FPS games. For each FPS game, we looked into multiple aspects. First, we coded the image of the protagonist, the shooter/ally/hero—what entity they represented. Second, we coded each game for the enemy, again what entity they represent, both for

⁸ Several experienced gamers and experts in the field were consulted on the appropriateness and validity of our 62 games, where certain games should be added or excluded. Earlier versions of the dataset included *Dues Ex, Dishonored*, and the entire *Resident Evil* series. These games have been excised from the final data based on comments and suggestions given these games are not primarily combat games or in the first person, but rather goal and puzzle orientated games. We focus here on games where destruction and death are the drivers of gameplay.

⁹ Sales figures come from http://www.vgchartz.com [Accessed July 2014].

¹⁰ There are tens of millions of unique multiplayer gamers participating online each day, and even estimating how many is difficult. The issue of addictive online play has even garnered an FPS addiction helpline.

first enemies and where applicable, a second enemy. The enemy is the target and object of attack. This can shift for some games, therefore we do have a code for a secondary enemy if it is clear that there is no single focus for attack throughout the game. For most human opponents, the enemy was an identifiable national or ethnicity, although some enemies were generic humans without identifiable information. Finally, we also noted the principal country where the game was developed, although keeping in mind that games can represent a collaboration of production studies or staff across multiple countries.

To ensure our coding of enemy images was valid and reliable given the number of different enemies present across these games, we adopted a strategy involving multiple coders. Each coder played through available games recently or in the past. If the game was currently unable to played, the coder consulted walkthroughs and YouTube clips. The first coder, one of the authors, analyzed our 57 games designated FPS after vetting the initial list online. 12 The coder labelled enemies according to the information conveyed in Table 1 in the columns designated Enemy 1 and Enemy 2, where Enemy 1 speaks to the prominent enemy in the game, and Enemy 2 as an alternative or less prominent antagonist. As we focus on Enemy 1, the researcher then created broader categories for Enemy 1, for example combining Russian Ultranationalists and Russians for the broader category of Russians. The broader, more general categories of enemies are presented later in Figure 1. Our categories included the following, typically ethnic, identities: Russians, who were often Russian nationalists and ultranationalists but also representatives of the Russian state or future versions of a reconstituted Soviet Union; Latin Americans, who were often portrayed as terrorists; Middle Easterns, who were also generally depicted as terrorists; generic Humans of non-identifiable race or ethnicity; World War II era enemies, including both Nazi Germans and Japanese; North Koreans and Iraqis, who were later incorporated into an Other category. We also had non-ethnic identities including: Aliens that speaks to

¹¹ Our mixing of nationality and ethnicity (for example Russian and Latin American) is intentional in order to be comprehensive and to have a reliable coding scheme, rather than choose too narrow of categories that would introduce greater subjectivity and be less reliable.

¹² The dataset was initially larger, but was revised based on a Reviewer's concern over designating 5 games as FPS. We initially coded Army of Two; Army of Two: 40th Day; Gears of War; Gears of War 2; Gears of War 3. Based on the reviewer's concern, we dropped these 5 games from the analysis. For reference, all three Gears of Wars games use generic humans as the protagonist and Aliens as the enemy. Army of Two uses generic humans as the shooter, and Middle Eastern Terrorist as the enemy. Army of Two 40th Day uses generic humans for both shooter and enemy.

any extra-terrestrial being; and finally *Monsters*, who were zombie-like or mutant creatures. In total we had 8 broader categories of enemy images across 57 games.

As is common practice in studies of framing and content analysis, we then employed the services of a second coder, a research assistant, to ensure the reliability of our coding scheme. The second coder was armed with our 8 categories and 57 games, 13 but without awareness of Coder 1's identification. The second coder then analyzed the enemy images in these games either via direct play, YouTube videos, or imagery available online. The agreement expected by chance among the two coders was 16.0 percent, which is calculated based on having two unique coders, 57 games, and 8 categories of enemies. The second coder agreed with the first coder in a remarkable 91.2 percent of instances. A classic measure of intercoder reliability, Cohen's Kappa, is 0.0896 in this instance, with a standard error of 0.056, which is statistically significant at the .001 level, demonstrating that our coding scheme for enemies is reliable. For those few instances of disagreement, a discussion ensued, and a final code outcome was agreed upon after discussion among the two coders.

Findings

The central questions we now address include who are the protagonists and enemies in FPS; do enemies correspond to the empirical rivals of the West; how do enemy images evolve over time, and what is the setting for the conflict? Table 1 presents the entirety of our data collection effort on first person shooter games over the period 2001 to 2013, a total of 57 games with over 390 million units sold.

[Insert Table 1 about here.]

The data for Table 1 are sorted by the volume of a game's sales in millions of units, column 3 of the table. The first column records the title of the game, and the second its release date. Column 4 notes the protagonist in the game, the country-affiliation and identity taken on by the first person shooter.

Columns 5 and 6 list the enemies represented, including when applicable, a second enemy choice.

Columns 7 and 8 list the context and location of where the digital game story takes place, and the final

¹³ The coder actually coded 62 games. There was no disagreement in the coding for the 5 games that were eliminated based on the Reviewer's concerns.

¹⁴ Cohen's Kappa and percent agreement were calculated using Stata13. Percent agreement in this case is calculated by using information on each coder and their use of each category over 57 games. The calculation by hand is 12/57*10/57 + 4/57*5/57 + 4/57*4/57 + 2/57*2/57 + 4/57*4/57 + 12/57*11/57 + 12/57*13/57 + 7/57*8/57 = 0.160, or expressed as a percentage, 16.0.

¹⁵ There were 5 instances of disagreement.

column notes the country of the game's content producers. Concerning sales figures, the *Call of Duty* (COD) series has been remarkably successful in generating worldwide sales, featuring in the top five best-selling games and 7 of the top 10 overall. The *Halo* series has also been quite successful, with 2 of the top 10. *Battlefield 3* of the aforementioned *Battlefield* series rounds out the top 10 with over 16 million units sold.

Who Are the FPS Protagonists?

We first turn to the shooter or the protagonist in digital games. For this, we create a summary figure of Table 1 Column 4's data, using five protagonist categories: generic *Humans*; protagonists identified as being from the *United States*; those identified as *United Nations* personnel; *United Kingdom*; and finally a category that includes *US and Others*, where US shooters join others in combat. It is notable here that not all shooters in all games are depicted as males but most are.

[Insert Figure 1 about here.]

Of the 57 games coded, the US was the protagonist 24 times, or 47.4 percent of the games. The next most popular category was generic Humans. Most of these were Caucasian, most often in games taking place Off Earth (outer space). At this point it is unclear if the movement towards the generic Human category represents a view of us versus them in the global fights, or is purely driven by sales considerations. These ideas need to be examined through interviews with the developers. Overall, there is clearly a problem in representation, as with movies, in that not many diverging perspectives are active in digital games. Future research agendas can be focused on the nature of the protagonist and hero.

The issue at the heart of the conflicts that would drive the protagonist tends to be obscured in games in favor of the madmen perspective, which includes the need to terminate a super-enemy at the end of a level/game. Instead of grievances, we have specific leaders who are responsible for conflicts, which suggests that digital games have a naïve view in general of the motivations of warfare. Instead of examining common themes of inequality or territoriality in conflict, games focus on the deeds of individuals pulling the strings behind the scenes for private gain, as is typical in the *Call of Duty* and *Battlefield* series.

It is also telling that the best-selling games most often feature the United States as the protagonist. Although the U.S. is the largest market for these games, there are considerable overseas revenues through many markets, and in this regard, generic Humans would be the most sensible choice in order to avoid alienating players who are even remotely antagonistic to the US. Indeed American hegemony seems not to have declined in FPS digital games. We should note, however, that in multiplayer games, the protagonist is not stable given that sides need to be chosen for forms of

gameplay such as *deathmatch*, or *conquest*, *capture the flag*, and *rush* objectives, and one may find themselves playing a protagonist listed here or even the enemy in campaign mode. ¹⁶ Indeed Schulzke (2013c) discusses the option of playing as a terrorist protagonist in several games and its consequences.

Who Are the FPS Enemies?

We now turn to our central motivating question: who are the enemies in FPS games? Although Table 1 presented these data, we provide summary information in Figure 2. Figure 2 offers a bar chart coding enemies into 8 categories to offer a broader perspective on the data.

[Insert Figure 2 about here.]

As we can see in Figure 2, the most common forms of enemies are generic, unidentifiable *Humans*, used in 13 games. Humans are featured in a variety of game settings ranging from underwater to outer space, and include a range of enemies from non-descript to cults to pirates. Most important for international affairs, *Russians* appear 12 times as the enemy, either as Russian nationalists or as a re-assertive Russian Federation in alternative reality based games. Those from the Middle East and Latin America are framed as terrorists, 11 instances in total. *Aliens* are the next most popular at 11 instances. Those from the Middle East and Latin America appear next most common, in six and five instances respectively. *Monsters*, which include both zombies and mutants, are used in 4 games. They are followed by *World War II* enemies (both Nazi Germans and Japanese in four games total), and finally, *Other*, a residual category which includes one instance of North Korean and one instance of Iraqi enemies.¹⁷

Consistent with expectations based on the work of Maness and Valeriano (2015), Russians are prevalent enemies. Among real-world threats linked explicitly with a nation-state, Russians dominate FPS with 12 uses, not even eclipsed by the combination of Middle Eastern (six uses) and Latin American (five instances) terrorists. In fact, referring back to Table 1, among the top five games by sales figures, Russian enemies are featured in four—as they are the typical enemy for the *Call of Duty* series. Content producers' preference for Russians is consistent with the frequent foreign policy disputes between the West and Russia as suggested by the rivalry framework, but their choice also has greater repercussions

¹⁶ The *Battlefield* series is notable given that in certain circumstances, one may be required to play as Chinese, Russian, Japanese—or even Terrorists launching improvised explosive devices (IEDs) against Americans.

¹⁷ The *Call of Duty* series includes a Zombie mode in most games. Since this mode is not central to the campaign or multiplayer experience, we do not code the COD games as being zombie. That the latest version of the series, *Advanced Warfare*, makes the Zombie mode downloadable add-on content only reinforces this perspective.

for market share than using generic *Humans* or *Aliens* or *Monsters*, as allies of Russia and Russians could be wary of targeting Russians in games.

As the War on Terror dominated the time period under investigation, it is not surprising to find that terrorists are prominent enemies in FPS. Terrorists, on the whole, equal 11 instances—close to the number of Russians enemies at 12. However, as we pointed out above, the terrorists are of two categorically different geographies and ethnicities. That is, of the 11 games featuring terrorists, six appear of generic Middle Eastern origin (one is explicitly the Taliban), but we also see generic Latin American terrorists in five games, typically involved in the distribution of narcotics. The use of Latin American enemies includes the *Tom Clancy* series and the recently released *Call of Duty: Ghosts*—where the Middle East is devastated through nuclear attack leaving Latin America as the sole oil producing region. Terrorists as enemies are an understandable choice on the part of content producers, as there are little risks of declining market share by using them, and moreover, most of the world can identify with terrorism as a threat. That terrorists are not a more common enemy than Russians again points to the importance of enduring rivalries in understanding the framing of enemies in digital games.

Given the finding concerning Russians, it is puzzling not to discover enemies from other rivals such as China, Iran, North Korea, or Libya featured often in digital games. Rivalries with these states and the West were as or more intense than that with Russia over our period of analysis, which ends in 2013 before the onset of hostilities in Ukraine. It could be that what makes Russia unique is the familiarity with Russia and the Soviet Union, driven by the historic nature of the rivalry through the Cold War period. Many of today's content producers would have been born and spent at least the early part of their childhood with the Soviet Union as the primary enemy of the West. A constructivist perspective would highlight the threat of the past and imagination, rather than reality, and certainly Russian enemies would be a suitable choice given the tendency for Russian enemies to remain in popular culture. Finally, the use of Russian nationalists as enemies is sensible for games today given the perception among those in the West that a proportion of the Russian population and parts of the political leadership are looking to reassert Russian empire. Undoubtedly interviews with content producers of games can help adjudicate among these explanations and perhaps reveal new ones.

Returning to other rivals, China appears as the enemy in one instance, *Battlefield 4*, and even there, as a secondary enemy. We previously noted the uproar in China over this decision from game producers. In the case of China, in addition to the reasons we highlighted above, developers may perceive the country to be an untapped market for their video games, and thus are wary of selecting it as an enemy, where the Russian market is more closed due to rampant piracy. North Koreans are

featured only once in the game *Homefront*, notwithstanding the regime's open hostility to the U.S. and regular attention from Western news media. Despite the Iraq War dominating our period of analysis, Iraqis are used only once as an enemy and this was presented by a British developer. Moreover, we fail to see soldiers from real world rivals Iran or Libya featured in games, even with their expressed hostilities toward the US, and the fact that market based concerns should not drive developers away from using them. ¹⁸ Serbia, with whom the West fought the 1999 Kosovo War, fails to appear. ¹⁹

A number of games feature non-humans as the enemy. As we noted above, 11 games select aliens as enemies, and four depict what we call *Monsters*, which includes zombies and mutants. In terms of threat and capability and imagination, these are obvious choices, and one can create non-human enemies to be as powerful and evil as desired. And given that (to our knowledge) aliens and monsters are not consumers of digital games, it would seem plausible that they would be a common or even the most common enemy. There is no risk over a loss of market share in using them. Add to that the recent upsurge in the popularity of zombie movies (e.g. *Zombieland*) and television shows (e.g. *Walking Dead*), and it is surprising that there are not more monster-based FPS games.²⁰ It is possible that this situation could change as developers seek to capitalize on the public's fascination with zombies, although such collective interest can also be ephemeral. That aliens and monsters are not more common suggests that developers and gamers still value experiences that are more akin to the real world. Since Russians are the principle enemies, we tentatively conclude that our rivalry and constructivist framework offers valuable insight into who the enemies are in digital games.

Context of FPS Battle

Our next figure presents the context of our games, the settings where conflict takes place. For Figure 3, we combine information from Columns 7 and 8 of Table 1 to delineate four settings: *Reality*, where settings mimic the real word and are held on planet Earth; *Alternative Reality*, where for example, a setting might incorporate the Earth in a very distant future; and *Off Earth* (conventionally, outer space). To highlight the distinction between Reality and Alternative Reality, the latter games deviate from reality/history in one or more important ways. An alternative reality game could take a

¹⁸ Iran is an additional enemy option in Battlefield 3.

¹⁹ The only case we found of Serbian enemies was in *Tom Clancy's Rainbow Six: Rogue Spear*, which was not coded because it did not meet our sales threshold.

²⁰ The *Walking Dead* (2013) adventure game did sell well, but this game can be considered more of "choose your adventure" story rather than a FPS.

point in history and extrapolate a new pathway offering a different present emerging from a given moment in time. On the contrary, reality games are anchored in a definitive moment.

In general, in Figure 3 we see a clear domination of the sales charts by those set in an Alternative Reality. *Alternative Reality* is the context for 30 games, with scenes that resemble the world as we know it but are different in important ways. In such games, Russian ultranationalists or the threat from a future "Russian Federation" are prominent as enemies, examples including the *Call of Duty* and *Battlefield* series.

Terrorists are also featured here, as is the sole instance of North Korea as the enemy, with North Koreans invading the United States in the game *Homefront*. This finding suggests that games can be an entrance into a different version of reality, one that approximates the world as we know it, but differs in some important dimension(s).

[Insert Figure 3 about here.]

It is also telling that reality-based games number only 8 of 57, and thus do not dominate the market. It may be that the developers generally prefer to avoid real world problems or circumstances, as perhaps the gaming experience could become uncomfortable if the context was too similar to the real world. Of our eight reality games, four were based on World War II plots, and four took place in other more contemporary settings, chronologically, the Cold War (*Call of Duty Black Ops* series); Desert Storm (*Conflict: Desert Storm*) and post 9/11 Middle East (*Medal of Honor*). Turning away from our planet, 19 of our coded games using an *Off Earth* setting, battles that take place outside Earth in outer space. As one might assume, the games set in outer space most times feature aliens as the enemy. Among these, the *Halo* series is well known and indicative of the style, but such games as the *Killzone* series also use the outer space context, plus the recently popular game *Destiny*.²¹

Publishers and Geography

We also consider the origins of the content producers, the last column of Table 1. Here we see that the vast majority of games are developed and released by American companies—a total of 42 of 57 games—although in fairness, many of these games represent a collaboration of producers across countries.²² One can also notice several interesting aspects of the data in Column 9 of Table 1. First,

²¹ Games such as *Doom* and *Quake* started this genre. *Destiny* is not included in our dataset, having been released in 2014.

²² We do include *Metroid Prime* here in these 42, which represents a collaboration between developers in the US and Japan.

games that deviate from standard enemy choices tend to be produced outside of the US. For example, the Tom Clancy series utilizing Latin American terrorists was developed by a French Canadian team, Ubisoft

in Montreal. *Battlefield 4,* which we have spoken of several times, were developed by a Swedish firm and this is the game that presents China as possible enemy.

Concerning protagonists, even production houses outside of the US frequently use the US as the point of entry for the player. That is, among the 26 games where the US is featured as the protagonist as seen in Figure 1, seven of these games (27 percent) were produced outside of the US. As a corollary, among the 42 games produced in the US, 24 (57.1 percent) feature a protagonist other than a US—most typically a generic human, although the United Kingdom was also used in 4 of these games.²³

Dynamics of Enemy Images over Time

Lastly, we turn to the evolution of enemy images in digital games. Our interest concerns the development of real world enemies associated with a given geography or ethnicity (e.g. *Russian, Latin American*, or *Middle Eastern* enemies) over time—particularly in comparison and contrast with generic *Human* or *Alien* enemies. Have we seen a rise of enemies set in contemporary contexts, particularly as issues such as hostilities among the West and Russia or the War on Terror gain traction in popular discourse? Figure 4 characterizes enemies by year over our more recent period of analysis using a bar chart. We include in this chart five categories of enemy images, eliminating *WWII Enemies* and *Other* for the sake of visual clarity, and for the same reasons, combining *Monsters* with *Aliens*.

[Insert Figure 4 about here.]

The x-axis for Figure 4 is the release date with each year in our analysis incorporated. The darkest bar reflects Russians as enemies, the next two darkest are Middle Eastern and Latin American enemies respectively, and then lighter shades reflect Aliens and Monsters (combined category) and generic Humans. To help interpret the figure, where all five bars are present for a given year, for example 2002 and 2008, one (or more) game was released for each respective enemy image. In contrast, in 2004 and 2005 for example, only games with Russians and Aliens/Monsters were released—there were no games with Latin Americans or Middle Eastern terrorists as enemies.

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²³ Albeit 3 of these instances refer to the use of James Bond, Agent 007.

There are a several findings of note on Figure 4. There is only one observable spike in the figure in 2004, and it relates to four games using Alien or Monster enemies—less relevant to our international interactions interest. Perhaps what is not present is most interesting: there are no spikes in, for example, the use of Middle Eastern enemies in the wake of the 2001 9/11 attacks, or the 2005 London attacks, or at the height of the War on Terror period. Nor is there an observable change in Russians as the enemy. In fact, Russians are featured throughout, with 2006 and 2012 as the only years where a game was released without Russian enemy images. Russian enemies have not only been a common choice in the modern period as we saw in Figure 2, but Russian enemies have been relatively constant over the past twelve years.²⁴ This finding suggests a complex interaction between real world historical threats and the legacy of serious rivalry. We suspect that the longer a Global War on Terror lasts or the looming China threat exists in popular perception, the greater the likelihood that these enemies will increase in games. However the recent resurgent conflict between the West and Russia over such issues as Ukraine and the Arctic along with the historical legacy of rivalry should see a continuation in the use of Russian enemies in digital games.

Discussion

We have devoted our attention to the visual framing of enemies in First Person Shooter digital games. We have argued that scholars need to give more attention to entertainment media generally and to digital games particularly. Our work raises and addresses important questions related to the visual framing of enemies that much of the mainstream international relations and political science literatures have missed. The presentation and depiction of enemies in video games is a logical starting place to a broader understanding of games and their effects, as understanding rivalries and enemies have important consequences for international relations, and games could affect audience attitudes and beliefs.

This research is the first systematic coding and analysis of enemy images in digital games, an important exploration given the rise of digital media as a potential transmission device of attitudes. We know now that among real-world threats, Russians are featured most prominently, followed by those from the Middle East and Latin America under the terrorism context. The frequent use of those of Middle Eastern descent and a recent rise of Latin American images as terrorists could also have

²⁴ We recognize that we are limited to only 12 years of data, and thus one should be cautious in making inferences about trends. Our goal will be to update the data as sales figures stabilize after the Christmas season each year given funding.

implications for users' perceptions of those of Middle Eastern and Latin American backgrounds. The concern we have raised is that negative attitudes toward those of Slavic decent, Latin American, or Middle Eastern could be amplified by digital games. Beyond enemies, we showed that the US is frequently portrayed as the protagonist. Even controlling for location of the production house does not alter this finding, one likely driven by marketplace realities, but also an open query for interviews with content producers. We further noted that games tend to avoid modern real world contexts and locations, preferring alternative realities that are still tied to Earth and our human experience, but differing in important ways, for example taking a different historical turn. Finally, we noted that Russians enemies are common over time, and that there were no spikes in the use of Middle Eastern enemies where might be anticipated by historical events. We cannot know if terrorists would show up as enemies without the context of 9/11 and the War on Terror, but it is telling that a number of terrorists in games come from Latin America rather than exclusively from the Middle East.

An added consideration we have neglected thus far is ethics and the enemy in digital games. Throughout our investigations we note that ethical considerations are not a prominent component of digital games. As a first point, it is rare for civilians to even exist in games. To illustrate, the *Call of Duty* and *Battlefield* franchises offer battle scenes in large metropolitan areas but lacking civilian presence, and thus are fought in what could be considered an urban wasteland. One might presume that content producers do not want to be accused of insensitivity by depicting scenes of massive civilian death. However, there are a few games that do touch upon what could be considered ethical choices in action. In *Dues Ex*, lethal force is always an option regardless of enemy or bystander, and there is a trophy awarded if bystanders are not killed. The game *Dishonored* is similar in that the player is an assassin, yet each kill is a choice open to the player. Lastly, in the *BioShock* series, one can save characters known as "Little Sisters," which can affect the game's end. Second, similarly, collateral damage is not typically an issue in these games. Some engines now emphasize the destructive capabilities of the shooter, for example featuring collapsing buildings if a structure is targeted too frequently—yet this destruction is done with no thought to innocents. It is also of note that the drone debate has not eluded digital games. Both *Battlefield* and *Call of Duty* feature targeting and kill drones in past versions of the series, but like

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²⁵ As a notable aforementioned exception, *Call of Duty: Modern Warfare 2* incorporated a controversial scene with the mass killing of Russian civilians in an airport.

²⁶ It is perhaps not surprising that one person, Harvey Smith, was Lead Designer for *Deus Ex* and cocreative director for *Dishonoured*.

basic gameplay, there is no consideration for civilians or innocents.²⁷ It might be illuminating to see how future games incorporate civilians in decision making, particularly in the case of drone usage and this issue should be the focus of a future investigation.

Future Directions

It will be interesting to observe future developments in both protagonists and enemies in digital games. Will increased globalization of the industry and the expansion of content producers to outside of the US mean that we will start to see more protagonists from Europe, East Asian, or even Russia as the protagonist? Our final figure suggests that despite changing political circumstances over our period under investigation, there have been no clear trends in the use of real word enemies over time, and these data would suggest that the future could look the same as far as gaming content is concerned.

Much work remains. At the present, we have offered a foundation for understanding the potential for the effects of games on the construction of the enemy image, built around the literature on the social construction of the enemy, visual framing and its effects on audiences, and the rivalry image. We have not yet explored the effects of encountering such enemies on players' attitudes and beliefs directly. Future studies can turn to experimental research designs exploring whether the use of Russian, Middle Eastern, or Latin American enemies in games affects attitudes such as hostility toward these particular foes, or even anti-immigrant sentiment. Such studies would randomly assign participants to play FPS games or to a control, manipulating the enemy across treatment groups, and adopting a control condition where participants shoots a generic human or alien-monster, or perhaps play a non-FPS. In this way we can understand transmission of attitudes to the user. There is also a need to interview content producers to understand what influences their decisions and motivations for selecting an enemy.²⁸

We believe that our work here establishes the importance of digital games in the international relations context and carves out a foundation for future research agendas on digital games. As digital games have become ever-more common in households and continue to gain in popularity, scholars should not ignore their implications. More researchers can investigate the impact of games, exploring, for example, issues including gender and discrimination.²⁹ And we hope to see studies moving beyond

²⁷ The exception was *Call of Duty 4* where the player is to avoid hitting teammates during AC-130 missions

²⁸ For an example of a study incorporating interview evidence, Sisler (2006) interviewed the creator of *Under Ash* and *Under Siege*—two games with Israeli forces are the targets. According to the producer and the title of the interview, "in videogames, you shoot Arabs or Aliens."

²⁹ Call of Duty is only getting its first true female protagonist in late 2015.

the relationship between the US military and the gaming industry towards a broader understanding of ethics and moral choices possible in games.

Certainly the long conflict with Russia and lingering perceptions of their threat and capability have had repercussions for enemy choices in games. It is interesting to consider possible feedback mechanisms. We have studied more recent conflicts such as the Global War on Terror or the island based disputes surrounding China and its enemies have yet become a frequent setting in games. We theorize a loop where the enemy image is created by the confluence of both entrenched real world situations and rivalries and by marketing decisions. We have also argued from a rich literature on entertainment media that we can expect that the choice of enemies in games will have consequences for perceptions of users. Such consequences can then feedback into the process whereby enemies are chosen for games, thus sustaining and reinforcing the perception of threat. More research and awareness of the potential of digital games to transmit information to the user and shape perceptions of threat will allow us to understand and disentangle this complex process. Games clearly provide new insights into culture and society, and the effects of the visual frames employed can no longer be overlooked.

REFERENCES

Aday, Sean. "The Real War Will Never Get on Television: An Analysis of Casualty Imagery in American Television Coverage of the Iraq War." In *Media and Conflict in the 21st Century*, edited by Phil Seib. New York, NY: Palgrave, 2005.

Adkins, Todd and Castle, Jeremiah C. "Moving Pictures? Experimental Evidence of Cinematic Influence on Political Attitudes." *Social Science Quarterly* 95, no. 5 (2014): 1230-1244. http://onlinelibrary.wiley.com/doi/10.1111/ssqu.12070/abstract

Alexander, Harriet. "Argentine Company Creates Video Game for 'Police' to Retake Falklands from 'Terrorists.'" *Telegraph:* March 26, 2013.

http://www.telegraph.co.uk/news/worldnews/southamerica/falklandislands/9955588/Argentine-company-creates-video-game-for-police-to-retake-Falklands-from-terrorists.html [Accessed February 15, 2014]

Allen, Robertson. "The Army Rolls through Indianapolis: Fieldwork at the Virtual Army Experience." *Transformative Works and Cultures*, 2 (2009)

[Volume 2. No issue or page numbers available, see link below] http://journal.transformativeworks.org/index.php/twc/article/view/80/97

Apperley Tom. *Gaming Rhythms: Play and Counterplay from the Situated to the Global*. Amsterdam: Institute of Network Cultures, 2010.

Barlett, Christopher P., Harris Richard J, & Bruey, Callie. "The Effect of the Amount of Blood in a Violent Video Game on Aggression, Hostility, and Arousal." *Journal of Experimental Social Psychology* 44, no 3. (2008): 539-546.

Bartsch, Anne and Frank.M. Schneider. "Entertainment and Politics Revisited: How Non-Escapist Forms of Entertainment can Stimulate Political Interest and Information Seeking." *Journal of Communication* 64, no 3. (2014): 369-396.

Bavelier, Daphne, C. Shawn Green, .Doug Hyun Han, Perry F. Renshaw, Micheal M. Merzenich, and Douglas A. Gentile. "Perspectives—Viewpoint: Brains on Video Games." *Nature Reviews Neuroscience* 12. (2011)

Volume 12. No issue number.

http://www.nature.com/nrn/journal/v12/n12/full/nrn3135.html

Bialasiewicz Luiza; David Campbell, Stuart. Elden, Stephen. Graham, Alex Jeffrey, and Alison J. Williams. "Performing Security: The Imaginative Geographies of Current US Strategy." *Political Geography* 26, no. 4 (2007): 405-422.

http://www.sciencedirect.com/science/article/pii/S096262980600151X

Bimber, Bruce. *Information and American Democracy: Technology in the Evolution of Political Power.* New York: Cambridge University Press, 2003.

Chan, Dean. "Playing with Race: The Ethics of Racialized Representations in E-Games." *International Review of Information Ethics* 4, (2005): 24-30.

No issue number available

http://ro.uow.edu.au/artspapers/1858/

Chong Dennis., and James N. Druckman. "Framing Theory." *Annual Review of Political Science* 10 (2007): 103-126.

No issue number available

http://www.annualreviews.org/doi/abs/10.1146/annurev.polisci.10.072805.103054

Coleman, Renita. "Framing the Pictures in our Heads: Exploring the Framing and Agenda-Setting Effects of Visual Images." In *Doing News Framing Analysis: Empirical and Theoretical Perspectives*, edited by Paul D'Angelo and Jim A. Kuypers, 233-261. New York: Routledge, 2010.

Der Derain, James. Virtuous War: Mapping The Military-Industrial-Media-Entertainment Network. London: Routledge, 2009.

Dewey, Caitlin. "Chinese Army-Designed Video Game Lets Players Fight Japan for the Diaoyu Islands." Washington Post: July 26, 2015.

http://www.washingtonpost.com/blogs/worldviews/wp/2013/07/26/chinese-army-designed-video-game-lets-players-fight-japan-for-the-diaoyu-islands/ [Accessed February 15, 2014]

Diehl, Paul & Goertz Gary. War and Peace in International Rivalry. Ann Arbor: University of Michigan Press, 2000.

Dill, Karen E., Brown, Brian P. & Collins Michael A. "Effects of Exposure to Sex-Stereotyped Video Game Characters on Tolerance of Sexual Harassment." *Journal of Experimental Social Psychology*, 44. No 5. (2008): 1402-1408.

Dittmer, Jason. Popular Culture, Geopolitics and Identity, Plymouth: Rowman and Littlefield, 2010

Entman, Robert. "Framing Media Power." In *Doing News Framing Analysis: Empirical and Theoretical Perspectives*, edited by Paul D'Angelo and Jim A. Kuypers. Pages 332-355. New York: Routledge, 2010. Pages 332-355

Festl, Ruth, Michael Scharkow, and Thorsten. Quandt. "Militaristic Attitudes and the Use of Digital Games." *Games and Culture* 8, no. 6 (2013): 392–407.

http://www.researchgate.net/publication/260264831_Militaristic_attitudes_and_the_use_of_digital_games

Gangnon, Frederick. 2010 "Invading Your Hearts and Minds': Call of Duty® and the (Re)riting of Militarism in U.S. Digital Games and Popular Culture." European Journal of American Studies. 5 no. 3.

Ghosn, Faten, Palmer Glenn & Bremer Stuart A. 2004. "The MID3 Data Set, 1993–2001: procedures, coding rules, and description." *Conflict Management and Peace Science* 21, 133-154. Number 2

http://cmp.sagepub.com/content/21/2/133.short?rss=1&ssource=mfc

Good, Owen. "Battlefield 4 'Illegal' in China, But It Wasn't For Sale There Anyway." Kotaku: December 28, 2013. http://www.Kotaku.com/battlefield-4illegal-in-china-but-it-wasn't-for-sal-1490808375 [Accessed 15 Feb 2014]

Graber, Doris A. "Seeing is Remembering: How Visuals Contribute to Learning from Television News." *Journal of Communication* 40. No 3. (1990): 134-155.

Halter, Ed. From Sun Tzu to Xbox, War and Video Games. New York: Thunder's Mouth Press, 2006.

Haynes, Cynthia. "Armageddon Army; Playing God, God Mode Mods, and the Rhetorical Task of Ludology." *Games and Culture* 1, no. 1 (2006): 89-96.

Volume 1, Number 1

http://gac.sagepub.com/content/1/1/89.short

Herrmann, Richard K. and Michael P. Fisherkeller. "Beyond the Enemy Image and Spiral Model: Cognitive-Strategic Research After the Cold War." *International Organization*. 49. No. 3. (1995): 415-450.

Hinkle, David. "NPD: US Video Game Sales Reach \$15.39 Billion in 2013." Engadget: February 12, 2014. http://www.joystiq.com/2014/02/12/npd-us-video-game-sales-reach-15-39-billion-in-2013/ [Accessed May 15, 2014]

Höglund, J. "Electronic Empire: Orientalism Revisited in the Military Shooter." *Game Studies* 8, no. 1 (2008)

No page numbers available

http://gamestudies.org/0801/articles/hoeglund

Huntemann, Nina B. and MatthewT. Payne, eds. *Joystick Soldiers: The Politics of Play in Military Video Games*. New York, NY. Routledge, 2009 New York, NY

Jahn-Sudmann, Andreas and Ralf Stockmann, eds. *Computer Games as a Sociocultural Phenomenon: Games without Frontiers, War without Tears*. New York: Palgrave Macmillan, 2008
New York, NY

Should be eliminated---as far as we can tell, the work was not actually published. Paper is unlisted on author's CV. Thus relevant sentences were struck from manuscript. See this link for access to the paper: http://www.globalmediajournal.com/open-access/gaming-terrorism-and-the-right-to-communicate.pdf

Klein, James P. Goertz Gary, and Diehl Paul "The New Rivalry Dataset: Procedures and Patterns." *Journal of Peace Research* 43, no. 3 (2006):331-348.

http://jpr.sagepub.com/content/43/3/331.abstract

Leonard, David. "Unsettling the Military Entertainment Complex—Video Games and a Pedagogy of Peace." Studies in Media and Information Literacy Education (2004):
Volume 4, Issue 4

http://www.synergiescanada.org/journals/utp/120764/v82m304n44j9/4lu7213r34740854

Machin, David and Usama Suleiman. "Arab and American Computer War Games: The Influence of a Global Technology on Discourse." *Critical Discourse Studies* 3, No. 1 (2006): [page numbers here] Pages 1-22

http://www.tandfonline.com/doi/abs/10.1080/17405900600591362

Maness, Ryan. and Brandon Valeriano. *Russian Coercive Diplomacy: Foreign Policy Conflict and Accommodation in the Post-Cold War Era*. New York: Palgrave, 2015

Mulligan, Kenneth., and Philip. Habel. "An Experimental Test of the Effects of Fictional Framing on Attitudes." *Social Science Quarterly* 92, no. 1. (2011):79-99 http://onlinelibrary.wiley.com/doi/10.1111/j.1540-6237.2011.00758.x/abstract

Mulligan, Kenneth, and Philip Habel. "The Implications of Fictional Media for Political Beliefs." *American Politics Research* 41, no 1. (2013):122-146.

http://apr.sagepub.com/content/41/1/122.abstract

Nexon, Daniel H. and Iver B. Neumann. "Introduction: Harry Potter and the Study of World Politics." In *Harry Potter and International Relations*, edited by Daniel Nexon and Iver Nueman Lanham: Rowman and Littlefield Publishers, 2006

Onuf, Nicholas *World of Our Making: Rules and Rule in Social Theory and International Relations*. Columbia, S.C.: University of South Carolina Press, 1989.

Ottosen, Rune. "Enemy images and the journalistic process." *Journal of Peace Research* 32, no 1. (1995): 97-112.

http://jpr.sagepub.com/content/32/1/97

Power, Marcus. "Digitized Virtuosity: Video War Games and Post 9/11 Cyber-Deterrence." *Security Dialogue* 38. No. 2. (2007): 271-288.

Number 2

http://sdi.sagepub.com/content/38/2/271.abstract

Prior, Markus. *Post-Broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections*. Cambridge: Cambridge University Press, 2007.

Robinson, Nick. "Videogames, Persuasion, and the War on Terror: Escaping or Embedding the Military-Entertainment Complex?" *Political Studies* 60. No 3. (2012): 504-522.

http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9248.2011.00923.x/abstract

Scheufele, Dietram .A. and David. Tewksbury. "Framing, Agenda Setting, and Priming: The Evolution of Three Media Effects Models." *Journal of Communication* 57. No 1. (2007):9-20.

http://onlinelibrary.wiley.com/doi/10.1111/j.0021-9916.2007.00326.x/abstract

Schulzke, Marcus. "Rethinking Military Gaming: America's Army and its Critics." *Games and Culture 8. No.* 2 (2013a): 59-76.

gac.sagepub.com/content/8/2/59.full.pdf

Schulzke, Marcus. "Simulating the War on Terror: Counterterrorism Narratives in Video Games." *New Political Science* 35. No. 4. (2013b): 586-603.

http://www.tandfonline.com/doi/abs/10.1080/07393148.2013.848703

Schulzke, Marcus. "Being a Terrorist: Video Game Simulations of the Other Side of the War on Terror Media." *Media, War & Conflict* 6, no. 3. (2013c): 207-220.

http://mwc.sagepub.com/content/6/3/207.abstract

Sides, John and Kimberly. Gross. "Stereotypes of Muslims and Support for the War on Terror." *American Journal of Political Science* 75, no 3. (2013): 583-598.

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8948583&fileId=S0022381 613000388

Sisler, Vit. "In Videogames You Shoot Arabs or Aliens – Interview with Radwan Kasmiya." *Umelec International* 10, no. 1 (2006): 77-81

http://www.digitalislam.eu/article.do?articleId=1418

Sisler, Vit. "Digital Arabs: Representation in Video Games." *European Journal of Cultural Studies*. 11, no 2. (2008):205-219.

http://ecs.sagepub.com/content/11/2/203.abstract

Smith, Graham. "Interview: CoD's Military Advisor Versus 12-Year-Old Boys." *PC Gamer Website* (September 16, 2010), http://www.pcgamer.com/2010/09/17/interview-cods-military-advisor-versus-12-year-old-boys/ [Accessed on 16 August 2014].

Stahl, R. "Have You Played the War on Terror?" *Critical Studies in Media Communication* 23, no 2. (2006):112-130.

http://www.tandfonline.com/doi/abs/10.1080/07393180600714489

Stahl, Roger. Militainment, Inc.: War, Media, and Popular Culture. New York; London, Routledge, 2010.

Susca, Margot A. "Why We Still Fight: Adolescents, America's Army and the Government-Gaming Nexus." *Global Media Journal*, 12, no 20. (2012):

No page numbers

Tomlinson, Simon. "'UK Hackers' Attack Argentine Online Video Game Which Recreates Scenes from Falklands and Allows Players to Shoot British 'Terrorists." *Daily Mail:* March 29, 2013. http://www.dailymail.co.uk/news/article-2300939/UK-hackers-attack-Argentine-online-video-game-Counter-Strike-recreates-scenes-Falklands-War.html [Accessed February 15, 2014]

Valeriano, Brandon. 2013a. *Becoming Rivals: The Process of Interstate Rivalry Development*. New York: Routlege.

Valeriano, Brandon. 2013b. "Teaching international politics with film." *Political Science Journal of Education*. 91: 52-72

Vasquez, John A. The War Puzzle. New York: Cambridge University Press, 1993.

Velez, John.A., Tobias Greitemeyer, Jodi L. Whitaker, David R. Ewoldsen, and Brad J. Bushman. "Violent Video Games and Reciprocity. The Attenuating Effects of Cooperative Game Play on Subsequent Aggression." Communication Research (forthcoming)

Article is forthcoming---No volume information available http://crx.sagepub.com/content/early/2014/09/26/0093650214552519.abstract

Wendt, Alexander. Social Theory of International Politics. Cambridge: Cambridge University Press, 1999.

Williams, Bruce.A. and Micheal X. Delli Carpini. *After Broadcast News: Media Regimes, Democracy, and the New Information Environment*. LOCATION: Cambridge University Press, 2011.

New York

Wolfsfeld, Gadi, Paul Frosh, and Maurice Awabdy. "Convering Death in Conflicts: Coverage of the Second Intifada on Israeli and Palestinian Television." *Journal of Peach Research* 45, no 3. (2008): 401-417.

Wouters, Pieter., Chrisfof van Nimwegen, Herre van Oostendorp, and ErikD. van der Spek. "A Meta-Analysis of the Cognitive and Motivational Effects of Serious Games. " *Journal of Educational Psychology* 105, no. 2 (2013):249-265.

http://psycnet.apa.org/index.cfm?fa=buy.optionToBuy&id=2013-03484-001

Table 1. Sales, Protagonists, Enemies, Context, Locations for First Person Shooter Games, 2001-2013.

Title	Date	Units Sold	Protagonist	Enemy 1	Enemy 2	Context (Battle)	Location	Production Origin
Call of Duty Black Ops	2010	29.22	US	Russians		Cold War	Global	US
Call of Duty MW3	2011	29.04	US	Russian Ultranationalists		Future Terrorist Plot	Global	US
Call of Duty Black Ops 2	2012	24.49	US	Latin American (Terrorists)		Post Cold War	Global	US
Call of Duty Modern Warfare 2	2009	24.22	US	Russian Ultranationalists		Counterterror Taskforce	Afghanistan	US
Call of Duty Modern Warfare	2007	18.98	UK	Russian Ultranationalists	Middle Eastern Nationalists/Terrorists	Near Future	Russia	US
Halo 3	2007	18.05	Humans (United Nations)	Aliens		26th Century	Off Earth	US
Call of Duty Ghosts	2013	16.42	US	Latin American (Terrorists)		Alternative Reality	South America	US
Call of Duty Gliosts	2013	10.42	03	Rogue CIA (with Middle		Alternative Reality	Journ America	03
Battlefield 3	2011	16.35	US	Eastern Terrorists)		Future Terrorist Plot	Iraq	Sweden
Call of Duty World at War	2008	14.96	US	Japanese		World War II	Japan/Eastern Front	US
Halo: Reach	2010	9.49	Humans (United Nations)	Aliens		26th Century	Off Earth	US
Medal of Honor Frontline	2002	8.91	US	Germans (Nazis)		World War II	Germany	US
Halo 4	2012	8.86	Humans (United Nations) Humans (United	Aliens		26th Century	Off Earth	US
Halo 2	2004	8.49	Nations)	Aliens		26th Century	Off Earth	US
Battlefield Bad Company 2	2010	6.86	US	Russians		Future Invasion	Global	Sweden
Battlefield 4	2013	6.74	US	Russians	Chinese	Alternative Reality	Global	Sweden
Medal of Honor Rising Sun	2003	6.72	US	Japanese		World War II	Asia	US
Star Wars Battlefront II	2005	6.53	Humans (with Wookie option) Humans (United	Aliens (and Droids)		Galaxy Far, Far Away	Off Earth	US
Halo: Combat Evolved	2001	6.43	Nations)	Aliens		26th Century	Off Earth	US
Far Cry 3	2012	6.04	US (and Others)	Humans		Island near India	Island	Canada
Medal of Honor	2010	5.66	US	Middle Eastern (Terrorists)		Post 9/11 Global	Global	US
Star Wars Battlefront	2004	5.39	Humans	Aliens (and Droids)		Galaxy Far, Far Away	Off Earth	US
Borderlands	2009	5.23	Humans	Humans	Aliens	Pandora	Off Earth	US
James Bond 007: Agent Under								
Fire	2001	5.15	UK (MI6)	Middle Eastern (Terrorists)		Alternative Reality	Global	US
James Bond 007: Nightfire	2002	4.93	UK (MI6)	Middle Eastern (Terrorists)		Alternative Reality	Global	US
Borderlands 2	2012	4.93	Humans	Humans	Aliens	Pandora	Off Earth	US
BioShock	2007	4.3	Humans	Humans		Undiscovered Dystopia	Underwater	US
Call of Duty 2: Big Red One	2005	4.12	US	Germans (Nazis)		World War II	D-Day to Berlin	US
Left 4 Dead 2	2009	4.07	Humans	Monsters		Alternative Reality	North America	US
Doom 3	2004	3.97	Humans	Monsters		Mars (Hell Hole Opens)	Mars	US
BioShock 2	2010	3.74	Humans	Humans		Undiscovered Dystopia	Underwater	US

Table 1 Continued. Sales, Protagonists, Enemies, Context, Locations for First Person Shooter Games, 2001-2013.

Title	Date	Units Sold	Protagonist	Enemy 1	Enemy 2	Context (Battle)	Location	Production Origin
Tom Clancy's Ghost Recon	2001	3.7	US	Russian Ultranationalists	•	Russian Ultranationalist Plot	Russia	US
Tom Clancy's Rainbow Six:								
Vegas 2	2008	3.66	US	Latin American (Terrorists)		Terrorist Latin American Plot	Las Vegas	France
SOCOM	2002	3.65	US	Middle Eastern (Terrorists)		War on Terror	Global	US
Left 4 Dead	2008	3.38	Humans	Monsters		Alternative Reality	North America	US
James Bond 007: Everything or								
Nothing	2004	3.37	UK (MI6)	Russian Nationalists		Alternative Reality	Global	US
			US (China, Other					
Far Cry 2	2008	3.34	Options)	Humans		Generic Central African State	Africa	Canada
BioShock Infinite	2013	3.27	Humans	Humans		Undiscovered Dystopia	Alternative Reality	US
Tom Clancy's Rainbow Six:								_
Vegas	2006	3.14	US	Latin American (Terrorists)		Terrorist Latin American Plot	Las Vegas	France
Crysis 2	2011	3.11	Humans	Aliens	Humans	Post Apocalyptic Future	New York City	Germany
Tom Clancy's Splinter Cell	2002	3.02	US (NSA)	Georgians and Russians		Georgian Terrorist Plot	Global	France
Half-Life 2	2004	2.97	Humans	Aliens		Post Apocalyptic Future	Eastern Europe	US
SOCOM II	2003	2.94	US	Russian Nationalists		War on Terror	Global	US
Killzone 2	2009	2.93	Humans	Humans		Space Colonization	Off Earth	Netherlands
Metroid Prime	2002	2.82	Humans	Aliens		Space	Off Earth	US/Japan
Medal of Honor Warfighter	2012	2.75	US	Middle Eastern (Terrorists)		Global Post 9/11	Global	US
Battlefield Bad Company	2008	2.59	US	Russians		Future War	Global	Sweden
Killzone 3	2011	2.54	Humans	Humans		Space Colonization	Off Earth	Netherlands
Conflict: Desert Storm	2002	2.52	US Delta (or UK)	Iraqis		Desert Storm	Middle East	UK
Homefront	2011	2.44	US	North Koreans		Alternative Reality	US	US
Spec Ops: Airborne Commando	2002	2.07	US (Ranger)	Latin American (Terrorists)		Latin American Drug Empire	Global	US
Red Faction	2001	1.92	Humans	Humans (Private Corporation)		Rebellion	Mars	US
Duke Nukem Forever	2011	1.84	Humans	Humans		Earth During Alien Vendetta	Earth	US
		1.73			11			
Crysis 3 SOCOM 3: US Navy Seals	2013	1.73	Humans US	Aliens Slavic Russian Nationalists	Humans North African	Post Apocalyptic Future War on Terror	New York City Global	Germany US
SOCOIVI 3. US NAVY SEAIS	2005	1.09	US	Slavic Russian Nationalists	(Terrorists); South African (Terrorists)	war on terror	Global	US
Red Faction II	2002	1.65	Humans	Human (Commonwealth)		Rebellion	Mars	US
				Human (Earth Defense				
Red Faction: Guerilla	2009	1.56	Humans	Force)		Rebellion	Mars	US
Bulletstorm	2011	1.54	Humans	Monsters		26th Century	Off Earth	Poland/US

Table 1 is sorted by Units Sold, from most to least.

The data speak to all platforms (except for handheld), all parts of world, and all versions of the same game

Release Date is the year of the first platform release

Origin is the country where the game was developed

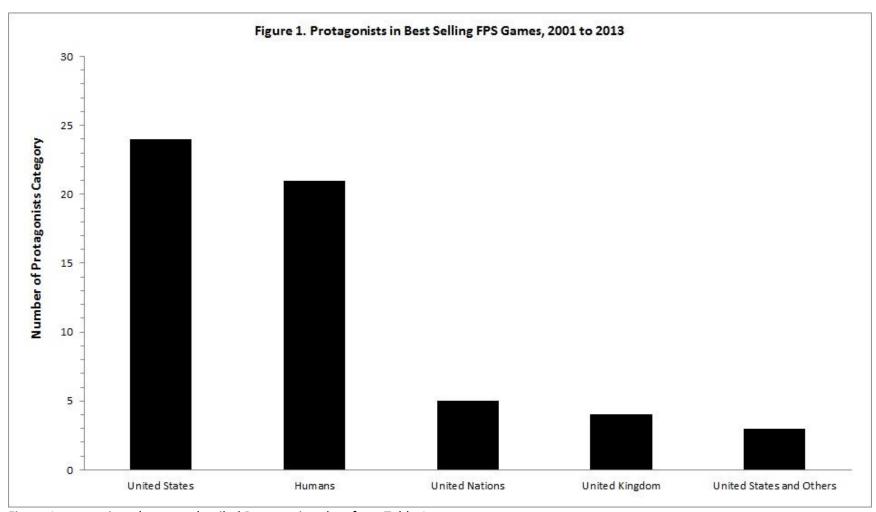


Figure 1 summarizes the more detailed Protagonists data from Table 1.

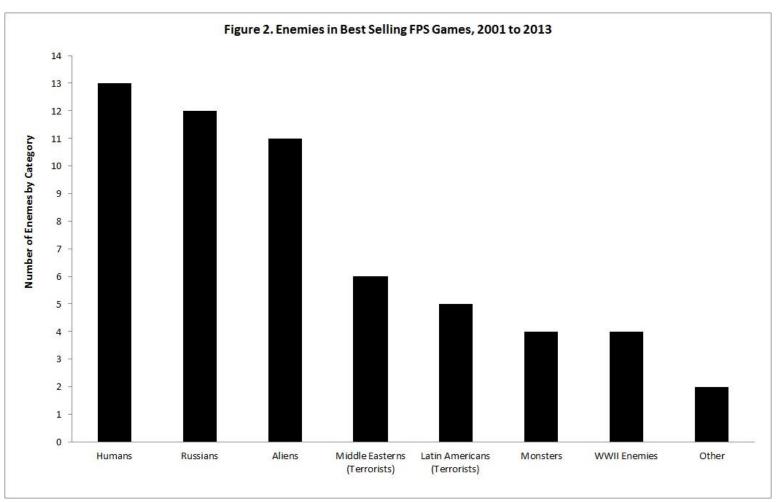


Figure 2 summarizes the more detailed Enemy data from Table 1. To clarify several categories: *Humans* speaks to all use of non-identifiable, generic humans in games, which includes from above Earth Defense Force, a private corporation, and a cult. *Russians* represents all uses of Russians as the enemy, with ultranationalists and nationalists being most common. *World War II Enemies* include enemies in games with World War II as the context, either Japanese or Nazi enemies. Finally, the *Other* category is a residual one, including one use of use of North Korea, and one use of Iraqis. Not included in this figure are any second enemies from Table 1.

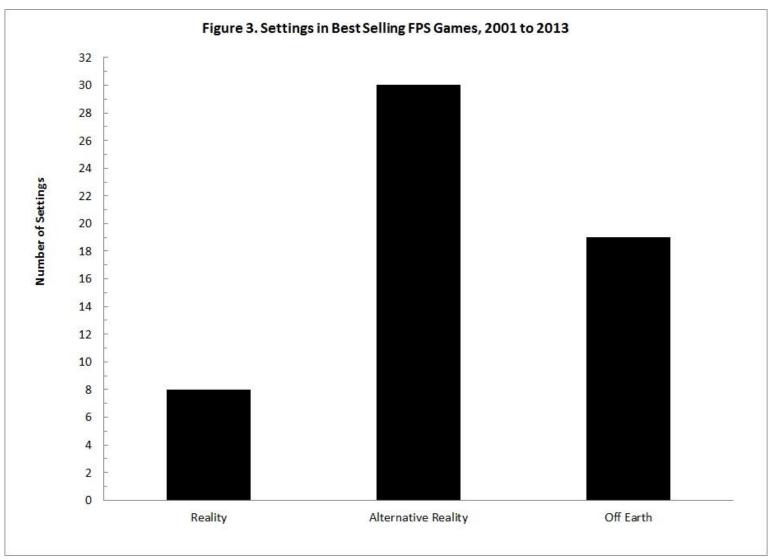


Figure 3 summarizes the Context and Location columns of Table 1, adopting three categories.

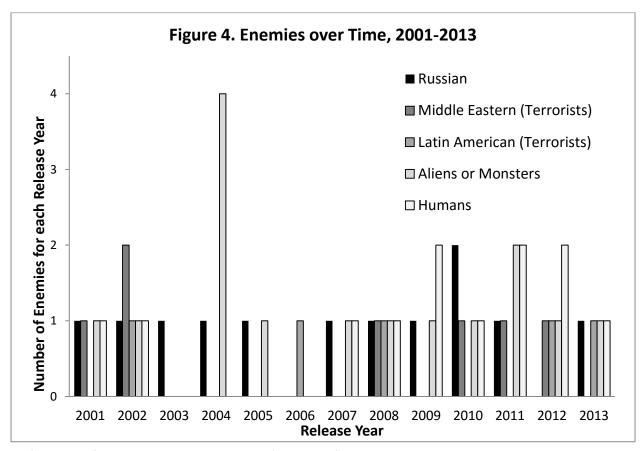


Figure 4 summarizes information from Table 1, incorporating Information form the Enemy category and Release Date. Figure 4 relies on the enemy categories found in Figure 1, although we pool *Aliens* and *Monsters*, and we eliminate the less common enemy categories of *Other* and *WWII Enemies*.