

Are We What We Play? Global Politics in Historical Strategy Computer Games¹

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Building upon current interest in studies of how popular culture relates to global politics, this article examines one hitherto overlooked aspect of popular culture: computer games. Although not prominent in the field of International Relations (IR), historical strategy computer games should be of particular interest to the discipline since they are explicitly designed to allow players to simulate global politics. This article highlights five major IR-related assumptions built into most single-player historical strategy games (the assumption of perfect information, the assumption of perfect control, the assumption of radical otherness, the assumption of perpetual conflict, and the assumption of environmental stasis) and contrasts them with IR scholarship about how these assumptions manifest themselves in the “real world.” This article concludes by making two arguments: first, we can use computer games as a mirror to critically reflect on the nature of contemporary global politics, and second, these games have important constitutive effects on understandings of global politics, effects that deserve to be examined empirically in a deeper manner.

Keywords: digital games, popular culture, game studies, militarization, IR theory

Of course, video game violence is not a new problem. Who can forget, in the wake of SimCity, how children everywhere took up urban planning? It was all, “Tune in, turn on, and zone for residential use, man!”—Stephen Colbert (January 14, 2013)

Analyzing how popular culture artifacts can impact global politics is not particularly new. One can trace this form of intellectual inquiry back to at least the Ancient Greeks, as when the fourth-century BCE Greek historian/proto-international relations (IR) scholar Xenophon ascribed the Spartan rout at the battle of Leuctra at the hands of the numerically inferior Thebans to the corrupting influence of lavish banqueting and gambling on horse races.² Nevertheless, it is undeniable that the discipline of IR has taken a renewed interest in popular culture over the past two decades. This arguably began with the discipline’s so-called “culture turn” of the 1990s, when many scholars became disenchanted with the assumption

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²See Bueno de Mesquita (2009, 143–49).

of a single, universal human nature in prevailing theories and instead attempted to take seriously the effect that cultural ideas can have when they accrete over long periods of time (Onuf 1989; Hollis and Smith 1991; Katzenstein 1996; Lapid and Kratochwil 1996). Subsequently, attention has focused more particularly on the intersection of global politics and popular culture; it seems everywhere one looks there are blog posts, conference presentations, journal articles, and scholarly books probing various facets of popular culture, be it in movies, TV shows, literature, visual art, music, or sports (see Table 1).

As IR scholars have begun taking pop culture more seriously, they have realized that the divide between high politics and low culture is an unnecessary one and perhaps even an untenable one. In a pioneering move, Nexon and Neumann (2006) suggested that there are at least four major ways in which popular culture and IR intersect, which they illustrate with regard to the *Harry Potter* books. First, pop cultural artifacts can impact the real world; for instance, the *Harry Potter* books stirred up a significant backlash from the American evangelical Christian community that attempted in some cases to have the books banned for their depiction of magic (Gemmil and Nexon 2006). Nexon and Neumann refer to this as “popular culture as politics.”

The second intersection is “popular culture as data” (Nexon and Neumann 2006): IR scholars can point to ideas in pop culture as evidence of existing norms, identities, and beliefs in the real world. For instance, Towns and Rumelili (2006) read the different receptions of *Harry Potter* in Sweden and Turkey—Swedish reviewers blasted the books’ implicit class structure, whereas Turkish critics highlighted the possibilities for interclass friendships and advancement—as evidence of differing cultural norms about class.

Third, the authors focus on “popular culture as a mirror” (Nexon and Neumann 2006), which entails self-consciously looking within popular culture for similarities and dissimilarities to the real world as we understand it. In Fey, Poppe, and Rauch’s (2013) felicitous phrase, popular culture can provide us with “quasifactuals.” The mirror perspective can allow us to question or “denaturalize” our own assumptions and epistemologies. For instance, the *Harry Potter* series subverts standard Western geographic imaginaries by locating giants, Dementors, and other undesirables in the North, whereas the South is depicted in a decidedly more mundane manner (Neumann 2006).

Sometimes, however, popular culture can have the opposite effect and “naturalize” certain ideas, phrases, and metaphors into the real world. Nexon and Neumann (2006) refer to this fourth approach as “popular culture as constitutive.” As an example, they look at how much popular literature of the nineteenth century, most notably *Heart of Darkness*, naturalized a strong distinction between Europeans and Africans and propagated the idea of a White Man’s Burden.³

Finally, although Nexon and Neumann do not formally discuss it, IR scholars have increasingly been exploring a fifth avenue: “popular culture as pedagogy.” Here, the idea is to incorporate popular culture into the IR classroom in order to make IR concepts more accessible and understandable to undergraduate students who are usually quite familiar with contemporary popular culture. For example, Swimelar (2012) reports results that show that students who took an Introduction to IR class anchored around several films and documentaries believed they learned more than if they had covered the same content without the films.

Adopting the lenses of “popular culture as mirror” and “popular culture as constitutive,” this article extends this line of inquiry to a set of cultural artifacts that

³When analyzing a particular pop culture artifact, it can occasionally be difficult to determine whether it functions more as a “mirror” or as “constitutive,” since it usually performs both roles simultaneously. For me, the distinction lies in the degree of societal critique the observer feels the object instantiates. Greater levels of critique are more associated with popular culture as mirror, while lesser levels fall more under the popular culture as constitutive framework.

Table 1. A sample of popular cultural analysis about global politics since 2000

Primary mode of analysis		As data	As mirror	As constitutive	As pedagogy
Primary Movies	Der Derian (2001)	Daccache and Valeriano (2012), Dadds and Dittmer (2013)	Ling (2004), Weber (2006), Dalby (2008), Shapiro (2009), Der Derian (2010), El-Khairy (2010), Kaklamanidou (2013)	Doucet (2005), Behnke (2006), De Carvalho (2006), Power and Crampton (2007), Chapman and Cull (2009), Higgins (2012), Dodds and Carter (2014)	Welber (2005), Hall (2011), Swinmeler (2012), Valeriano (2013)
Television		Baus (2009)	Weldes (2003); Bizan (2010), Dixit (2012), Kiersey and Neumann (2013), Shepherd (2013)	Mutz and Nir (2010)	Salter (2014)
Other visual mediums	<i>Lisle</i> (2006), Sylvester (2009), Dadds (2010)		Spanakos (2014), Rech (2014)	Campbell (2007), McKeivitt (2010), Saunders (2012b)	
Literature			Braun (2001), Halliday (2001), Nexon and Neumann (2006), Devetak (2009), Ling (2014)	Sharp (2000), Moran (2013)	Ruane and James (2012), Blanton (2012)
Music	Schumann (2013)	Franko and Schiltz (2012)	Dunn (2008)	Shapiro (2001), Franklin (2005)	
Sports	Foster and Pope (2004), Allison (2005), Chappelet and Kubler-Mabbott (2008)			Markovits and Rensmann (2013)	
Digital games			Magnet (2006), Högland (2008), Dillon (2008), Lowood (2008), Dyer-Withford and de Peuter (2009), Lammes (2010)	Stahl (2006), Power (2007), Huntemann and Payne (2009), Salter (2011)	Squire (2004), Carpenter, Landall, and Rubin (2007), Schot (2007), Wang (2010), Weir and Baranowski (2011), Corbett and Laveault (2011), Bridge and Radford (2014), Carvalho (2014), Keller (2014)
Other/multiple	Bayles (2014), Behnke (2014)	Caso and Hamilton (2015)		Lipschutz (2001), Debrix (2008), Muller (2008), MacDonald (2008), Grayson, Davies, and Philpott (2009), Purcell, Brown, and Gokmen (2010), Dittmer (2010), MacDonald, Hughes, and Dodds (2010), Saunders (2012a), Gavaler (2014)	Drezner (2011), Singh (2014)

Criteria for inclusion involved meeting all the following conditions: (1) being a scholarly book or peer-reviewed article published since 2000, (2) being substantially concerned with global politics, and (3) devoting at least half of the text to an analysis of one or several pop cultural artifacts. In cases where the same author(s) wrote both an article and a book on a similar topic, only the book is listed here. This list is merely intended for illustrative purposes and does not purport to be comprehensive. Regular font indicates the item is a book or a book chapter, while italics indicate a journal article.

have not yet been explored: computer games, specifically the subgenre of single player, historical strategy computer games. Although all pop cultural artifacts have something to tell us about the sociopolitical context of the societies that fashioned them, IR scholars should be particularly interested in these games because they are the closest thing we have to a private sector attempt to simulate global politics. These games place the player in the position of the ultimate decision maker within a polity, which exists in a recognizable Earth-like world at a given point in human history. As such, they have a great deal to tell us about how global politics are viewed by game designers, by the corporations that underwrite them, and by the computer game-playing public more broadly. What assumptions about global politics are embedded in these games that are played by millions of players each year? And what can we—IR scholars, IR teachers, IR players—learn by gazing into the mirror those assumptions offer us?

In the next section, I describe the characteristics of the particular computer games I am analyzing in this paper and review the literature on digital games in the field of game studies. In the following section—building off the insights of ludologists—I focus more closely on the traditional disciplinary concerns of IR. I show that the assumptions built into historical strategy computer games contrast with our best understanding of how global politics works “in the real world.” I conduct a content analysis that concentrates on five assumptions common in the games: the assumption of perfect information, the assumption of perfect control, the assumption of radical otherness, the assumption of perpetual conflict, and the assumption of environmental stasis. Finally, I conclude by arguing that IR scholars should care about computer games for two reasons: first, because they provide a resource for normative critiques of our existing state of global politics and second, because empirically exploring their constitutive effects can help us better understand how common understandings of global politics take root and are reproduced.

Locating Computer Games: Moving from Game Studies to IR

The branch of academia that has most seriously taken up the task of analyzing digital games is the emerging field of game studies, sometimes called ludology. Ludologists have helpfully cataloged the various subdivisions of digital games and have also been at pains to show how many digital games are gendered, racialized, and militarized. Furthermore, they have put forward an ontological framework for understanding the role digital games play in shaping contemporary societies. Briefly reviewing these findings provides a useful jumping off point for our analysis.

For the purposes of this article, digital games can be understood as the broadest category of electronic games comprising several categories of games that are best differentiated by the platform they are played on, for example, video games (played on external consoles like Nintendo Entertainment Systems or Playstations), computer games (which are played on PCs), and mobile games (which are played on cell phones). I focus solely on computer games in this article. More specifically, I discuss nine single-player, historical, strategy computer games (see Table 2). By “historical,” I mean that the games are set in a recognizable historical period of humanity’s development on Earth, typically spanning several centuries or even millennia.⁴ The games were released between 1996 and

⁴Limiting my analysis to historical games excludes some more speculative strategy games from my sample. Among others, I exclude: Blizzard Entertainment’s widely popular *Warcraft* and *Starcraft* series for not being based on a recognizable Earth, Westwood’s *Command & Conquer* franchise for being set in an alternate historical universe, and Firaxis’ *Sid Meier’s Alpha Centauri* and *Civilization: Beyond Earth* games for being set in the future. Perhaps most debatable is my decision to exclude from my sample historical trading games like Ascaron’s *Patrician* series, which is set in the Hanseatic League of the fourteenth century. Although such games are both historical and strategic, they usually have the player adopt the perspective of a firm, as opposed to a state, and as such deal substantially less with global politics.

Table 2. Common assumptions in historical strategy computer games

Game name (abbreviation)	Year released	Publisher (country of origin)	Scores on IGN; Gamespot*	Playable period	Perfect info**	Perfect control	Radical otherness	Perpetual conflict	Enviro stasis
<i>Civilization II (CivII)</i>	1996	MicroProse (United States)	N.A; 9.2	4000 BCE–2020 AD	Y	P	P	N	N
<i>Age of Empires II: The Age of Kings (AoEII)</i>	1999	Microsoft (United States)	8.8; 9.1	500 AD–1500	Y	Y	Y	Y	P
<i>Civilization III (CivIII)</i>	2001	Infogrames (France)	9.3; 9.2	4000 BCE–2050 AD	Y	P	P	N	N
<i>Europa Universalis II (EUII)</i>	2001	Strategy First (Canada)	9.0; 8.5	1419 AD–1820	Y	Y	N	N	Y
<i>Medieval: Total War (Med)</i>	2001	Activision (United States)	8.9; 8.7	1087 AD–1453	Y	P	Y	Y	Y
<i>Empires: Dawn of the Modern World (EDMW)</i>	2003	Activision (United States)	8.8; 8.5	950 AD–1950	Y	Y	Y	Y	P
<i>Civilization IV (CivIV)</i>	2005	2K Games (United States)	9.4; 9.4	4000 BCE–2050 AD	Y	P	P	N	N
<i>Medieval II: Total War (MedII)</i>	2006	Sega (Japan)	8.8; 8.8	1080 AD–1530	Y	P	Y	Y	Y
<i>Europa Universalis III (EUIII)</i>	2007	Paradox Interactive (Sweden)	8.5; 8.7	1399 AD–1821	Y	Y	N	N	Y

*Both out of 10.

**Except for fog of war.

Y = yes, the assumption is present in the game; N = no, the assumption is not present; P = partly, the assumption is partially present.

2007 and all have been commercial or critical successes. The *Age of Empires* series has sold over twenty million copies, whereas the *Civilization* franchise has sold over eight million copies. In terms of their critical reception, none of the games discussed received lower than an 8.5 (out of ten) rating from two of the major digital gaming publications, and one of the games, *Civilization II*, was deemed the third best digital game of all time in 2007 by the video game publication IGN (formerly Imagine Games Network).

I focus exclusively on single-player historical strategy games for both methodological and substantive reasons. Methodologically, studying an entire class of games rather than just a single exemplar allows for both greater validity and generalizability and allows me to identify instances of across-game variation (cf., Schut 2007, 215–18). In terms of Gerring's (2006, chapter 5) typology, it allows me to undertake a study of typical cases since the historical strategy games discussed herein are most likely not outliers along the various dimensions I analyze.

Substantively, I focus on historical strategy games because the games are explicitly designed to allow the player to simulate global politics. All unfurl over long periods of time, are set in historical eras, and involve the player interacting with other states, nations, or tribes. The typical game involves the player beginning with a small base or city and needing to acquire material resources. These resources in turn can be used to purchase combat units, invest in one's cities/settlements by erecting different types of buildings, and conduct international diplomacy and trade. Alongside all of this, the player must advance along a technology tree that mimics the historical emergence of new technologies. Put differently, the core of the games consists of politico-military decision-making: what balance should be struck between guns and butter, which alliances should be forged and broken, which strategic and tactical postures should be adopted, etc. Overall, these games are more likely to foreground assumptions about global politics than almost any other types of computer games.

When analyzing digital games, ludologists have repeatedly emphasized three themes: gender, race, and militarization. First, scholars have explored the gendered aspects of digital games. Starting with the observation that historically most digital games have been developed by men for men (Cassell and Jenkins 1998; Kline, Dyer-Witheford, and de Peuter 2003; Johnson 2013), a first wave of research noted the very gendered, often hypersexualized, ways in which female characters in digital games are depicted (e.g., Jansz and Martis 2007). More recently, ludologists have begun focusing on players' within-game agency, deconstructing everything from how female players participate in male-dominated environments (Schott and Thomas 2008; Kafai et al. 2008; Nardi 2010; Braithwaite 2014; Cote Forthcoming) to how digital games can allow players to either experiment with or normalize their off-line gender identities through the use of avatars (MacCallum-Stewart 2008; Williams et al. 2009; Shaw 2012; Pulos 2013).

Second, scholars have focused on the way races and cultures are depicted in digital games. Occasionally, this has involved noting the puzzling absence of race and ethnicity in some digital games (Kolson 1996; Kafai, Cook, and Fields 2010). Often it has entailed mapping the contours of how various racial or ethnic groups are depicted in digital games (Barrett 2006; Magnet 2006; Dillon 2008; Brock 2011; Goodfellow 2015; Patterson 2015), with a recent concern for critiquing the increasingly orientalizing war games produced in the West since 9/11 (Reichmuth and Werning 2006; Höglund 2008; Lowood 2008; Šisler 2008). And sometimes, it has even included studying how completely fictional, even fantastic, virtual worlds come to be racialized, both in-game and offline (Monson 2012; Poor 2012; Packer 2014).

Third, ludologists have considered the relationship between digital games and militarization, particularly in the era of the "Global War on Terror," which

coincided with the development of powerful seventh-generation consoles (Stahl 2006; Power 2007; Huntemann and Payne 2009; Gagnon 2010; Cassar 2013; Hitchens, Patrickson, and Young 2014; Rech 2014). Many ludologists would agree with Power (2007, 278) that “digital war games put a friendly, hospitable face on the military, manufacturing consent and complicity among consumers for military programs, missions and weapons.” It is, therefore, perhaps not surprising that the US military has been particularly quick to seize upon both the constitutive and pedagogical effects of digital games when training its soldiers (Halter 2006; Leser and Sterrett 2009). Indeed, the most-downloaded war video game of all time—*America’s Army*—was developed and is distributed free of charge by the US military (Kumar 2004; Nichols 2009; Nieborg 2009; Salter 2011; Schulzke 2013). For many commentators, it is clear that there is a “military-entertainment complex” actively at work in America (Herz 1997; Der Derian 2001; Dyer-Witthoford and de Peuter 2009).

Finally, a fourth important contribution ludologists have made is not substantive, but ontological. Recent scholarship has rejected earlier overly textual analyses of digital games, arguing instead that digital games (and popular culture more generally) are better understood from either a practice approach or a phenomenological approach (Dittmer and Gray 2010). In other words, the games’ ostensible content matters less than the ways in which they are played or the feelings that they engender. Similarly, Ash and Gallacher (2011) argue that three geographies matter when analyzing digital games: the geographies *in* digital games (such as the within-game representations and politics), the geographies *of* digital games (relating to the “real world” ways in which digital games are produced, marketed, and consumed), and the geographies *around* video games (focusing on the specific ludic practices players develop, e.g., forming social guilds to play with like-minded peers). All of these frameworks allow for agency and meaning-making: not only can there be resistance to the intended meanings created by the game producers, no two individuals can ever play exactly the same game since understandings of the play experience will vary according to each player’s identities.

In analyzing my sample, most of the themes identified by ludologists are evident. For instance, the computer games I examine tend to have very few female characters or female unit icons. Women are so minimalized in *CivIV*, for example, that when historical female figures are born, they are shown as men because no separate female unit icon exists. Thus, Joan of Arc sports a beard in the game. Similarly, almost all the games I study exhibit strong signs of Eurocentrism: typically all the unit icons are Caucasian, even if a player plays as, say, the Zulu or the Chinese. As I discuss further below, all the games surveyed give pride of place to warfare, hence naturalizing state violence as a legitimate feature of global politics. Finally, several of the more recent games I consider have active communities of players who create “mods,” or variations of the original game that expand gameplay beyond what was originally envisioned by the game designers. *EUIII*, for instance, has popular mods that allow gamers to colonize Australia (neglected in the original game) or play as the lost continent of Atlantis, allowing for greater player agency.

Ludologists have made path-breaking advances in helping us better understand the role digital games play in reifying inequalities that exist in our contemporary societies. Unfortunately, IR as a discipline has been slow to take seriously their praxiological concerns with popular culture. In the next section, I attempt to bring their concerns more directly into the mainstream of IR by directly contrasting the assumptions about global politics in computer games with our theories about how IR works “in the real world.”

Common Assumptions about Global Politics in Historical Strategy Computer Games

There have already been a number of analyses of digital games by IR scholars, as Table 1 suggests. The bulk, however, have tended to consider whether bringing digital games into the IR classroom can be an effective way of improving learning outcomes.⁵ This article has a different focus: critically deconstructing the games as cultural artifacts in and of themselves. Therefore, in this section, I present a content analysis of nine games, contrasting five major assumptions built into most of my sample with the extant IR scholarship on the topic. As I note at the end of this section, there are many more assumptions that could also have been analyzed—I have concentrated on those which are present in an overwhelming majority of my sample as well as those that speak most directly to the traditional disciplinary concerns of IR.

The Assumption of Perfect Information

Often in historical strategy computer games, the player has access to perfect or near-perfect information. As with all of the assumptions I discuss there is some variation in this assumption, and the degree of information is rarely as total as in, say, the game of chess, but players enjoy an unparalleled amount of information in comparison to real-world policymakers. This is perhaps clearest with regards to information about players' own units and capabilities: typically, at any given point in time players know exactly how much money they have, how many troops they command, what the size of their populations are, and sometimes even how happy their populations are.⁶ Contrast this with the Congressional Budget Office's perennial difficulties in knowing how much money the US government has on hand, many militaries' struggles with having "ghost soldiers" ostensibly serving in their armed forces, or Lebanon's uncertainty about its exact population given that a national census has not been undertaken since 1932. In addition, players almost invariably have perfect information about the game's win conditions and hence have a definite sense of the universe of possible future outcomes in the game.

Perhaps more intriguingly, players also have remarkably good information about the abilities and intentions of both their allies and opponents. In games where the assumption of perpetual conflict holds (see below), opponents' intentions are known and there is almost perfect information about enemy decision-making at the strategic level (e.g., *AoEII*). Even in games where opponents' and allies' intentions and attitudes toward the player can vary, they are almost always quantifiable as a single (unerring) numerical value (e.g., *EUII*, *EUIII*, and *CivIV*). The only major way in which game designers deliberately introduce uncertainty is at the tactical level; typically the games have a "fog of war," a computer game concept whereby only the parts of the map where the player has troops or buildings actively present are revealed. The rest of the map remains dark and mysterious until military units are sent out to push back the fog of war.

In the real world, of course, policymakers typically have far more limited information about their allies, their enemies, and possible futures. Indeed, some of the most developed IR explanations for why war occurs have to do with lack of information—realists such as Mearsheimer (2001) argue that because one can

⁵The pro side is represented by Squire (2004), Carpenter, Lundell, and Rubin (2007), Wang (2010), Weir and Baranowski (2011), Corbeil and Laveault (2011), Salter (n.d.), Bridge and Radford (2014), and Keller (2014). The con side is represented by Magnet (2006), Schut (2007), and Carvalho (2014).

⁶The *Civilization* games indicate with smiley, neutral, and angry faces exactly how (un)happy a given populace is, with a margin of error of zero. Other strategy computer games not considered here have gone even further, allowing players to read the thoughts of individual citizens in the games (e.g., the *Tropico* series).

never absolutely know rivals' future intentions one must adopt a power politics strategy, while rationalists such as Fearon (1995) argue that states' inability to accurately gauge opponents' resolve and capabilities during the lead-up to a war (because of the temptation to bluff, etc.) often ends up serving as the trigger.

Interestingly, the assumption of perfect information is built into the very framework of the games considered via the top-down perspectives employed. Each of the nine games studied employs a bird's eye perspective when representing the main action of the game. In other words, the games force players to occupy the Archimedean, "view-from-nowhere" perspective that feminist and postpositivist scholars have long criticized as never being achievable in any social enterprise (Haraway 1988). Clearly, the underlying visual metaphor here is one derived from images taken by spy planes and satellites (Friedman 1997), but there is no acknowledgment that such a view only became possible in the late twentieth century and would have made no sense to anyone living during the historical eras the games purport to cover.

The Assumption of Perfect Control

As a general rule, players of the games have near perfect control over their populations and forces, be it militarily, diplomatically, or politically. For instance, in the military realm, units carry out their orders perfectly, with zero confusion, miscommunication, misinterpretation, or willful disobedience.⁷ Needless to say, any military commander throughout human history would find the proposition that they had perfect control over their own forces laughable. In recent memory, American commanders overseeing US troops in Afghanistan have been unable to prevent soldiers from desecrating enemies' corpses, burning Korans, or murdering innocent children, all with disastrous consequences for Americans and Afghans alike. Equally troubling is Sagan's (1993) work, which has shown how precarious America's control over its own nuclear arsenal can be.

Players' perfect control over military situations is often aided by the fact that they control the game clock, which can be fast-forwarded, slowed, or even paused in order to give them as much real-world time as they need to analyze a situation and devise an appropriate response (cf., Magnet 2006, 153–54; Dillon 2008; Voorhees 2009, 263–64). In reality, of course, numerous studies have shown that when policymakers have only limited time to make decisions, problematic biases and heuristics can emerge (Herek, Janis, and Huth 1987; Brecher 1996).

The assumption of perfect control carries over from the military arena to diplomatic and trade matters (for those games which depict those aspects of global politics). When the game features a diplomacy system, for example, the diplomatic apparatus always conveys exactly the message the player intended to send. Again, this goes directly against many of the findings of rationalists, who have noted the difficulty inherent in signaling games (Walsh 2007). In all of the games studied, a situation like the runup to the 2003 Iraq War—where two countries consistently misinterpreted one another's signals—would be impossible.

Going even a step further, players have near perfect political control over their polities. Thus, players can typically assume that their polity will not rebel, resist, splinter, and so forth. For instance, none of the games surveyed depict any form of terrorism, despite terrorism's significance in twentieth and twenty-first century politics (Pape and Feldman 2010). From the player's perspective, the state is a unitary actor, and the enormous literature in IR on the domestic determinants of state policies is largely inapplicable (Katzenstein 1996; Milner 1997; Moravcsik

⁷The only exceptions to total military control I could identify in the nine games were two minor ones in the *Medieval: Total War* franchise: in battles, some unit types such as Berserkers may occasionally charge unprompted, and units having suffered high casualties can become routed and hence unresponsive.

1997). However, there is some interesting variation surrounding this assumption. While a game like *EDMW* offers players total political control, other games go against this assumption in small but significant ways. For instance, in *Med*, the player must keep an eye on the loyalty of his or her generals, lest they become disaffected and defect. In the *Europa Universalis* franchise, civil wars and wars of independence are frequent, sometimes triggered by a player's actions and sometimes by external events. In *CivII*, unhappy cities revolt, causing the player to lose control of city management until the situation is rectified. *CivIII* carries this one step further, where discontented border cities can switch allegiances to a neighboring power. Still, even in the *Civilization* series, the assumption of perfect political control runs deep—particularly notable is the “revolution” function built into all *Civilization* games, which allows the player to change government types (e.g., monarchy, liberal democracy, fundamentalist dictatorship) at will and with a foreordained result.

The assumption of perfect control leads to occasionally bizarre and anachronistic gameplay, because it tends to be held constant regardless of historical era. This oddity is particularly pronounced in the *Civilization* series, where players control a polity over six millennia. However, the player's initial screen and interface are practically the same as the screen and interface at the end of the game, some 6,000 in-game years later. Other incongruities the player faces include receiving written reports prior to the technology of writing being discovered, and being able to issue commands just as effectively for Dark Ages archers as for AEGIS cruisers, regardless of factors like operating distance from one's capital.

The Assumption of Radical Otherness

In all of the games surveyed, the other polities controlled by computer artificial intelligences (AIs) are represented as fundamentally different from the player's polity and, with few exceptions, unalterably so. There can be no conciliation, no drawing together of polities beyond the thin level of formal alliances. In responding to this radical otherness, the two usual responses offered to the player are the same ones that Inayatullah and Blaney (2004) have argued characterize the West's response to difference—forced assimilation or arms-length separation. Only a few exceptions to this strongly held assumption can be identified: At the beginning of most *Civilization* games, small unaffiliated tribes can be peacefully assimilated by the player. The *Europa Universalis* series also allows for the player to take on or become a vassal, which suggests a third possible way for two polities to relate to one another.

One reason that radical otherness can never be breached is that typically communication is only possible along a predetermined number of channels and with predetermined content. This is most notably the case of the *Civilization* franchise, whose relatively robust system of diplomacy nevertheless tends to boil down to bilateral summitry between heads of state, with the possibility of polities exchanging territory, units, technologies, or money.⁸ In contrast, the *Medieval* series features a fuller set of diplomatic agents, including formally accredited diplomats as well as spies, royal princesses, and religious figures; heads of state never communicate directly. One can sense here echoes of the debate between constructivists and rationalists about the role that communication plays in diplomatic politics. For rationalists/*Civilization* players, communication can transmit information, but does not alter fundamental preferences or identities (Fearon 1997). For constructivists/*Medieval* players, however, communicative acts like offers of marriage or

⁸*Civilization IV* did mark the introduction of two formal multilateral diplomatic organizations—the Apostolic Palace and the United Nations. In game, these outfits seem to approximate international regimes (cf., Keohane 2005) more than truly independent international organizations (cf., Barnett and Finnemore 2004).

religious conversions can go beyond simple semiotic signaling toward actual identity convergence (Checkel 2003).⁹ Relatedly, the fact that almost all the games surveyed have some built-in form of communicating with other polities suggests that diplomacy is a well-established concept in the mind of game developers; perhaps diplomacy is indeed the “master institution” of global politics as English School theorists have long claimed (Wight 1977).

The Assumption of Perpetual Conflict

As a result of the assumption of radical otherness, many of the games feature perpetual conflict between polities. The most important element in fostering this attitude of unremitting conflict are the games’ various “win conditions,” or the conditions a player must meet in order to win according to the game (typically marked with a celebratory message and a screen calculating the player’s score). For about half of the games under consideration, the win condition is the utter elimination of all rivals’ units and buildings or the conquest of all rival territory. Players desirous of “winning” the game have no choice but to engage in total war. Cassar (2013, 337) rightly notes that one effect of the perpetual conflict assumption is a justification of the United States’ belligerent behavior in the twentieth and twenty-first centuries. If we truly live in the Hobbesian world the games depict, then US militarism becomes less an expression of imperial ambition and more an inevitable response to external pressures.

The games in the other half of the sample are somewhat more pacific, in that they allow players to win via alternative paths besides outright conquest. For instance, *CivIII* allows the player to win by being the first polity to build an interstellar spaceship. Furthermore, whereas a state of war is permanent and ongoing in *AoEII* and *EDMW*, both the *Civilization* and *Europa Universalis* series formally delineate periods of “peace” from periods of “war,” with official declarations between the parties demarcating the one from the other. But even these more pacific games directly urge their players to consider warfare as an, if not *the*, most appropriate method of gameplay. As the *Civilization I* manual instructs players:

Successful wars can be very useful. Capturing cities is much easier than building them up from nothing, and may provide loot in stolen technology and cash. Weakening rivals reduces the threat they pose . . . In a word, you must grow. In this dynamic world environment, surrounded by rivals in unknown corners, there is no future in complacency and stagnation.

In short, the game’s makers directly urge players to pursue war as a legitimate, even necessary strategy in global politics.

Meanwhile, in the real world, statistical analyses undertaken on the basis of the International Crisis Behavior or Militarized Interstate Disputes data sets show that most states most of the time are not participating in crises or disputes, let alone wars. And the *Civilization* manual’s claim that war is economically profitable for states has long been questioned in the IR literature (e.g., Rosecrance 1996).

The Assumption of Environmental Stasis

As a general rule, the game maps that represent the physical world remain static for the duration of the game. Given that these games can depict planetary scales over millennia-long periods, one might expect the natural world to change at least a little bit, but that is not the case. For instance, only four of the nine games surveyed depict weather of any type.

⁹I am grateful to Sabina Hilaiel for this suggestion.

The picture is somewhat more nuanced as regards anthropogenic environmental degradation. On the one hand, the use of conventional weapons (up to and including saturation bombing) never affects the map, and in most games, even the use of nuclear weapons does not affect the physical environment. On the other hand, games such as *AoEII* feature resource depletion as a central factor of their gameplay (Dillon 2008). One particularly interesting game to analyze in terms of its environmental assumptions is *CivII*; its players are confronted with the specter of pollution, which increases with population growth and industrialization and decreases the utility of certain sectors of the map. Presciently for a game introduced in 1996, widespread levels of pollution can trigger inexorable global warming, which dramatically raises sea levels and does profoundly alter the physical map.

Other Assumptions

Once one begins to think critically about the assumptions built into historical strategy computer games, ever more assumptions come to mind, certainly far more than I can address here. Table 3 briefly summarizes possible additional assumptions in historical strategy games as “food for thought” for the reader.

Clearly, this article has only touched upon the tip of the iceberg in terms of scientific, cultural, economic, and legal assumptions that these games and others have embedded within them. And it seems likely that a more detailed analysis of these additional assumptions would confirm that most of them do not match up well with what we know of politics in the real world. Does this matter, though? Is it a problem if these games do not accurately portray the international legal system, or the international economic order, or any other facet of global politics? After all, aren't these just games? In my concluding section, I offer two ways of responding to this “so what?” question.

“Objects in the Mirror are Closer than They Appear”: Learning about Ourselves from Our Games

Ultimately, what does studying the assumptions in historical strategy computer games teach us? Returning to the Nexon and Neumann (2006) model for analyzing pop cultural artifacts, I argue first that IR scholars can use the games as a mirror, analyzing incongruities between within-game politics and “real-world” politics in order to help us better perceive social realities around us. Second, I argue that further empirical work needs to be undertaken to assess precisely how these games are constitutive of social reality. Played by millions each year, these games represent an ever more important global site for the reproduction of the sets of social realities, discourses, and imaginaries described above (and many more not discussed here). Yet IR's understanding of how that process of reproduction (and simultaneous contestation) operates remains superficial and inadequate.

Thinking about historical strategy games as a mirror forces us to reflect critically on the nature of global politics in the second decade of the twenty-first century. I attempted above to demonstrate that many of the key assumptions of these games run against much of the best IR scholarship in several domains. At the same time, however, these games would not enjoy the popularity they do if they represented global politics in a way that was too disconnected from the conceptions held by a majority of their players. Therefore, these games shed light on popular conceptions of IR, while at the same time challenging us to ponder if things have actually changed as much as we might imagine. Have any contemporary global actors stopped visually imagining IR from on high and instead opted for a more people-centered vision of “relations international” (Sylvester 1994)? To what an extent has the current international community found ways to handle

Table 3. Partial list of additional IR-related assumptions in historical strategy computer games

Assumption		Brief description	Scholarly commentary
Scientific assumptions	The assumption of linear Science	Science proceeds linearly and teleologically, as demonstrated by the in-game technology trees, with latter technologies being invariably superior to their precursors	Schut (2007, 224), Owens (2011)
	The assumption of technological determinism	New technologies are immediately adopted and significant	Voorhees (2009, 265)
Economic assumptions	The assumption of economic extraction	The bulk of economic activity depicted in the games is extractive in nature (i.e., mining, harvesting, and felling trees)	Dillon (2008, 132), Cassar (2013, 339)
	The assumption of economic openness	Generally speaking, the games exhibit a bias in favor of open markets	
	The Malthusian assumption	Demographic and economic growth is subject to Malthusian constraints	Dillon (2008, 132)
Legal assumptions	The absence of reproductive labor	Reproductive labor is almost never depicted in the games, with new citizens and soldiers springing up <i>ex nihilo</i>	
	The assumption of binding alliances	Interstate alliances are depicted as formal, binding, and unambiguous	
Other assumptions	The absence of international law	There is usually no international legal order governing relations between states (or, for that matter, within them)	
	The assumption of cultural relativism	From the player's perspective, different cultures, nationalities, and religions are functionally identical, with only cosmetic differences	Douglas (2002, para. 25), Schut (2007), Dillon (2008)
	The assumption of a universal language	Characters from different linguistic and national groups nevertheless manage to perfectly comprehend one another	Dillon (2008, 140)
	The absence of indigenous peoples	There is some variation among the games on this point, but most of them assume that territory is empty and unused prior to the player's arrival	Douglas (2002), Voorhees (2009), <i>pace</i> Dillon (2008)
	The assumption of colonial inevitability	Colonialism is assumed to be either inevitable or highly likely	Douglas (2002), Lammes (2010)
	The assumption of player customizability	Players are typically allowed to select various traits about their avatar (name, gender, group identity, occasionally personality traits)	Douglas (2002, para. 24)
	The absence of historical contingency	The games typically reduce randomness and chance to a minimum, so most outcomes are predictable	Schut (2007, 225–26), Voorhees (2009), <i>pace</i> Salter (n.d.)

difference beside assimilation and isolation? In a world deeply shaped by a temporally and spatially unbounded “Global War on Terror,” is it still possible to critique these games for depicting situations of perpetual conflict? Given the seeming disinterest in many parts of both the developed and the developing worlds in combatting climate change, are we collectively not tacitly pretending that the environment is indeed static?

In other words, gazing into the mirror of digital games helps us better understand ourselves. We might begin to realize, for example, that playing historical strategy computer games can serve as wish fulfillment for all the latent values of late modernity: playing makes us feel autonomous, self-sufficient (i.e., environmentally independent), rational, all-knowing, and all-powerful (cf., Voorhees 2009; Salter 2011). It is no accident that these games are often called “god games,” or that they are as popular as they are.

In addition to using digital games as a springboard for self-reflexivity, IR scholars should also pay greater attention to the constitutive properties of digital games. As Table 1 shows, there is growing acknowledgment within IR that pop culture has important constitutive properties, by which I mean that our pop culture artifacts recall, reproduce, and reinforce certain patterns of both conscious and unconscious thinking about the world. Pop culture usually operates in a quite conservative manner, ideologically speaking. As Shapiro (2001, 1) has argued, popular culture “tend[s] to endorse prevailing power structures by helping to reproduce the beliefs and allegiances necessary for their uncontested functioning.” Accordingly, there are good normative reasons to worry about the unrealistic depictions of global politics in historical strategy computer games.

Furthermore, IR educators have particular reason to worry about the constitutive effects of digital games, given that what they attempt to teach by day in the IR classroom may be undermined by what students are playing at night. Statistics suggest that this is not just an idle fear. The digital games industry has surpassed Hollywood along practically all meaningful indicators in North America and Europe (Chatfield 2010) and is making significant inroads elsewhere in the world (Huntemann and Aslinger 2013). At least seventy percent of American households play digital games, and Americans consume more fictional content than nonfictional content such as news. Accordingly, the question for responsible IR educators is no longer whether or not we should bring popular culture into IR, but rather whether or not we want to give our students the tools to critically assess the popular culture they are already consuming.

And yet . . . One point that the most recent generation of ludological scholarship has been at pains to emphasize is that players’ intentions and own systems of meaning are absolutely central to understanding what effects, if any, playing games will have on them (DeVane and Squire 2008; Lowood 2008; MacCallum-Stewart 2008; Huntemann and Payne 2009; Schwartz 2009; Owens 2011; Lin 2012; Huntemann and Aslinger 2013; Cote Forthcoming). Digital games, through their strong emphasis on active participation rather than passive reception, stand out from the rest of pop culture as the medium that arguably most allows for agency, reinterpretation, and contestation. So it would be inaccurate to expect simple, direct causal effects as a result of playing digital games; the nature of the relationship is likely to be both more diffuse and less determined. Indeed, some have even suggested that instead of having a conservative effect, digital games can actually have emancipatory properties (Chan 2009; Chien 2009; Dyer-Witheford and de Peuter 2009; Lammes 2010).

This, in turn, opens the door for further systematic empirical research. Much of the existing literature in IR on the constitutive nature of popular culture, while persuasive *in toto*, tends to simply posit a relationship rather than seek to test it empirically. This is especially true for the few existing IR studies of digital games, where claims about, say, games’ constitutive role in militarization tend to be asserted rather than tested (e.g., Stahl 2006; Power 2007; Höglund 2008; Gagnon 2010).¹⁰ Fortunately, though, scholars in a variety of other disciplines have been

¹⁰Indeed, one recent effort to directly test the relationship obtained null results: Festl, Scharkow, and Quandt (2013). See also the data reported in Carvalho (2014), Huntemann (2009), and Hitchens, Patrickson, and Young (2014).

developing techniques for empirically establishing the causal microfoundations between pop cultural artifacts and their constitutive effects. For instance, the constitutive effects of digital games have been assessed through survey data (Penney 2009; Wang 2010; Festl, Scharkow, and Quandt 2013), panel studies (Williams 2006), direct observation of in-game behavior (MacCallum-Stewart 2008; Payne 2009; Kafai, Cook, and Fields 2010; Monson 2012), focus groups (Schott and Thomas 2008; Huntemann 2009), content analysis (Šisler 2008; Gagnon 2010; Hitchens, Patrickson, and Young 2014), and reviews of online material posted by players (Brock 2011; Owens 2011; Pulos 2013; Braithwaite 2014). IR will develop a richer understanding of how global politics actually works if it unpacks the constitutive effects of pop cultural artifacts using empirical techniques like these.

At the end of the day, popular culture is not epiphenomenal to global politics, but rather central to it—we cannot help but to think along pathways that have been profoundly shaped by the pop cultural artifacts prevailing in our societies. Historical strategy games, as the computer games most designed to model global politics, offer researchers, educators, and citizens alike important ways of deepening understandings about both the theory and practice of IR. IR as a field would do well to pay more attention to these games.

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