

The Rules of the Game

Video Games and the Aesthetic Turn in International Relations

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Abstract

This paper intends to explore the possibility of using video games to better understand the ideological or theoretical dimensions of international relations and state behaviour. Using Roland Bleiker's argument that artistic or aesthetic products that have been largely ignored in discussions about international relations are in fact capable of providing unique and important insights on international politics, the paper demonstrates how fundamental aspects of video game design in existing popular games post surprisingly sophisticated and cogent arguments about the nature of international relations.

Keywords

International relations, video games, politics, aesthetics, ludology

1. Introduction

It is by no means a new observation that video games have become an increasingly ubiquitous form of media since their introduction in the mid-1960s. In 2015 the sales of games and associated products drew in \$23 billion in revenue in the United States alone (see note 1), while changes in forms of distribution have seen worldwide sales of digital games rise to \$61 billion worldwide (see note 2). Besides the number of players, the increasing visibility of video games has also been reflected in a demographic diversity among video game players. According to Entertainment Software Association trends in the United States suggest that the average video game player was a far cry from the stereotypical younger male, trending not only older (closer to 35) but increasingly female (closer to 44 percent) (see note 3). The phenomenon of playing video games professionally is even popular enough to merit coverage by sports networks like ESPN. Even the notion that such a popular form of entertainment merits being discussed in academia is also not a novel one. Much has been made, for example, of scholarly attempts to link video games with increased violence or aggression in youth. Other examples include studies into the pedagogical potential of video games, or the way in which video games play into the relationship between players and various forms of gendered and sexual identities. Unique disciplinary discussions around video games have even arisen in specialized fields like ludology and game studies. However, while it may seem somewhat unorthodox to transpose this kind of academic attention on as ostensibly spurious a topic as video games in relation to something as obviously important as international relations (IR) this link is not entirely without precedent. This has become particularly true in the context of the so-called cultural or aesthetic turn in IR.

Suffice it to say, video games have not escaped the debates brought up in the broader cultural or aesthetic turn in IR, though the existing literature on the relationship between video games and IR is unsurprisingly small and has been overwhelmingly focused on the place very particular games (namely military-themed first-person shooters) have in larger socio-political dynamics like militarization. The possibility for video games to provide a critical dialogue with more orthodox IR practice or theorizing is generally left as an open possibility. This gap in existing research begs the question of how video games might be used to achieve insights into international politics or even

more fundamental aspects IR theory generally. Indeed, this becomes an especially curious line of inquiry considering that game terms like ‘players,’ ‘rules,’ ‘turns,’ and ‘moves’ make their way into fairly fundamental aspects of established IR analyses such as game theory. Given the way in which video games regularly engage with depictions of international events like war, trade and strategy to an almost infamous degree in turn seems worth exploring whether IR theory is at all reproduced in fundamental aspects of the design of games. It is with this question in mind that this paper intends to explore the ways that Ian Bogost’s arguments about procedural rhetoric allow strategy games to mount surprisingly cogent arguments regarding the nature of key aspects of major schools of thought in IR theory. This can be shown by placing such an analysis in the context of existing literature on IR and video games, positing an alternative approach to aesthetic IR analysis in Roland Bleiker’s account of the aesthetic turn, providing a means of understanding the expressive power of video games through Ian Bogost’s arguments about procedural rhetoric, and exploring how the single player campaigns of strategy games like *Total War: Shogun 2* as well as *Civilization V* present clear representations of realist and liberal approaches to IR.

Given that much of this paper is steeped in the cultural turn in IR, it seems worth providing an overview of this intellectual movement. The cultural turn in IR is itself a relatively recent phenomenon in IR research. Generally, it entails a call for greater degrees of attention to be paid to the possible contributions artistic or cultural artifacts and disciplinary approaches can provide in understanding international events. According to Gerard Holden, the cultural focus in IR subfields can partly be traced back to the 1980s, where the slow spread of literary theory and elements of European philosophy in other humanities fields was taken by postmodern or poststructural theorists in IR (see note 4). Holden further contends that throughout the 1990s the works of authors like Samuel Huntington, Christine Sylvester, Martin Wight and even political philosophers like Martha Nussbaum and Hayward Alker served as early precursors to explicit attempts to find insights into international politics in cultural sources (see note 5). While Holden points out that the result often concerns itself with notoriously vague concepts like culture (see note 6) and other authors like Cerwyn Moore and Laura Shepard note that many of the approaches in the aesthetic or cultural turn has often obscured precise research goals in making the connection between IR and the arts (see note 7). However, Alex Danchev and Debbie Lisle give something of a putative summary of what aesthetic analyses to politics are meant to achieve:

This means refusing to see art as merely illustrative of more fundamental issues in the ‘real’ world. IR is replete with such thinking. For us, it is insufficient. It is not enough to suggest that while Picasso’s ‘Guernica’ may be a great painting, it is only a footnote to the Spanish Civil War, or high-technology warfare, or civilian casualties. That kind of analysis is neither critical nor reflective; more to the point, it denigrates the productive aspect of art in relation to political issues, or the role that art can play in helping us think and feel our way through difficult political problems. For us, there must be a *politics* in our observations. Today, Guernica lives through ‘Guernica’; and ‘Guernica’ lives on the streets, as a global symbol of man’s inhumanity to man, and in the sanctum of the UN, as talisman and goad (and embarrassment) for those who would do good in the world. ‘Painting is not made to decorate apartments,’ said Picasso. ‘It is an offensive and defensive weapon against the enemy.’ Let us mobilise it (see note 8).

Thus, given the obvious focus on the possible contributions artistic or pop cultural sources can make on IR, it is within this general framework that much of the existing literature on the relationship between IR and video games takes place.

2. Material Studied

2.1 Video Games and Militarization

While it is something of a truism among IR scholars who have written on the subject of video games that the medium is often overlooked as a factor in international politics despite being a wildly popular cultural form, the connection between the ostensibly deeply serious issues dealing with the international and popular culture or art is not without some precedent. Indeed, scholarship on video games generally is by no means novel nor is specific scholarship on the relationship between international politics and other aspects of pop culture. For instance, Adrienne Shaw has written on the increasingly popular topic of gendered, racial and sexual identity among video

game players (see note 9), and Jason Dittmer has written on the way *Captain America* comics have embodied imaginative geographical and national identity boundaries for Americans (see note 10). However, much of the IR literature on the topic has explored the relationship of very particular games (namely shooters) with the so-called “military-entertainment complex” and the role games play in extending state violence. This can be shown by contextualizing much of what has been written on video games and the international within James Der Derian’s virtual theory.

Perhaps the most influential concept in much of the existing IR literature on video games is the military-entertainment complex, or what Der Derian refers to as the military-industrial-media-entertainment network (MIME-NET) (see note 11). Among IR scholars who write about the impact of video games, however, Der Derian’s systematization of the MIME-NET in a proposed “virtual theory” is particularly influential. For Der Derian, the increasing influence of digital technology on political or military planning served to increasingly thin out the practical and theoretical boundaries between planned virtual simulations and the much less predictable realities they hope to capture (see note 12). According to Der Derian, this dynamic is by no means new, as “the telephone in the First World War provided generals with the means and the arrogance to send hundreds of thousands of soldiers to their deaths from the relative safety of their chateaux headquarters,” (see note 13) and indeed the very nature of empirical social science often fall into a similar trap as “positivist approaches—assuming that words transparently mirror objects, facts reside apart from values, and theory is independent of the reality that it represents—produce a fairly hermetic world-view with little room for the interpretation of accidents.” (see note 14). However, for Der Derian the speed, ease of access to and widespread nature of digital technologies distinguish themselves from prior technological developments or systematic modes of thought (see note 15). The resulting harmony between commercial and state interests as both seek to pursue the opportunities to satisfy financial, entertainment or strategic needs provided by digital advancements set the stage for a dangerous kind of arrogance to permeate approaches to warfare as virtual simulations and widespread media depictions attempt to eliminate the worst elements of war and endow conflict a kind of virtuous character (see note 16). The result, according to Der Derian, is the synchronicity of the MIME-NET in virtuous war as an extension of state power:

Designed by the Pentagon, auditioned in the Balkans, and dress-rehearsed in Afghanistan, virtuous war took center stage in the invasion of Iraq. Virtuous war projects a technological and ethical superiority in which computer simulation, media dissimulation, global surveillance, and networked warfare combine to deter, discipline, and if need be, destroy the enemy. Ethically intentioned and virtually applied, drawing on the doctrines of just war when possible and holy war when necessary, virtuous war plays on its ambiguous status as a felicitous oxymoron. After September 11, as the United States chose coercion over diplomacy in its foreign policy, and extolled a rhetoric of total victory over absolute evil, virtuous war became the ultimate means by which the United States intended to re-secure its borders and assert its global suzerainty (see note 17).

It is within this conception of the increasing identification with civilian media and military interests, then, that much of the IR scholarship on video games takes place.

Thus, it is within this framework of the increasingly mutually reinforcing relationship between military and commercial media development that much of the existing scholarship on video games and IR takes place. These authors have commented both on how the production of video games as well as the themes found in video games have reflected the influence of militarization. Indeed, part of the formulation of Der Derian’s virtual theory involves playing successive rounds of the shooter *Doom* retooled for use by the Marine Corps,¹⁸ and notes that the virtual identification of MIME-NET is clear in commercial military video games, where “the developmental lag between the real thing and its simulation has just about disappeared. From the F-16 to the F-117A, the M1A2 tank to the Bradley armored vehicle, the Aegis cruiser to the latest nuclear aircraft carrier, the video-game version arrives on the shelves almost as soon as the weapon system first appears.” (see note 19). Mark Salter describes the way in which games as diverse as *Diplomacy*, *Civilization*, *America’s Army* and *Grand Theft Auto IV* each use the constraints of a game world to impose particular imagined geopolitical realities on a player wherein the authority of the state is often

central and the embodied nature of violence is often absent (see note 20). Nick Robinson is partly an exception in using Cynthia Weber's work on the way popular culture can reveal the foundations of IR theory as a means of interrogating themes of American exceptionalism in military shooters like *Medal of Honor* or *Call of Duty 4* (see note 21) However even Robinson has explored the militarization of video games through Ian Bogost's framework for the way in which games can mount implicit persuasive arguments such as the sanitized portrayal of war in *America's Army* or the portrayal of violence as a necessary response to the war on terror in *Army of Two* often serve pro-military themes to players (see note 22) while pointing out that games that are openly critical of military violence are either few in number or relegated to the far smaller independent game development scene (see note 23) Marcus Power invokes Der Derian in describing how military-themed shooters like *America's Army* serve to extend a romanticization of war that allows players a chance to exert a fantastical sense of control over complex historical military engagements wherein war and in particular the American military is portrayed in a sanitized benign light (see note 24) Sebastian Deterding is similarly concerned with the increasing integration of military and media in military simulations (particularly for video games), and traces the tradition of strategy games and the link to the military-entertainment complex to the use of some of the earliest war games like *Kriegsspiel* as a training tool for Prussian army officers during the 1820s (see note 25). For Roger Stahl the close identification video games often thematically make with current affairs, such as the news-like shooter *Kuma/War* or the much-touted military recruitment tool *America's Army*, often entail implicit ethical arguments that portray military action as an ultimately desirable or more effective solution to international issues and work to thin the line between a critical citizenry and an impartial soldiery (see note 26). Other authors in Nina Huntemann's collection *Joystick Soldiers* such as David Nieborg (see note 27), Randy Nichols (see note 28) and King and Leonard (see note 29) have also written on the intersection between militarization, American power and military shooters made the United States. Thus, much of the existing literature on the relationship between IR and video games has thus far largely focused on the way in which video games play a role in the larger MIME-NET and often serve as extension of state power.

Thus, that much of the existing literature on the relationship between video games and international politics have been largely focused on the place of games in the development of militarization whether directly in the production of games or the thematic content they contain. This analysis is often cast in the tradition of Der Derian's virtual theory and critique of the MIME-NET. However, it is worth pointing out that some of these authors often note the potential for video games to engage with more critical questions about IR outside of their place in MIME-NET. Salter, for instance, concludes that some other avenues of critical studies on geopolitics through the ludological study of games could be productive (see note 30) while Robinson argues that the persuasive character of games could serve to raise critical question in virtual worlds (see note 31). However, beyond Robinson's exploration of challenges posed to militarization in a handful of games (see note 32), the question of what video games could potentially offer for insights into broader disciplinary debates in IR theory remain unexplored. How to explore these possible insights outside of the military character of the Der Derian's account of the virtual, however, would probably require a different approach that gives some privilege to the possible insights video games can make as critical sources of knowledge in IR. This approach can be found in the works of other cultural turn writers like Roland Bleiker.

3. Area Description

3.1 Roland Bleiker's Aesthetic Turn

Given that previous efforts to examine video games in the context of IR have overwhelmingly focused on the connection between video games and the framework of militarization in virtual theory, exploring other means of analyzing video games and IR theory would in turn require some alternative theoretical approach to frame video games as potential sources of insight into IR. Whereas virtual theory highlights how the production, dissemination and content of media can be tied to the extension of state power, pop culture and digital media can also be interpreted as artistic artefacts with their own insights into international affairs. This notion is a heavy component of both the ontological and methodological critique offered by Roland Bleiker's account of the aesthetic turn in IR.

Perhaps one of the defining aspects of Bleiker's aesthetic turn in IR is its foundation in an epistemological challenge to more established disciplinary approaches to knowledge claims in international politics. Much like Der Derian's virtual theory, the aesthetic turn is also grounded in a critique of what it claims to be an overwhelmingly positivist approach to IR research. However, rather than questioning this approach in order to broaden ways of recognizing the extent of state power Bleiker's aesthetic turn is instead interested in arguing for the capacity for art and media to provide unique aesthetic insights into international politics. Bleiker grounds this approach in a critique of "mimetic" knowledge claims, which attempt to render IR theories as close to exact replicas of how social phenomena work as possible (see note 33). For Bleiker mimetic approaches in IR often obscure their own basis in subjective conjectures or assumptions about international politics in the quest for some notion of objectivity (see note 34). While Bleiker does not necessarily go further in claiming that the facts and objects of IR research are, as a result, themselves suspect, Bleiker does push the notion that how IR as a discipline translates or represents facts ought to not be taken for granted (see note 35). The preponderance in IR of an Enlightenment-era idealization of reason over other human faculties that in turn informed the pursuit of scientific legitimacy after the Second World War served to strip the socially and historically contingent aspects of Hans Morgenthau's assessment of the rise of Nazi Germany or Kenneth Waltz' assessment of the Cold War into a universalized and ahistorical objective description of international politics (see note 36). For Bleiker, however, the objectivity sought by a mimetic approach is almost impossible:

Consider, by way of illustration, the similarities between the work of a painter and a social scientist. Both portray their objects through particular modes of representation. Even a naturalistic painting is still a form of representation. It cannot capture the essence of its object. It is painted from a certain angle, at a certain time of the day, and in a certain light. The materials are those chosen by the artist, as are the colours and size of the painting, even its frame. Recall for a minute the famous and much-discussed painting by the surrealist René Magritte: the one that features a carefully drawn pipe above an equally carefully hand-written line that reads 'Ceci n'est pas une pipe' ('This is not a pipe'). What becomes obvious fairly soon – that the painting is not a pipe itself, but only an artistic representation thereof – challenges the very notion of mimesis. It draws attention to what, in Saussurian language, is called the arbitrariness of the sign: the fact that the relationship between signifier (the drawing of the pipe) and the signified (the pipe) is contingent on a range of interpretive steps (see note 37).

Bleiker even goes so far to say that a mimetic theory would not even be desirable, as a perfect representation "would merely replicate what is, and thus be as useless 'as a facsimile of a text that is handed to us in answer to our question of how to interpret that text' (see note 38)." Informed by the works of Kant and Deleuze, Bleiker posits the alternative to mimesis as a Romantic-era notion of the "aesthetic" as an attempt to give some privilege to the wide variety of other sensual forms of representation that may provide equally important academic insights other than those derived from the rational (see note 39). For Bleiker, the contemporary relegation of concepts like artistic taste and evaluation to being "of a purely private and thus subjective nature" (see note 40) misses an opportunity to provide "an alternative to the deeply embedded modern assumption that our knowledge of the world is structured according to the objects we see to know (see note 41)." Thus in ignoring the epistemological question about the relationship between representation and represented, mimetic tendencies in IR theory often end up entrenching particular subjective perspectives as objective at the expense of a range of other potential academic or ethical insights into international politics. The potential of those aesthetic insights is something the aesthetic turn explores in the methodological challenge it poses to traditional IR scholarship.

Following from an epistemological critique of established IR scholarship the aesthetic turn also offers a methodological challenge to IR study. While mimetic approaches to research not only entrench and thus mask their interpretive and subjective underpinnings, they also delegitimize alternative approaches to the study of IR that do not reflect a comparatively narrow emphasis on empiricism and reason as a source of knowledge. Bleiker does point out that the inclusion of artistic sources in IR is by no means entirely novel, attempts to do so aesthetically have certainly not been. While Bleiker notes that *Man, the State and War* is no stranger to literary sources, "Waltzian abstraction is obsessed with deduction, categorization and scientific legitimacy (see note 42)." At any rate, according to Bleiker subsequent IR orthodoxy has not seriously pursued this interest in the arts (see note 43). For

Bleiker, however, (and much unlike Der Derian) the pursuit of artistic sources as an alternative means of attempting to understand (and potentially subverting) previous means of understanding international phenomena serves a key role in the aesthetic turn. Various art forms are often based in precisely the sensuous and non-rational experiential descriptions of history or international events that could be used to broaden the relatively limited notions of objectivity in IR scholarship (see note 44). The result, according to Bleiker, is an approach that evaluates the wide range of subjective approaches to epistemology rather than assuming ontological characteristics of objects of study. As Bleiker explains:

A brief illustration from the world of art may help: consider how Picasso's *Guernica* has given us insight into the Spanish Civil War and the human psyche not because it sought recognition and life-like representation. The significance of *Guernica* as a form of aesthetic insight and historical memory is located precisely in the fact that Picasso aesthetically engaged the very substance of politics: the difference between the represented and its representation. *Guernica* allows us to move back and forth between imagination and reason, thought and sensibility, memory and understanding, without imposing one faculty upon another (see note 45).

Thus arguments about the celebrations of military heroism in the music of Beethoven, the close relationship between popular memory of the Vietnam War and films like *Apocalypse Now* as well as the role literary fiction has played in justifying colonialism all seem to deserve some impact on the study of IR by virtue of their ability (see note 46). Indeed, in *Aesthetics and World Politics* Bleiker's own work engages in an extensive discussion on the way the poetry of Paul Celan, Pablo Neruda, Anna Akhmatova, Ko Un and the Prenzlauer Berg poets each played with the conventions of language to address or even seek alternative ways of thinking about the politics of their day (see note 47). Perhaps most importantly for this paper Bleiker even argues that inquiries outside the high arts into the way fictional representations of politics in pop culture are capable of revealing something positive about the societies on which they are based (see note 48). Thus, despite grounding itself in similar epistemological approaches to previous IR analyses of video games Bleiker's aesthetic turn also gives a means of developing a critical understanding of IR using artistic sources based on their unique capacity to provide alternative aesthetic insights.

Thus, Bleiker's aesthetic turn offers both an ontological and methodological basis for approaching cultural or artistic sources as the possible bases for aesthetic insights into IR. This is due to their capacity to frame or translate information in ways other than more orthodox logocentric approaches in social scientific IR research. However, while Bleiker's aesthetic turn suggests a possible way to approach video games as a possible source of knowledge in IR as somewhat independent artistic artefacts and outside of Der Derian's virtual theory, the question of how exactly an examination of video games can come about ought not to be taken for granted. Bleiker notes that a challenge in drawing aesthetic perspectives from artistic sources is meeting those sources in ways that do not simply fall back on simply privileging rationalist assumptions. Bleiker refers to the example of relying on musical insight or illumination, as "Both of these terms are inherently visual, reflecting a deep-seated assumption that our ideal experience, as Nussbaum stresses, 'must be a visual experience, that its illumination must be accounted for in terms of the eye' (see note 49)." Bleiker's own analysis of poetry as an example of aesthetic research begins with a similar question and attempts to answer it by highlighting the way in which poetry directly engages with normal conventions of language and thus give a space for imagining alternative approaches to politics (see note 50). Video games are potentially no different, as it is worth noting that disciplinary debates over even ontological questions of what video games are do exist. Thus, how aesthetic insights on IR can be gleaned from video games probably ought to be preceded by a discussion of Ian Bogost's notions of procedural rhetoric and the persuasive power of video games.

3.2 What is a Video Game?

Much like in the way that Bleiker argues that the value poetry has for IR studies in playing with the fundamental conventions of language and thus speaking to the very political struggles over the control of language in authoritarian states, it seems worth exploring exactly what kind of aesthetic insight into IR could be drawn from video games. It is worth noting, however, how Bleiker acknowledges that his accounts of aesthetics and poetics are

not complete overviews of admittedly large topics since a full discussion of either would quickly outstrip an interdisciplinary argument that is ultimately concerned with IR (see note 51). Similarly, it is worth noting that the study of video game design and research has its own scholarship. Indeed, as Juul points out one of the early debates in video games studies were between the study of some notion of a tradition of games (ludology) and the study of the stories that games tell (narratology) (see note 52). For Montola, a social constructionist perspective on games challenges Juul as well as the narratology/ludology debate in favour of highlighting the intangibly symbolic nature of engaging with game play and the resulting intersubjective experience (see note 53). Thus, while even ontological debates about the nature of video games are varied, it is beyond the purview of this paper to settle them as the focus of this paper is rather on the connections between games and IR. Sufficed to say that this paper intends to present “an” understanding of video games that could be tied into the study of IR. This understanding is one that appropriates Jesper Juul’s notions of video games as primarily rules-based activities and thus capable of the process-based persuasion argued by Ian Bogost.

One foundational notion in ludology is the concept of video games as being defined primarily as a rules-based activity. For Jesper Juul, the primacy of rules and the constraints placed on the players of a game in video games as a medium can be considered as an extension of the notion of a game as a whole. Thus, while video games as such may be a relatively recent form of entertainment Juul places them in a longer tradition stretching all the way back to early board games like senet played in ancient Egypt (see note 54). Juul systematizes this tradition in what he calls a “classic game model” which emphasizes the fundamental importance of consistent sets of rules, concrete goals with differing values (win/loss, etc.) and negotiable outcomes (see note 55). However, according to Juul while the classic game model may provide a basic approach to understanding how games could generally function it does not necessarily account for the appeal or variation of computerized games (see note 56). For Juul, the introduction of computers to the classic game model changes the dynamic of how a player interacts with a game, given that a computer (or equivalent digital format) is capable of refereeing rules independent of human activity as well as processing more numerous and more complicated rules than their non-digital counterparts—all potentially without letting a player know (see note 57). This becomes a particularly important point given the narratological-ludological debate, where video games could be analyzed or read like other forms of digital media. Many video games usually project some kind of fictional world to effectively justify the pretense of engaging with the otherwise somewhat arbitrary rules they present (see note 58). However, for Juul focusing on these fictional elements ignores the substantial contribution game rules make to how a player relates to more traditional audio-visual parts of a video game. As Juul points out, representational elements may be expressly used to hint at otherwise hidden rules:

In a game with a first person perspective, the player facing evil-looking monsters is likely to assume the monsters are avoided or possibly destroyed. If the images of the monsters were replaced by something benign, perhaps large flowers, the player will likely make different assumptions about the rules of the game. It is not just the graphical representation, but also the rules of the game that project the fictional world (see note 59).

The interplay between traditional fiction and game rules can also be revealing when a dissonance occurs, which Juul explores in the example of character design in *Tekken 4*:

In the fighting game *Tekken 4*, players can choose between a number of different characters. In this case, we have chosen the small girl, Xiaoyu versus the big muscular Marduk (figure 5.11). The representation of the game leads us to believe that Marduk is a stronger character than Xiaoyu but, in actuality, her strength is on par with all the larger characters in the game (figure 5.12). In my experience, the discrepancy between the outward appearance of the characters and the rules governing their behavior tends to be considered humorous. Here, the surprising difference between what the representation suggests and what the game rules determine adds depth to the characters in the game. It also ties into the story of David versus Goliath, and the supposedly amazing powers of martial arts. In this case, the representation cues something that is contradicted by the rules, but this incongruence is an interesting effect (see note 60).

Thus, for Juul video games exist as the latest extension of a longer tradition of media and entertainment that is distinguished by how rules play a central role in how a player accesses a game. What exactly those rules could potentially express is an idea that is further explored by Ian Bogost.

One possible way to understand how video games can mount arguments as rules-based forms of media is through what Ian Bogost refers to as “procedural rhetoric.” Juul suggests something similar in mentioning the way in which the fictional worlds games project are necessarily stylized abstractions of activities that occur out of the game. As a result, in-game interactions that are omitted, left simplified or made particularly complex can in turn highlight what the game considers to be ideal aspects of that experience (see note 61). Thus, while “Virtua Tennis simulates lobs, smashes, and other dramatic aspects of tennis, whereas tennis elbow and broken rackets are omitted (see note 62).” This becomes an idea that is particularly relevant for Bogost. Bogost begins with the notion that one of the defining aspects of computer code as essentially being the execution of a series of codes, which Bogost refers to as procedurality (see note 63). For Bogost, the procedures that dictate computer behavior are in many ways analogous to the procedures that are found in regular human interaction. Indeed, most of human behavior is governed by some notion of procedure or underlying logic, which can describe the intersection of multiple malleable and complex cultural practices as well as dense mechanical workings (see note 64). Bogost thus argues that the nature of computers as process enacting machines make them uniquely suited to describe procedurality by presenting other representational procedures, making a kind of procedural rhetoric that Bogost presents as distinct from written or verbal forms of rhetorical persuasion (see note 65). Procedurality is especially given persuasive power considering the often interactive nature of procedural computer representations, as the ability for a participant to manipulate or explore the bounds of a given procedure (what Bogost refers to as “possibility space”) effectively forms the contours of an argument about how a procedure works (see note 66). In Bogost’s own words:

For example, many players and critics have celebrated *Grand Theft Auto III (GTAVIII)* as a game that allows the player to “go anywhere, do anything.” This sentiment is flawed for several reasons. First, the game does not actually allow the player to “do anything”; rather, in the words of one reviewer, “*GTAVIII* let you do anything you wish, within the parameters of the game.” The “parameters of the game” are made up of the processes it supports and excludes. For example, entering and exiting vehicles is afforded in *GTAVIII*, but conversing with passersby is not (see chapter 3 for more on this subject). This is not a limitation of the game, but rather the very way it becomes procedurally expressive. Second, the interactivity afforded by the game’s coupling of player manipulations and gameplay effects is much narrower than the expressive space the game and the player subsequently create. The player performs a great deal of mental synthesis, filling the gap between subjectivity and game processes (see note 67).

Bogost gives a possible example of what procedural rhetoric could describe in the hidden ideological underpinnings of political life (see note 68). Of particular interest to this paper, Bogost suggests that video games are examples of complex collections of computational processes that combine to create representations of the logic that drives political action. For Bogost the strict constraints that *America’s Army* places on players that entail in game punishments for deviations from either the American army’s rules of engagement or the chain of command, the use of a persistent “honour” score to incentivize the completion of missions by those standards and the general lack of any particular geopolitical relevance to the missions players are expected to complete all contribute to underlining the portrayal of the American army as an apolitical entity that rewards service for following orders rather than a moral stance on a particular conflict (see note 69). Thus the interaction between rules/procedures, procedural rhetoric and play is one kind of alternative aesthetic insight that video games can bring to the study of IR theory. The way this interaction manages to procedurally mount cogent arguments about the nature of international politics can be explored in both *Total War: Shogun 2* and *Civilization V*.

4. Discussion

4.1 *Shogun 2*

One possible example for exploring how video games can present procedural arguments about the nature of international affairs is the game *Total War: Shogun 2*. The game was released in 2011 and developed by the UK-

based The Creative Assembly. The game is the seventh in a series that began with *Shogun 2*'s direct prequel, *Shogun: Total War*, in 2000. *Shogun 2* comes from a line of grand games with the conceit of allowing a player direct control over large historical battles where groups of up to hundreds of units can be tactically maneuvered in real-time. The series has maintained this tension between grand strategy and tactical battles over a number of different historical periods in Europe, with *Shogun* and *Total War: Warhammer* being the exceptions (see note 70). Given its place in a series of games that have functioned relatively consistently, the choice of *Shogun 2* over other *Total War* games may seem somewhat arbitrary. However, it is worth pointing out that it was an especially well received entry and even won a British Academy of Film and Television Arts award for best strategy game in 2012 (see note 71). It also seems worth noting that while *Shogun 2*'s main game has an online multiplayer variant as well as two later expansions, none of these variants affect the main campaign and are thus being excluded as somewhat different aesthetic experiences of their own. Regardless, *Shogun 2*'s main single-player campaign potentially serves as a particularly cogent procedural expression of realist thought in IR and is worth examining as an example for this fact alone. This can be shown by providing some notion of a realist approach to IR, examining how these notions express themselves procedurally in the rules that govern *Shogun 2*'s game world, and addressing some possible problems this analysis might cause.

Any analysis of how political realism expresses itself in *Shogun 2* probably ought to be preceded by a summary of the game itself. In *Shogun 2*, a player is tasked with the management of a Japanese aristocratic family towards the latter half of the Warring States Period in 16th century Japan. As such, players witness the collapse of feudal Japan as each faction seeks to maintain its independence and/or place itself as the ruling military shogunate. The game is played primarily from an isometric top-down perspective somewhat mimicking the experience of playing a board game. The major conceit of the Total War series sees the game played out in two kinds of maps; a general map of Japan where strategic choices are made and a tactical map where a player makes choices for an army fighting particular battles. On the general strategic map most of modern-day Japan is represented and divided into smaller individual provinces, each of which contain a town from which armies can be recruited as well as a range of infrastructural improvements that can be upgraded as the game goes on. While a player initially sees the few provinces they initially own in addition to nearby provinces as well as a general territorial layout of Japan, a stylized fog of war hides relevant information such as ownership, troop movements and infrastructure. The strategic map also sees a player move various human agents like armies, fleets, assassins, bureaucrats, and priests around not unlike board game pieces. The strategic map also allows players to manipulate various elements of their internal affairs such as tax policies (with higher taxes causing higher risks of civil unrest), spending on infrastructure, the dynamics between their family members as well as areas of research that give bonuses to the faction and open up technological developments such as gunpowder. The strategic map further allows players to deal with other factions through a screen listing relevant information about each faction (power, wealth, personality, integrity, opinion of the player, etc.) as well as the option to trade set policies (trade agreements, ceasefires, dynastic marriages, military alliances, open border treaties, etc.). Decisions taken on the strategic map work on a turn-based basis, the player being given a certain budget every turn to recruit soldiers or make improvements to their provinces (or both) and all of their human agents only being able to move a limited distance around the map each turn. Meanwhile, the various tactical maps allow players to more directly attempt to affect the outcome of their strategic decisions (ostensibly when armies either run into each other or siege towns) in real-time by giving orders to their armies at the same time as their opponent. At the start of a game, the player is given the option to manage a range of 10 playable Japanese noble clans each starting in different parts of a map of feudal Japan and with different strategic or tactical advantages. For example, the Oda faction recruits superior non-noble soldiers cheaper than other factions, while the Hojo build cheaper castles as well as better siege engines. Regardless, each faction is given the goal of conquering a certain amount of province within a certain amount of time. Depending on the choice of the player, this can range from twenty-five to sixty provinces between 1545 and either 1580 or 1600. Aside from the ultimate goal of the imperial capital in Kyoto, each faction has an additional goal of capturing particular nearby provinces. Ultimately, if the victory conditions set at the beginning of a game are met a player is rewarded with a premade cut-scene proclaiming them the new shogun of a regime that set the foundations for present-day Japan, while the player loses when either their last province is taken or the allotted time runs out without completing their victory objectives (see note 72).

4.2 Mearsheimer and Realism

One useful tool in examining the procedural representation of IR in *Shogun 2* are some of the key features of the realist struggle for power, particularly as it is expressed by John Mearsheimer. As its name suggests, Mearsheimer's offensive realism is an offshoot of the realist school of thought in international relations and Mearsheimer thus borrows a number of realism's basic assumptions. Besides agreeing with realism's basic premise that states are the primary (or really only) actors exerting influence in international affairs (see note 73), Mearsheimer also identifies five major 'bedrock' assumptions that inform offensive realism. For one, the international system is anarchic and maintains no central authority that governs above independent states in the system (or, that there is no world government). In addition, states (specifically great powers) also inherently possess some offensive military capability. States can also never be certain about another states' intentions. The maintenance of territorial integrity (survival) is the primary imperative of all states. Lastly, all states (specifically great powers) are rational actors that consider the effects of their decisions and their chances of survival in a calculated or strategic manner. Mearsheimer admits that none of these assumptions individually entail a system defined by conflict. However, the primary drive for survival coupled with the uncertainty over whether their neighbours will attack with their military capabilities and an anarchic system that does nothing to stop such an attack from occurring put a great deal of pressure on states (see note 74). This means that the rational, calculated response of any actor in such a system would be to adopt a self-serving attitude that measures raw military wherein alliances are brief and power is the main factor in any relationship with another state, particularly as a deterrent (see note 75). In effect, the more power a state has the less likely weaker neighbours are to take advantage of an anarchic system. Offensive realism's distinguishing characteristic becomes apparent when Mearsheimer suggests an upwards limit to the total distribution of global power that states share, with the gains of any one state necessarily inflicting a relative loss on its rivals. As there is no way to determine just how much power assures a state's security in the long run and that the security dilemma resulting from any rival states' fear of any other state's increase in power (see note 76), Mearsheimer ultimately concludes that the pursuit of hegemony or its closest approximation is the goal of at least all great powers (see note 77). It seems worth noting that while Mearsheimer's offensive realism is by no means the only or only legitimate formulation of an old and diverse IR approach, it is ostensibly not within the bounds of this project to give a comprehensive view of international realism. However, Mearsheimer does express some key realist notions in a fairly straightforward manner, and the implications of offensive realism are particularly appropriate in examining the manifestation of international politics in *Shogun 2*.

4.3 Realism Procedurally Represented

It is within this context that games like *Shogun 2* can mount a procedural argument about the systemic constraints placed on state behavior in IR. In the case of *Shogun 2*, the nature of the constraints and goals structured in the game in many ways encourage a player to engage in a deeply realist analysis of the role power plays in IR. This, for instance, extends to the bedrock assumptions Mearsheimer puts forward about international politics. Just as Mearsheimer posits state sovereignty as the foundation of structural anarchy, so too does *Shogun 2* present the player control over playable clans which with only a few exceptions (such as vassalage to another faction, which is temporary) are effectively sovereign given that no other faction dictates their (or the player's) decisions. Much as Mearsheimer's states all possess some offensive capability, so too do the most of the factions in *Shogun 2* all raise armies, navies and saboteurs (the exception being a landless faction for rebels and a faction of roving European trading ships). While a player in *Shogun 2* can receive a vague notion of what other factions in the game intend either through the diplomacy screen or through espionage, the player is not allowed to see what goes on beyond a little ways outside their borders and thus can never truly know what other factions in the game are planning. For Mearsheimer states are primarily concerned with survival and territorial integrity, just as players in *Shogun 2* are presented with the prospect of losing all of their provinces as tantamount to losing the game (see note 78). Mearsheimer's final bedrock assumption that states make decisions based on rationally or otherwise strategic calculations is in turn expressed by the decisions of the player, who acts in their own self-interest presumably in a quest to win the game. Beyond Mearsheimer's bedrock assumptions, other fundamental aspects of *Shogun 2* reflect the centrality offensive realism assigns to the relative distribution of hard military power among actors in an international system. Mearsheimer's conclusion that hegemony is the overall goal of great powers is directly represented in *Shogun 2*, not only in the overall goal of the game being to conquer large swaths of province but in

the security dilemma created by the in game relationship between province, wealth and military power. All units in *Shogun 2* require regular salaries on top of recruitment fees, meaning that the only way to field the armies and agents necessary to defend a player's borders against their neighbours if they increase in power is to acquire increasing levels of revenue. While establishing trade routes with other factions is one way a player can gain these funds, trading relationships are subject to the shifting political relationships between those factions. The only alternate way to assure a consistent flow of revenue is to hold and develop provinces, with a single additional province adding a substantial increase in funds. Given that the only way to acquire more provinces is to field the armies capable of taking it and that the number of provinces on the map is limited (see note 79), conflict in *Shogun 2* is inevitable. While computer-controlled factions and indeed the player may respond to the distribution of power in different ways, the depiction of power at the core of these relationships does not change. Computer-controlled factions are scripted to relate to the player and each other through static "personalities" as well as through a dynamic relation score that changes over time, a major cause of change being territorial expansion. While ambitious personalities may opt to expand quickly they risk a drop in relation with smaller peaceful personalities (see note 80), a situation the player may face or exploit by allying smaller threatened factions in what Mearsheimer calls "balancing (see note 81)." Even the player's relationship with the nominal sovereign is more like with that a hegemon and is dictated by these power dynamics, especially as the player's progress is marked by a meter representing the attention paid by the imperial shogunate. *Shogun 2*'s end game generally consists of a "realm divide" event wherein this meter is filled, the shogunate is threatened enough to declare war on the player with a powerful army and unites all of the other factions against them (see note 82). Thus, the central role power plays in the way in which players interact with other factions in *Shogun 2* clearly present the game's rules as a staunchly realist process.

It is worth noting, however, that there are potential limits to overlaying an offensive realist analysis to *Shogun 2*. For instance, for Mearsheimer realism is based on an obvious but implicit weight given to the centrality of the modern state and its coercive capacities. Indeed, much of Mearsheimer's own analysis of great power behaviour in *The Tragedy of Great Power Politics* does not extend before the 1850s (see note 83) and even typifies nuclear superiority as a means for great power survival in systemic anarchy (see note 84). Taking place in the mid-to late 16th century, *Shogun 2* ostensibly takes place long before Japanese statehood or even before the concept of statehood is considered to have originated in Europe and long before the advent of nuclear weaponry. Indeed, the events depicted in the game are thematically closer in nature to a feudal civil war than an international system. This is reflected in certain more theme-specific aspects to how the game manipulates the way players relate to other factions in the game. The most notable among these is perhaps the influence of an actual sovereign in the emperor of Japan. The theme also exerts itself in other ways such as the impact dynastic marriages, hostage exchanges and a reputation for honouring or dishonouring treaties can play in the relation modifiers which dictate a player's relationship with another faction (see note 85). This is worth mentioning given the integrated nature of theme and rules in video games, given Juul's insistence that different sets of games rules cannot simply be arbitrarily represented by different thematic presentations (see note 86). Part of this dissonance could potentially be addressed with the admission Mearsheimer makes to the role factors other than structural anarchy play in shaping foreign policy, citing the German nationalist supplement to Bismarck's realpolitik (see note 87). Another possible response could suggest that though players represent feudal noble clans, factions in *Shogun 2* play far more like centralized states. Beyond the possibility of civil unrest or armies mutinying, decisions taken over a faction's internal and external policy are almost entirely centered on the player (see note 88). However, Bogost's notion of the limits a game's possibility space affords a player suggests another possible argument. Despite the thematic dissonance produced by the historical elements of *Shogun 2*, the highly centralized nature of decision-making in *Shogun 2* means that a player is not bound to respect treaties, engage in dynastic marriages or recognize in-game imperial authority. Beyond damaging relations with other neighbouring factions the player was probably going to declare war on anyway given the nature of the game there are no other repercussions on the player for breaking treaties or alliances. Similarly, a player has no reason to appease the Ashikaga faction beyond the risk of antagonizing a very powerful but very passive imperial authority that the player has to defeat to win the game anyway. The gap between the game's rules and thematic content seems to fit in line with the notoriously older general tradition of realist thought beyond Mearsheimer. The struggle for hegemony and power in the absence of a structural authority was as pervasive for *Shogun 2* in feudal Japan as it was for Hobbes in Stuart England or Thucydides in Greece. Thus,

despite the thematic historical trappings of *Shogun 2* the game remains very much about the centrality of power among effectively sovereign entities in line with realist IR thought.

Thus, *Shogun 2* serves as one possible example of a video game presenting a procedural representation of fairly fundamental elements of realist IR thought. This was demonstrated by presenting a particular account of realism as expressed by John Mearsheimer, examining how power plays a central role in the very realist underpinnings of *Shogun 2*'s process and addressing some potential conflicts in applying realism as an ideological framework to the game. *Shogun 2*, however, is not the only strategy game that can mount similar arguments about IR.

4.4 Civilization V

Another possible example of how video games can procedurally represent aspects of IR theory can be found in the game *Sid Meier's Civilization V*. This is particularly obvious the manner in which it allows a player to enact the major elements of certain liberal approaches to IR like the democratic peace theory. Released in 2010 by developer Firaxis, *Civilization V* is (somewhat counter intuitively) the sixth in a series of eight games that began with *Sid Meier's Civilization* in 1991. Much like the *Total War* series, the *Civilization* games have all shared the relatively consistent conceit of having a player lead a recognizably historical "civilization" through recognizably historical and technological eras. As players generally progress largely linearly from nomadic to agrarian to industrial societies, they make choices about the internal politics and culture of their civilization as well as they way they relate to other civilizations (see note 89). Also like the *Total War* games, the tradition of games could suggest that the choice of *Civilization* as a topic of study is somewhat arbitrary. However, unlike *Shogun 2* which was critically well received and performed well on its release *Civilization V*'s marked popularity (selling some 21 million units worldwide by 2014) (see note 90) as well as its potential ability to procedurally represent the democratic peace theory make it a clear example for studying strategy video games. Like *Shogun 2*, meanwhile, it is worth noting that *Civilization V*'s single player campaign also has a multiplayer variant and two later expansions, though the expansions directly impact how the main campaign is played and will thus be treated as part of it. The manner in which *Civilization V* argues for the democratic peace theory can be shown by first summarizing some expression of the democratic peace theory (namely as it is accounted for by Michael Doyle) and examining how major elements of the theory like constitutional, international and cosmopolitan law manifest in playing *Civilization V*.

In *Civilization V*, a player is tasked with managing a civilization as it progresses through a facsimile of world history and achieves a level of development or global conquest that wins the player the game. While many aspects of any one game of *Civilization V* are subject to the player's discretion, typically a game sees a civilization develop linearly from one city during a kind of Stone Age to an analogous contemporary and even future level of technology. Much like *Shogun 2*, *Civilization V* is also primarily played from an isometric perspective but is entirely turn-based. Unlike *Shogun 2* a game of *Civilization V* is played exclusively on one map that at a player's discretion may resemble a map of the globe or be a randomly generated one. Also unlike *Shogun 2*, *Civilization V*'s world map is divided wholly into hexagonal square tiles which represent natural features rather than the townships in *Shogun 2*. *Civilization V*'s world map furthermore differs from *Shogun 2* in that a player lacks any geographical outline beyond the fog of war, initially being only familiar with their immediate surroundings and discovering more of the world as the game goes on. One focus of a player's actions on the world map are cities, one of which a player settles on a tile as the first action of a game and typically settles or conquers others over the course of a game. Cities provide a focus for political, technological, economic and social development of a player's civilization. A faction's borders are the zones of influence around their cities, which grow and potentially merge as a game goes on. Based on a numeric representation of "production" (in turn based on the development of the territory around a city), cities build buildings that increase a numeric representation of "science," add to a numeric representation of "culture," increase a player's wealth and recruit different kinds of units. Technology plays a particularly important role in the game, as the level of "science" cities generate contribute to the development of particular technologies (such as the wheel, or gunpowder) that abstractly represents a civilization's place in history (the Medieval Era, the Industrial Era,

etc.). Players also control units on the world map that move across and occasionally transform tiles in both military and civilian capacities. For the most part one unit occupies one tile at a time and can move up to two tiles a turn, with certain tiles (like river or forest tiles) slowing movement down. A number of units fulfill different military roles, namely scouting the world map, attacking other units and attacking cities. However, a number of other units fulfill civilian roles such as workers who develop tiles inside a city's borders into farms, mines or roads as well as settlers who settle new cities. At the start of a game, a player is given the choice of managing one of 43 factions, each generally correlating to a historical polity, country or nationality. Each civilization is differentiated by being represented by a unique leader that the player interacts with during diplomatic discussions, being able to recruit a unique unit or build a unique building as well as holding some more permanent global effect. The player is also given control over various characteristics of the world map of a game (size, climate, starting date, etc.) as well as how many other civilizations and minor city-state factions they might meet throughout a game. Finally a player is also given a choice as to how they might win a game, as multiple means of winning a game ranging from conquering all other factions, being elected World Leader at the in-game United Nations, launching a spaceship into space or achieving a cultural dominance over most of the other civilizations (see note 91).

4.4 Doyle and Liberal Peace

Another perspective in IR that could be useful in examining the expression of international politics in *Civilization V* is the mechanisms of the democratic peace theory. According to Michael Doyle, the democratic peace theory is grounded in an empirical observation made that the gradual appearance of multiple liberal democratic regimes globally towards the middle of the 19th saw a stark reduction in interstate wars between these liberal countries (see note 92). Doyle characterizes liberal regimes by their general adherence to the maintenance of juridical equality as well as civic rights among a citizenry, an elected constitutional legislature for a sovereign, the recognition of an economy based on property rights and that such an economy be predominantly governed by a free market (see note 93). The combination of these features domestically, according to Doyle, created "a liberal zone of peace, a pacific union (see note 94)" that despite not pacifying liberal democracies entirely certainly succeeded in lessening the legitimacy of wars between liberal democracies. Doyle points out that a number of possible alternatives for the reduction of outright wars between some states, such as the development of military technology, the simple relationship between similarly ideologically aligned states of any ideology and the enduring nature of historic alliances or friendships do not account for the totality of Kant's pacific union (see note 95). Thus, Doyle suggests that a possible explanation for the phenomenon of the democratic peace can be found in the Kantian notions of the Perpetual Peace. For Doyle, Kant's suggestion of three Definitive Articles effectively systematizes the combination of the characteristics of liberal regimes and serves as a basis for the empirical or potentially normative character of Doyle's own zone of liberal peace (see note 96). According to Doyle, the domestic provision of constitutional law (or Kant's First Definitive Article) that assures the civic and economic freedoms of a citizenry by subjecting a sovereign to democratic scrutiny within liberal states replaces the possibility of a warlike despot's personal agenda with the caution of a collection of individuals who presumably would be the ones fighting a war (see note 97). Furthermore, the externalization of domestic liberal constitutional principles in Kant's Second Definitive Article (or Doyle's international law) provides a common moral basis for international cooperation between liberal states (see note 98). Lastly, Doyle points to the liberal economic basis of cosmopolitan law (analogous to Kant's Third Definitive Article) that promotes the spirit of commerce and the rights to hospitality provides not only a material incentive for international cooperation or interdependence but also remove the responsibility for (and thus conflicts over) the production and distribution of goods from the purview of the state (see note 99). According to Doyle, the combination of all three factors connects the pacifying moral and economic characteristics of liberal politics across liberal regimes to consequently promote peace (see note 100). Besides the potential for peace, however, another mechanic of Doyle's democratic peace theory is the inverse potential for war between liberal democratic and non-liberal states. For Doyle, while the characteristics of liberalism shared between liberal regimes may promote legitimacy among liberal citizenries, the lack of those same characteristics outside liberal democracies may instead promote a much more classic realist dynamic of suspicion and fear (see note 101). According to Doyle, the failure of non-liberal states to uphold civic or constitutional freedoms for their citizens potentially frames those societies as morally lacking in liberal societies. Consequently, the place of non-liberal states outside of a liberal order of moral or international law also potentially presents the picture that non-liberal states do not share basic international legal rights such as non-intervention and may themselves not respect the

independence of liberal states (see note 102). Given that subsequent relations between liberal and non-liberal states return to realist security considerations, the cosmopolitan basis for economic relations are also made subject to other political conflicts (see note 103). Thus, Doyle's picture of democratic peace theory as positing that particular liberal institutions promote peace among liberal states and war with between liberal and non-liberal states. Like Mearsheimer and realism, it is worth noting that Doyle's democratic peace is not the be-all end-all of liberal IR theory or even of democratic peace theory, neither of which could comprehensively be discussed in this paper. However, Doyle's focus on particular characteristics of liberal politics is useful in examining how *Civilization V* engages with IR theory.

4.5 Liberal Peace Procedurally Represented

Perhaps the most obvious way in which *Civilization V* procedurally represents the democratic peace theory is the way in which it encourages in-game trade and as a result Doyle's cosmopolitan law. Throughout a game of *Civilization V*, for instance, players are given the opportunity to engage in trade with other factions which play out on the game's map as caravan units who regularly move along routes between cities set by the player. These trade routes can be set to move resources like food or production between cities controlled by the player or generate wealth, science and spread religious influence if they are given destinations outside of the player's civilization (see note 104). Given that these trade routes are interrupted and even plundered during war time, their benefits can obviously only be enjoyed during peaceful relations with other factions. However, a secondary and perhaps more persuasive example of the pacifying effect of in-game trade is the relationship between in-game luxury resources and a civilization's happiness which in many ways parallels liberal economic notions of economic interdependence. Somewhat similarly to *Shogun 2*'s unrest mechanic, factions in *Civilization V* also represent civil unrest in a "happiness" meter which affects the production of various resources gained from cities. When happiness levels drop below zero due to factors like having too many citizens in a faction or not having enough food in particular cities the progress of scientific development, production and wealth generation becomes significantly hindered. Unlike *Shogun 2*, however, a possible way of raising happiness is the development of tiles on the map holding luxury resources such as ivory, silk or gold which confer significant bonuses to a civilization's happiness as long as a player controls the developed tile that good is on (see note 105). The more unique luxury resource a player controls the happier their citizenry is and their economy remains efficient. While this potentially sets the stage for resource competitions between civilizations as only so many of these tiles exist on any one game map, Bogost's possibility spaces offer an alternative argument as these resources can also be obtained by trading other civilizations for them. Given that the happiness bonus for developing luxury resource tiles is only obtained once for every unique resource controlled, this encourages a player to trade excess luxury resources they control and confer the happiness bonus for another civilization. Even more strategic resources such as iron, horses, coal or oil used in the production of higher-tier military units can be traded in this way (see note 106). Thus, offering the option to ground aspects of a faction's long-term stability in possible economic interdependencies *Civilization V* makes a clear argument about the possible pacifying effects of trade. This element of Kant's Definitive Articles is generally added to later in *Civilization V*'s depiction of international law.

Civilization V also presents the opportunity to engage with other pacifying effects of Doyle's democratic peace theory, namely the institutionalization of common liberal democratic values in international law. This finds some parallel in *Civilization V* generally towards the middle of the game. Either when a civilization develops the printing press technology and meets every other civilization in the game or when a civilization reaches the (usually later) industrial era each civilization in the game is given a place in a World Congress, wherein each civilization is assigned a number of delegates to vote on passing or repealing motions that hold binding effects on all civilizations in the game at set turn intervals. These motions range from the ban of particular luxury resources to embargoing trade against particular civilizations or even launching common projects to build an international space station. It is worth noting that much unlike the body of the democratic peace theory's international law that develops out of the respect for shared liberal values and lay out a common moral foundation for the relations between liberal democracies, the direct representation of international law in *Civilization V* appears for all civilizations regardless of their affiliation to liberal tendencies (see note 107). However, the effect that in game ideologies (a later development) have on the relationship between civilizations does encourage factions with similar ideologies to work

with one another peacefully. Indeed, Doyle's note on the role free speech plays in liberal politics in allowing a certain level of transparency (and thus confidence) in the dealings with liberal states (see note 108) is somewhat reflected in the fact that civilizations with similar ideologies gain free insight into the intentions of other civilizations at the World Congress. And while the body of international law in *Civilization V* is not born out of a common moral or ideological horizon shared among political factions in the game it can establish one, as civilizations can vote on a world religion, world ideology and when the World Congress becomes the United Nations much later in the game even win the game peacefully by being elected world leader (see note 109). Thus, there is some procedural analogue to the way in which liberal politics are institutionalized between liberal states in the democratic peace theory.

Perhaps the most intangible aspect of Doyle's account of the democratic peace theory is the notion of constitutional law and the domestic organization of politics along liberal constitutional lines. Much like *Shogun 2*, decisions taken by the player's faction in *Civilization V* are almost entirely left up to the player and little in the way of constitutional divisions of power exist in the game's analogy to domestic or foreign policy. However, a possible way to address this somewhat ambiguous aspect of overlaying the democratic peace theory onto *Civilization V* is the role ideologies play in the late game. From the beginning of a game of *Civilization* a player customizes aspects of their faction by adopting cultural policies from different representations of cultural traditions (liberty, piety, aesthetics, exploration, etc.) that add permanent or instantaneous bonuses to that faction. In a move analogous to history outside the game, when a civilization reaches the industrial era and begins to build factories these social policies give way to three full-blown political ideologies that a player is given the option to choose between (but may change later). Factions are presented with three ideologies (freedom, order and autocracy) which individually consist of a branch of tenets that confer bonuses on their civilization and even steer them towards particular victories. Additionally, ideologies also affect the relationship between factions as civilizations with the same ideology gain a permanent boost to their relations and cooperate more closely in the World Congress as long as they share an ideology (see note 110). Of the ideologies in the game, the freedom path obviously corresponds to constitutional democracy the closest and its tenets could answer the issue of how *Civilization V* represents constitutional law. Superficially, it could be argued that civilizations in the game don't technically become liberal or democratic until they adopt a freedom ideology and its associated tenets like "Civil Society," "Universal Suffrage" and "Creative Expression" which bear some procedural consequences in increasing the likelihood of a civilization generating "great people" units on the map (see note 111). Despite this, however, how a player plays a liberal democracy remains not particularly democratic. Much like *Shogun 2*, though, the gap between the thematic representation of liberal democracy at this basic level and the way in which *Civilization V* is played does entail a strong argument in favour of the democratic peace theory. While a player's faction that adopts the freedom ideology is not played democratically the interplay between ideologies in the game do ultimately encourage a player to act like a liberal democracy in Doyle's democratic peace theory. This is partly due to the ways in which the freedom ideology discourages a player from pursuing a domination (or military) victory but encouraging wars against non-freedom ideological factions. Indeed, the freedom ideology is unique in providing bonuses to maintaining trade routes (such as the "Economic Union" tenet, which increases the wealth generated by trade routes with other freedom factions), and otherwise largely focus on the generation of "great people" special units that confer substantial benefits to achieving cultural or scientific victories (see note 112). Meanwhile, the few military bonuses conferred by freedom tenets (such as the "Their Finest Hour" tenet, which increases the defensive strength of cities) encourage militarily defensive play styles. This is contrasted against the Order and Autocracy ideologies, both of which actually discourage forming economic interdependencies by conferring large happiness bonuses for buildings inside their borders and in the case of Autocracy tenets actively enable militarization (see note 113). As a result, while constitutional law may not be directly represented procedurally in *Civilization V*, liberal constitutional attitudes such as the belief in the inherently peaceful nature of liberal democracy, the moral horizons shared with other liberal democracies and even the suspicion of non-liberal states as inherently aggressive are clearly procedurally represented.

Given the at least nominal presence of all three of Kant's Definitive Articles at various stages of a game of *Civilization V*, it is perhaps not a surprise that ultimately the interaction of all three in the game can interact in

representing the democratic peace theory. Trade and cosmopolitan law provide long-term material bases for peaceful diplomatic relations, international law and the World Congress provides the possibility for peaceful diplomatic cooperation victories, while ideologies and constitutional law provide the impetus to seek those victories as well as the incentive to distrust inherently militant non-liberal factions.

5. Conclusion

Thus, within the aesthetic turn in IR scholarship there are still possible avenues of evaluating the capacity for video games to procedurally represent and engage with broader systemic accounts of international politics. While much of the previous research done on the relationship between video games and IR has focused on video games and their place in broader socio-political phenomena such as increased levels of militarization, much of this scholarship has been done in the context of Der Derian's virtual theory. Beyond virtual theory, other IR scholars in the aesthetic turn give other means of evaluating the possible impact artistic or cultural artefacts or disciplinary approaches may have for theorizing about international affairs. Roland Bleiker's account of the aesthetic turn gives some basis for this kind of analysis in highlighting the way in which artistic sources can challenge dominant logocentric knowledge claims and offer alternatively sensuous or aesthetic ways of thinking about IR theory. In the case of video games, the way the nature of games as rules-based activities can allow players to interact with and possibly even critically engage with the mechanics of systemic procedures. This can be seen in the context of two strategy games which both attempt to mimic out of game history or politics and as a result end up making surprisingly cogent arguments about the nature of IR. In the case of *Shogun 2* the relationship in game rules about goals, land, wealth and military power forces a player to confront the realist security dilemma. Similarly, in *Civilization V* the way trade, international law and political ideologies interact in the game gradually push a player towards basic tenets of liberal politics in the democratic peace theory. Besides addressing a gap in the current IR literature, what perhaps remains to be explored are some ways in which these kinds of insights can actually have an impact on IR as a discipline.

Perhaps the first major implication that can follow from a study of IR and video games is a (perhaps somewhat obvious) pedagogical approach. The notion that studying artistic or cultural forms for representations of different aspects IR entails some educational value is by no means a novel suggestion between aesthetic turn authors, which Moore and Shepherd highlights as a goal shared by writers like Cynthia Weber or Michael Shapiro (see note 114). For Bogost, the pedagogical implications of procedural rhetoric are expressed through what Bogost refers to as "procedural literacy." Bogost notes that while the notion of procedural literacy is often understood as knowing how to program or code, being procedurally literate could just as easily refer to the ability to recognize the patterned interactions that make up some underlying logic (see note 115). For Bogost, the notion of procedural literacy is couched in a tension between constructionist and behavioural educational approaches which contrasts the emphasis placed on the value of general abstractions derived from learning against the value of learning about the inner workings of specific processes (see note 116). Bogost offers procedure-centric learning as a possible bridge between these contrasted approaches in the way that procedural rhetoric root necessarily abstract rule-based simulations of real world phenomena with the more specific depictions of a computerized fictional depiction (see note 117). While Bogost notes that procedural literacy is not an entirely perfect concept, he gives the example of how games like *Civilization* present opportunities to tie general arguments about historical progression with the histories of specific countries:

Historical divergence serves as both a limitation and an opportunity for videogames like *Civilization* and *Europa Universalis*. On the one hand, to connect the games' abstract model to the particulars of lived history, the player must muster knowledge from outside the game, perhaps from traditional educational media. On the other hand, the games' use of factual information about historical civilizations (names and landmarks in the case of *Civilization*, geographic and material circumstances in the case of *Europa Universalis*) underscore the inconsistencies between played and lived history in each run of the game. These contrary-to-fact conditions open a simulation gap for the player to interrogate: the player also learns by meditating on what is different in the game's representation of Egypt or Russia compared with the historical (and geographical) record. All told, artifacts like *Guns, Germs, and Steel*, *Civilization*, and *Europa Universalis* suggest that procedural literacy means more than writing computer code; it also comes

from interacting with procedural systems themselves, especially procedural systems that make strong ties between the processes in a model and a representational goal—those with strongly argued procedural rhetorics. Otherwise said, we can become procedurally literate through play itself (see note 118).

Thus, extended to the analysis of this paper strategy games like *Shogun 2* or *Civilization V* offer a player to engage not only with the notion of strategy as a whole but also the more particular arguments posited by specific strategy games. An examination of *Shogun 2* and *Civilization V* shows that these specific arguments can be fundamental aspects of schools of thought in IR that a player would otherwise need a fairly involved education to understand. The opportunity to translate an otherwise relatively inaccessible and academic disciplinary debate in a relatively efficient manner thus might pose some clear pedagogical questions for how IR relates to an increasingly video gaming public.

Beyond pedagogy, however, a potential for a somewhat less obvious methodological implication sits at the heart of any connection made between video games and IR. Moore and Shepherd point out that the practice of mining popular culture for the pedagogical potential of their representations of IR is often a somewhat flawed approach due to the relatively surface-level nature of the analysis (see note 119). The result for Moore and Shepherd does not reach the kind of “meta-theoretical and philosophical innovations (see note 120)” that are often meant to come out of aesthetic engagements with IR. However, an effect of the kind of surface-level engagement with aesthetic sources of knowledge is the way it legitimizes and possibly even normalizes aesthetic engagements beyond traditional texts or sources of knowledge. In Moore and Shepherd’s own words:

These engagements frequently speak to mainstream IR, rather than challenge its very foundations, but in doing so they can perhaps be interpreted as enabling such a challenge in the spirit of one of Western mythology’s greatest tales of trickery and misdirection: the Trojan horse. If, even through an empiricist reading of popular culture as pedagogical tool, students of IR are conditioned to accept the reading of texts as part of IR, there is great potential indeed for encouraging further strategies that problematise the definitional boundaries of the discipline (see note 121).

Indeed, if the persuasive potential of procedural argumentation holds water and could even be used to describe existing dynamics in IR it may follow that as a legitimate aesthetic source of knowledge gamic forms could also be used as the basis for legitimate aesthetic disciplinary critique. If procedural forms of rhetoric could be used to describe, say, the pressure of the security dilemma as effectively or as convincingly as more orthodox realist texts could they not also be used to describe their own unique insights and arguments communicated through play within the bounds of rules as opposed to the written word? Bleiker’s aesthetic turn offers a radical means of challenging the disciplinary primacy of logocentric text in IR. While Bleiker admits that this is a somewhat far-fetched idea in the context of contemporary academia (see note 122) (shown by, if anything, the fact that both Bleiker’s work and this paper is written in precisely the kind of written argumentation the aesthetic turn is meant to challenge), the sheer popularity of video games posited at the beginning of this paper alone ought to give some cause for thought. For Bleiker, the sheer imperative of understanding IR as a topic that is overwhelmingly important to the lives of so many people demands the exploration of all avenues that might shed light on it, even if they had been previously ignored (see note 123). More specifically, IR scholars who have written on video games stress the need to engage with an increasingly popular form of media that has hitherto gone largely ignored in IR scholarship. While this paper obviously does not dispute either of these calls to action it is worth pointing out that much more could be written on the possible relationships between video games and IR than has been thus far, and while video games have the capacity to promote problematic ideologies like militarization they also clearly have the capacity to speak constructively as well as imaginatively to theorizing about the international.

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