Digitising Diplomacy: Grand Strategy Video Games as an Introductory Tool for Learning Diplomacy and International Relations

Rhett Loban
University of New South Wales
High Street, Kensington
NSW 2052 Australia
r.loban@unsw.edu.au

ABSTRACT
The paper illustrates the rich diplomacy and international relations content contained within Grand Strategy video games and how this could be used as a great learning and teaching tool within the discipline. The paper initially surveys learning and video game literature with an emphasis on strategy and board games. Second, it briefly defines diplomacy and international relations as a point of reference and comparison for subject matter content within Grand Strategy games. Third, it analyses Grand Strategy gameplay, mechanics, and strategies that simulate diplomacy and international relations and how this teaches the player about the discipline. Fourth, it analyses and interprets survey responses from a game forum, to understand player experiences with diplomacy and international relations within a Grand Strategy game. Finally, it highlights how these different manifestations and simulations of diplomacy and international relations, collectively represent a spectrum of digital diplomacy from explicit representations to more conceptual and player based forms.

Keywords
Strategy Games, Grand Strategy Games, Diplomacy, International Relations, Video Game Learning

INTRODUCTION
The art of diplomacy has existed for more than 5,000 years with the earliest records found in Iran on clay tablets which describe diplomatic missions between Mesopotamian city-states (Office of the Historian 2004: 11). However, the more formalised term international relations was conceived much later and was created by Jeremy Betham in his book Principles of Morals and Legislation authored in 1789 (Knutsen 2009: 34-35). The academic discipline (which use capitalised letters; International Relations) was established in 1919 by the first chair at the University of Wales in Aberystwyth. Since then an abundance of sub-disciplines and theories have emerged under this broad umbrella of International Relations. Many universities offer Bachelor, Master and Doctoral degrees in the subject matter, with opportunities to learn about diplomacy and study the causes and outcomes of international events.

However, in most cases across the International Relations discipline, the learning curriculum and the modes of teaching in university typically consist of reading articles, discussion of topics in tutorials, writing essays, quizzes and some timed exams. The use of digital media and information technology to assist in learning and teaching remains minimal, with typically only enabling technologies used such as Word processor or online university forums (such as Blackboard or Moodle). In this paper, I will argue that International Relations can benefit from the use of video games. Video games are being used as tools for teaching and learning in a wide range of subject matters, in primary, secondary and tertiary education (Egenfeldt-Nielsen 2005, Ryan, Rigby et al. 2006, Prensky 2007, Gee 2008, Apperley and Beavis 2011, Squire 2011, Benson and Chik 2014). Information technology has been the subject of study for International Relations theorists looking at its impact in warfare, international development and global relations. This paper demonstrates the rich diplomacy and international relations content that is encapsulated within the information technology medium of video games, namely the genre of Grand Strategy, and it illustrates the great learning and teaching potential that these games can offer the diplomacy and International Relations discipline.

The paper will show this, by first, briefly exploring literature relating to game learning with a specific focus on the use of strategy games. Second, it then defines the terms diplomacy and international relations, in order to establish parameters which can be used to evaluate and compare Grand Strategy video games. Third, the paper will examine the depictions of diplomacy and international relations in gameplay, game mechanics, and strategies within Grand Strategy games. Fourth, it will examine the experiences of gamers playing Grand Strategy games, by interpreting and analysing survey responses collected from a number of survey respondents about their experiences with diplomacy within these games. Finally, the paper will show how altogether these different manifestations of diplomacy and international relations form a spectrum of digital diplomacy which collectively teaches the player about diplomacy and international relations.

GAME LEARNING AND DIPLOMACY

Despite the world's heavy use of the digital media, video games have long been a divisive topic for the general public, scholars, and educators, (Kontour 2009: 6, Brand and Todhunter 2015, Entertainment Software Association 2015). Yet, there are positive effects of video games, with one of the most notable and positive applications being its use for learning and teaching which has become a rapidly growing area of academic interest.

Leading education and literacy scholar James Gee believes students can learn through video games which he asserts are just a set of complex problems that the player has to solve (DMLResearchHub 2011). He claims the issue with the current primary and secondary education system in the United States is the way that subjects are tested. Video games do not test a child at the end of a video game in the way that the education system would test a student at the end of a course subject. He attributes this latter method of assessment is due to our lack of trust in the way that educators currently teach, as opposed to a game where, if completed, players can mostly be assured they have mastered the content of the game. Gee created the notion of 'Situated and Embodied Learning', which uses learned information as instruments for problem solving of real problems (as in video games) rather than just testing for knowledge (DMLResearchHub 2011). Indeed, Bogost (2007: 28-29), similarly argues that learning from video

games is not any different from the way we learn in other mediums such as writing, speech or images (2007: 28-29).

Apperley and Beavis also illustrate, through their work with secondary schools, the benefits of utilising video games in the English and Media curriculum to further enrich classroom learning and texts through the action based approach of video games (Apperley and Beavis 2011). While, Ryan, Rigby and Przyblski explain that video games have a great motivational pull with the possibility to use this to facilitate learning (Ryan, Rigby et al. 2006). Squire's research follows similar themes examining how video games can facilitate learning through a participatory culture. He primarily looks at children and adolescents using the commercial video game *Civilisation III* to learn about history (Squire 2011: 113). Furthermore, Egenfeldt-Nielsen (2005: 259), investigated the use of Grand Strategy games to teach adolescents about history in the school classroom.

While videogames have been integrated into a number of university-level subjects, there has been no comprehensive work on how they can be used in International Relations. There have been many efforts to use video games to teach other subjects. For example, a computer science educational title showed improvements in the grades of novice programming students who also enjoyed the learning method (Marques, Levitt et al. 2012: 3-4). The U.S. military has used video games to train their soldiers by drawing on commercial video game technology to create military simulations (Prensky 2001: 4, Darkest Hour Team 2011, Marine Corps War College 2014). Furthermore, other products have been aimed at teaching business management and others at economics (Smartsims , LionsHeart Studios 2015). Yet despite these games, there is still a shortage of specifically educational adult video games, however there does appear to be demand and considerable potential for games that can cater for formal adult learning (Brand and Todhunter 2015: 6).

Moreover within the discipline of games studies, the rich history of board games and tabletop wargaming, which Grand Strategy was based on, should also be acknowledged. Wargaming has a long history potentially dating back to Sun Tzu author of the Art of War and is used even today as analysis tools for war or for educational purposes of military training, history or otherwise (Perla 1990: 15-16, Kainikara 2003: 12-13, Tzu 2012, Sabin 2015: 338). History classes, the military and governments have used these board and wargames for a multitude of purposes; from recreating and learning about battles between ancient civilizations to wargaming biological terrorism scenarios to determine counter-terrorism budgeting (Perla and McGrady 2011: 114, Sabin 2015). However, it was with the development of the political-military wargames around World War II and the creation of the board game *Diplomacy* that showed the integration, fusion and rising importance of political, economic and strategic factors involved in manual gaming (Weiner 1959: 13, Calhamer 1974, Caffrey Jr 2000: 41). These game depictions collectively reflected many of the elements and considerations in diplomacy and International Relations.

More recently there has been several boardgames and wargames implemented in university courses that targeted historical content with solid results (Sabin 2015: 334-335). Students who played wargames found they learnt more about the dynamics of historical events and the risks/rewards faced by historical actors perhaps not otherwise considered in other learning mediums (Sabin 2015: 336). While Reynaud and Northcote (2014: 364-365) found that learning outcomes were enhanced through wargaming for students who consistently reflected, discussed and participated in the wargames, as it

enabled them to understand complex historical settings. There are those studies which have looked at using board games like *Diplomacy* for teaching political science (Arnold 2015: 162, 164 & 165). The hands-on approach to the game was shown to have increased student interest in International Relations. Arnold believed that the games provided a platform of discussion about the evolution of international institutions.

Further to this, Woessner (2013: 362-363) used a political simulation based on *SimCity* to teach concepts in his introductory class to American government, with students playing the mayor or members of the city council and having to work together and negotiate with each other to achieve their in-game objectives. This was intended as a means of getting students more excited about the course content and even raising the interest of non-political science major students, in politics and government. The most noticeable use of Grand Strategy video games to teach adult level content was the US army's use of a *Hearts of Iron II* mod called the *Darkest Hour* which aimed to help students understand war policy and strategy (taffy3 2013, Marine Corps War College 2014, taffy3 2014). Yet, recent statistics suggest that many higher education educators do use non-digital games (56%) more than digital games (27%) with 17% using neither game type, indicating digital games remain underutilised (Wiggins 2016: 23 & 27). While the option to use video games to teach about diplomacy and international relations has not been widely considered or implemented, many strategy games, and most Grand Strategy games, heavily borrow concepts and content from diplomacy and international relations depicting the discipline in many forms. Hence, it seems practical to make use of the medium as a learning tool; even as an introduction to the subject matter.

DEFINING DIPLOMACY AND INTERNATIONAL RELATIONS

Before discussing diplomacy and international relations depictions and content in Grand Strategy games, the very notion and definition of diplomacy and international relations should be explored to establish certain parameters as a point of comparison and measurement with the games. One definition of diplomacy is "the term given to the official channels of communication employed by the members of a system of states" (Berridge, Keens-Soper et al. 2001: 1). The Dictionary of Diplomacy defines diplomacy as:

> *The conduct of relations between *sovereign states through the medium of officials based at home or abroad, the latter being either members of their state's *diplomatic service or *temporary diplomats……Diplomacy is therefore the principal means by which states communicate with each other, enabling them to have regular and complex relations.* (Menon 2001: 69-70)

Although the following definitions on diplomacy share the concept of relationships between entities, nations and states there are some minor variations in their content. The U.S. Department of State defines diplomacy as the 'art and practice of conducting negotiations and maintaining relations between nations; skill in handling affairs without arousing hostility" (U.S. Department of State). Hamilton and Langhorne (2011: 1) define diplomacy as "the peaceful conduct of relations amongst political entities, their principles and accredited agents". Satow (1922: 1) defines diplomacy as "the application of intelligence and tact to the conduct of official relations between the governments of independent states, extending sometimes also to their relations with vassal states". Barston (2014: 1) believes diplomacy "is concerned with the management of relations between states and between states and other actors". Interestingly, Barston (2014: 1) notes that diplomacy "is often thought of as being concerned with peaceful activity,

although it may occur within war or armed conflict or be used in the orchestration of particular acts of violence". Further to this, Machiavelli, who wrote "the Prince" created the basis of the notion of 'realpolitik' which is captured in this paragraph:

> *...for many have pictured republics and principalities which in fact have never been known or seen, because how one lives is so far distant from how one ought to live, that he who neglects what is done for what ought to be done, sooner effects his ruin than his preservation* (Marriott 1908: 71)

The idea of realpolitik is about practicality over justice, morality or ethics although they are not incompatible. In this sense diplomacy is more than just a peaceful or inoffensive conduct between nations instead it can be calculated, practical and based on state interests. Hence, diplomacy can be broadly defined as the conduct of relations and negotiations between states and other actions whether this is peaceful or more Machiavellian in its approach.

International relations is defined in a very similar manner. The Dictionary of Diplomacy defines International Relations as a "*state's dealings and contacts with other states, and with *international organizations" (Menon 2001: 147). While the Merriam-Webster dictionary defines international relations as "a branch of political science concerned with relations between nations and primarily with foreign policies" (Merriam-Webster Dictionary). Sutch and Elias simply state international relations as "the study of relations between nations" (Sutch and Elias 2007: 1). Devetak (2011: 2) defines international relations as the "external relations amongst nations, states and peoples". Indeed, it needs to be acknowledged that international relations can involve non-state actors, individuals, groups or transnational issues seemingly unrelated to state relations such as the environment and refugees.

Yet for most Grand Strategy games the notion of the state and dealing primarily with other states remains at the center and forefront of the Grand Strategy genre. For the most part the player is the state, or a god-like controller of a sort, managing the higher level political, economic, diplomatic and social aspects of the state. Therefore, international relations, for this paper, can most usefully be defined as the relations between states and international organisations or for International Relations (the discipline), the study of relations between states and international organisations; thus for the essay these terms are semantically interchangeable. Yet, within the subject matter lies a wide spectrum of theories about how state relations function and change.

DIPLOMACY AND INTERNATIONAL RELATIONS IN GAMEPLAY, GAME MECHANICS AND STRATEGIES

Most Grand Strategy games are designed primarily for the use of entertainment. However, as a by-product, this media can also depict and simulate diplomacy and international relations potentially allowing the player a way to learn the subject matter and even apply the knowledge within a game context. Within the Grand Strategy genre, period settings may vary from Medieval times, the Early Modern Period containing the renaissance and the European colonisation of the new world, the Victorian Era, World War II, the Cold War or even a distant Sci-Fi setting (Paradox Development Studio 2010, Paradox Development Studio 2012, Paradox Development Studio 2013, Paradox Development Studio 2016, Paradox Development Studios 2016). Each of these period settings have merit in the way they can teach the player about diplomacy and international relations.

In its most explicit form, diplomacy and international relations can be seen in most Grand Strategy games in the form of the diplomacy interface. It is generally depicted as in Figure 1 which is *Europa Universalis IV* (*EUIV*), however at a very basic level it is relatively similar across many Grand Strategy titles including the *Civilization* series and the *Total War* series (Paradox Development Studio 2013, Creative Assembly 2015, Firaxis Games 2016). Clearly, some series are more complex in terms of diplomatic actions and interactions. In *EUIV* there are a total of 55 Diplomatic actions and interaction that can be executed with other nations, and 26 interactions and actions with the subject nations. This totals over 81 different interactions that nations in the game can use to interact with other nations. Even the terminology and language used is different to everyday language such as vassals, annex, provinces, declare war and issue an embargo to name a few, which help the player understand how states relations work, the different relationships between states, and how diplomacy is conducted between states (at least in a Western view). Diplomacy and international relations are clearly reflected as the state conducts some action (well intentioned, malicious or otherwise), that affects the relationship between the two actors. This is diplomacy and international relations in its most digitised and explicit from.

The less apparent and more hidden level of digitised diplomacy is the opinion scale/gradient which shows the state of the relationship between the two states. However, more importantly, it often tells us why the relationship is in its current state providing more depth and telling us the 'why'; explaining the reasons for the relationship, and how it came to be. In part, this is the essence of international relations, explaining and making sense of the circumstance of the political condition of the world. Figure 1 illustrates France's relationship with the nation of Provence. Provence has a fairly positive opinion of France given they have the same religion and dynasty as well as having formed an alliance. Yet Provence still holds reservations and its own interest, as France retains some of Provencal land, as well as having border friction. Nonetheless, given the state of the relationship; Provence is likely to cooperate with France, regardless of other tensions and interests. Hence a more complex and deeper level of diplomacy is developed.

Figure 1: Europa Universalis IV diplomacy interface and opinion hoverbox

The next level of digitised diplomacy and international relations is the in-game diplomacy mechanics and AI personalities. These are more complex manifestations of digital diplomacy, although still bound and dictated to by computer code. For example, in international relations the Balance of Power Theory, with the precise definition still being debated, generally proposes that with any great change in international power balance, usually through conquest, there will be a counter balancing force to oppose the change to prevent hegemony of one power (Haas 1953: 444-445, Levy and Thompson 2005: 1). One historic example is the rise of the revolutionary France under Napoleon which saw many great powers in Europe band together to stop the rapidly growing French empire. Many examples of this can be seen in Grand Strategy games such as *EUIV*, *CK2*, *Stellaris* and *Hearts of Iron IV*.

In the games *EUIV* and *CK2* this is depicted in the form of coalitions, whereby if the player conquers many provinces or nations too quickly, surrounding and even distant

nations will form coalitions against the player's nation to stop the conquests and even force the player to return their provinces, release those nations conquered, with a return to the status quo (Paradox Development Studio 2013). *Stellaris*, although in a Sci-Fi setting, shows how weaker and more peaceful nations will be more likely to enter into alliances and even form federations (a closer bond between the nations) in order to fend off larger and more expansionist nations (Paradox Development Studios 2016). Furthermore, towards the end of the game there are end game crises (such as extra-dimensional or extra-galactic invaders) which the player and other AI civilisations must face. In this circumstance, AI civilisations, even expansionist ones, recognise the changing power balance and will be more susceptible and possibly even offer alliances with the other player and other civilisations to fend off the invaders.

Similarly, in *Hearts of Iron IV*, a World War II game, if an Axis country declares war on too many countries or expands too much, the Allies leader (the United Kingdom) will guarantee independence to potential Axis targets, to halt Axis expansion. Identifying these in-game examples gives the real and practical meaning to theories. Ignoring these IR concepts in the game form of guarantees and coalitions, may mean the player's nation will enter into a war it cannot win and will suffer a huge defeat and in-game consequences. These cases illustrate the growing complexity of diplomacy rather than just being an executable state to state diplomatic action or an opinion gradient with different positive and negative modifiers. Rather multiple international relationships come into the equation due to the actions of an individual nation, with the non-expansionist nations using diplomacy as a counter measure to aggressive nations.

Furthermore, many Grand Strategy games show the development of international institutions which are inherently more complex, as they represent multiple modes of international relations and provide forums for many nations to conduct diplomacy. For example, in *Stellaris*, multiple alliances may be formed between several states (Paradox Development Studios 2016). However, this bond can be further developed and cemented into a federation which has a President who rotates after a certain period. A nation/player empire surrenders several diplomatic functions including the ability to declare war. Instead, this is decided by the federation president, however the player member state is protected by all other member states and has the chance to become the federation president at a later point in the game. The federation develops a federation fleet, which is controlled by the president and benefits from all member state technologies. This could be seen as similar to organisations such as the European Union which do have a close-knit bond and cooperation on military matters as well as a president (European council president) who drives the political direction of the body (European Union Offical Website).

These institutions are not just to counter rising powers similar to the Balance of Power Theory, some of these institutions are utilised for trade and commerce. For example, in the more recent expansion of EUIV, Mare Nostrum, Merchant Republics can form a multilateral alliance/organisation called a Trade League. The Merchant Republic, while also a defensive alliance, is primarily to create wealth and trade power for its member states giving many economic and trade bonuses to the league leader and other member states. Trade Leagues could be representative of modern day organisations such as the Organisation for Economic Co-operation and Development or the World Trade Organisation which aim to increase economic progress and trade as well as regulate it (Organisation for Economic Co-operation and Development , World Trade Organization Offical Website).

In another example, in the Democratic/Liberal Peace Theory, democracies or liberal states are very unlikely to (or rather will not) declare war on other democracies (Doyle 1983: 213, Clemens Jr 2002: 1). In *Hearts of Iron IV* this practice is reflected in how the United Kingdom, the United States and other democracies play the game with practical in game implications. As democracies cannot declare war on other democracies without just cause, they are often on the defensive throughout the game or are often limited to declaring war on only fascists, communists and some neutral states (Paradox Development Studio 2016). Fascist and communist nations are free to declare war on any other government types and spread their influence through force of arms. Furthermore, in *Stellaris* the in-game Artificial Intelligence for each empire will have a certain personality (Paradox Development Studios 2016). The personality type 'Democratic Crusaders' will more often maintain good relations with other democracies in the game, however they tend to use military force to liberate the populations of non-democratic empires as depicted in Figure 2.

Figure 2: Stellaris Diplomacy Interface and AI Personality hoverbox

The game *Realpolitiks* (Jujubee S.A. 2017) is another Grand Strategy title that is set in the present and near future and touches on many aspects of the modern issues of diplomacy and International Relations. For example, the game depicts a simplified version of the United Nations (UN) where the wealthiest and most powerful nations interact. In the game UN, member states make propositions to the council/body, such as foreign aid programs, the Non-Proliferation of Nuclear Weapons or sanctions against authoritarian or totalitarian regimes. Voting on the proposition takes place and if passed the proposition will become an active resolution. While it is a highly abstract version of the process; it is not too dissimilar to what would occur at the UN (United Nations). The game also depicts issues of nuclear weapons in intentional relations, such as a nation's stock of nuclear arsenals, the concept of Mutual Assured Destruction (M.A.D) and even the effect on the environment. The game also depicts factors and measurements that typically depict the power and development of a nation such as Human Development Index (HDI), Gross Domestic Product (GDP) and the notion of Blocs of nations with similar ideals or goals.

Even in broader and more encompassing definitions of International Relations, Grand Strategy games can depict international issues, such migration between nations, refugees of genocidal states and other transnational issues often considered objects of study within the discipline of Diplomacy and International Relations (Paradox Development Studio

2010, Paradox Development Studios 2016). Hence Grand Strategy games express and teach diplomacy and international relations in several digital forms both explicitly and in more complex varieties. However, diplomacy and international relations are disciplines involving real people (or rather states and state actors) and need to be included in the equation. The author recently conducted a survey on the EUIV game forums with several participants expressing their views on diplomacy within EUIV.

EUROPA UNIVERSALIS IV FORUM SURVEY

The survey was recently undertaken on the Europa Universalis online forums. The author used Survey Monkey to host the survey and posted the survey link and details on the *EUIV* forums. Players were asked how they played the game and if they learnt about history and nation governance by playing *EUIV*. The intent of the survey was to understand whether these games reflected and simulated history, and nation governance accurately, including if multiplayer involvement affected this experience. Interestingly, as a by-product of the survey, a number of participants commented that EUIV reflects diplomacy and international relations particularly well. The survey received 331 participants from the Paradox Interactive forums and had a 100% completion rate.

The next level of diplomacy and international relations depicted is that of player diplomacy used to achieve short and long term strategies. This can be seen in the comments by participants as a number of survey respondents agreed that *EUIV* allowed a considerable number of diplomatic actions to advance their nations interests.

> *The power-play and diplomacy is relatively well done*

> *Focus and main depth on game is on external policies*

> *In EU4, foreign relations and diplomacy is more important than internal matters, which are more of an afterthought. I doubt this is the case irl.*

Several participants commented on the historical diplomacy and how it may have operated in the Early Modern period. The game also allowed players to strategise and use diplomatic actions as a means of expansion or to achieve in game objectives.

> *EUIV focuses more on the relations between countries like diplomacy and warfare. This it portrays very well and EUIV is a great way to learn roughly how those worked at the time.*

> *EU4's main attraction is the diplomatic simulation, which is relatively realistic and, most importantly, shapes the player's diplomatic actions and avenues for expansion, which in turn informs understanding of the driving forces behind historical conflicts and expansion.*

One participant commented how he/she learned to strategise and pursued their national interest using diplomacy with the consideration of long term goals in mind. The participant noted the game was particularly effective at conveying how international relations changed over time, typically because of state interests and realpolitik.

> *EU4 is accurate in depicting history in the sense that the game models power accumulation and alliances and international diplomacy in a satisfactory if not*

completely accurate manner. The game teaches the player in a intuitive way how to pick allies and rivals for each nation they play as, how to consider diplomacy and war and nation building in a long-term way (over centuries), and how to deal with rivals and enemies who have their own priorities that can clash with the player's. Finally, the game does a great job with modelling how historical allies can turn into bitter enemies and vice-versa, all relationships based on self-interest and competition.

Additionally, while multiplayer was one of the less used features of *EUIV*, a number of participants believed that multiplayer enhanced the diplomatic and negotiation aspects which they thought unlocked the full potential of *EUIV*. One participant said "*it adds a layer of diplomacy AI is incapable of*" while another noted "*In ways yes, because you have someone to interact with intelligently, someone to feel rivaled by*". Several participants further explained the even greater importance of diplomacy and international relations given the real players with similar motivations to their own.

> *Yes, intrigue and politics in multiplayer games enchances the experience greatly.*

> *Power balance is key. Some games can turn into a cold war. Diplomacy actually gets important.*

> *Yes, because it allows me to cooperate and compete with other human players who are more aggressive about pursuing their interests. It also allows for much more in depth diplomacy (as I have to consider the opinions of an actual person and their own goals, much like the monarchs of Europe and great diplomats of the age did).*

> *Yes, people you play with can either help you if you choose a hard start or be the greatest rival throughout the whole campaign.*

Some participants noted that the game became more "boardgame like" with other players being more Machiavellian in their approach to the game and much greater interaction with an ally or opponent via the in-game chat.

> *No, mostly because it slows the game down, you lose the ability to control the speed. Also the dynamics of diplomacy become more "boardgame like", with most players being very rationnal optimizers.*

> *It makes the core experience exactly what it should be, with actual inter-player diplomacy and espionage carried out mostly via chat, so yes, it definitely does.*

> *Playing with friends allows you to coordinate or bargain (Say you attack someone and they'll pay you)*

> *It's a more collaborative exercise in multiplayer. It enables you to engage in the realpolitik of quid pro quo arrangements between powers like actually happened in history. However, going it alone in single player can be more of a challenge and also more convenient, as you can budget your time playing the game unilaterally.*

Interestingly, the more the player focused on the diplomacy in the game, the more it seemed to align with the realpolitik diplomacy with practical and material objectives rather than the more ideological driven diplomacy and international relations which are depicted more so in the explicit and game mechanic forms. Collectively, these players believed diplomacy and international relations were reflected and simulated relatively well in this Grand Strategy game. Furthermore, from these responses two more levels of diplomacy and international relations are exhibited. First, Grand Strategy games allow the player to conduct and learn diplomacy and international relations using them as tools to achieve their in-game strategies and goals. Indeed as Squire (2011: 36) points out, sound educational games allow the player to use and apply their knowledge of a given subject matter in game to achieve their objectives. Second, the games multiplayer function adds another layer and dynamic to diplomacy and international relations, creating more depth and complexity. While the essay has defined international relations and diplomacy as a function that happens primarily between states; the multiplayer aspects shows elements of personal diplomacy and negotiation between individuals. History does show that individuals, for example leaders like Churchill, Trudeau and Macmillian, can primarily drive and determine the diplomatic and political relations between states (Nassal 1982: 290, Aldous 1996: 10, Larres 2002: 1). Hence diplomacy and international relations manifests itself in several and varied digitised forms.

DIGITAL DIPLOMACY: FROM THE EXPLICIT TO THE CONCEPTUAL

Elliot and Kapell (2013: 4-5 & 11) in their view of history see that different games can reflect history in different ways. In a similar sense, different mechanics or aspects of a singular game may be able to engage one subject on multiple levels. Furthermore, in Bogost's (2007: 28-29) theory of Procedural Rhetoric, the player can learn information or a given topic through interaction with a process such as a video game. Yet, within a single game there may also be a multitude of processes and interactions that each afford different pieces of information or learnings about the same subject. Hence Grand Strategy video games are able to depict and teach players about diplomacy and international relations in several ways and at varying levels of depth and complexity:

1. The most apparent diplomatic and international relations depictions are the interaction and actions offered to the player in-game. Examples of these may include in-game functions that allow the player to make alliances, declare war, manage relationships with their subjects, execute trade deals and so on. This helps the player to understand the more formal concepts and terminology around diplomatic interactions and relations such alliances formed between nations and subject management. These are the most elementary understandings and details, but are still very important to appreciate how diplomacy and international relations are organised and viewed; at least in a Western sense.

2. The relationships between the player and AI nations, and the between AI nations and other AI nations. This tells the player the "why" about state motivations and the condition of the relationship. The clearest example of this is the opinion scale of nations which are determined and changed by in game variables and actions. It may be that another nation wants to conqueror the player's land, or the player's nation is expanding too fast causing a negative change relations. Alternatively, the player may have a common enemy with another nation, or the player's nation and another nation have the same religion causing a positive relation boost between the nations. These all affect the condition of state relationships and gives the player an understanding of state motivations, state relationship dynamics and

other important relationship variables. The player can use these to navigate, play and win in the game world.

3. The in-game diplomacy mechanics and AI personalities give an even greater level of depth and complexity depicting multilateral relations, global dynamics with the actions of states and their motives, and the depiction of International Relations theories. An example could be multilateral organisations or alliances such as coalitions in *EUIV* or federations in *Stellaris* which are formed in opposition to a strong conquering nation; these situations depict the International Relations theory the Balance of Power Theory. Another example would be the Democratic/Liberal Peace Theory where the diplomatic actions and restraints of democracies in the games such as Hearts of Iron IV and *Stellaris* are guided by ethical motivations and objectives.

4. The next level of diplomacy is how the player themselves conduct diplomacy and international relations in the game world to achieve their goals. They need to strategise considering long and short term goals for his or her nation. In-game examples may include the player's consideration of which nations to subjugate, which alliances to value and invest in, whether to join coalitions against rising powers, whether or not to be a part of international/multilateral organisations. These are diplomatic considerations which the player must contemplate and plan to secure their nation's future in the international arena.

5. The diplomacy conducted in multiplayer adds a human element to the game where states and nations have real and hidden motivations and objectives. Allowing the player to enter into the real art of diplomacy through negations, cooperation and even intrigue with human actors who are also strategising in a similar fashion. An in-game example of this could include players strategising and working together to execute their plans of expansion or a player working with AI nations to halt and impede the expansion of another player. This type of digitised diplomacy would be useful in educational wargaming scenarios. This is the most complex manifestation of diplomacy and international relations in Grand Strategy with two actors who have hidden motivations either working with or against each other to achieve their nation's objectives. This type of player diplomacy tends to be more Machiavellian and realpolitik in its nature.

These different manifestations of diplomacy and international relations can be seen as a spectrum of diplomacy, from the theoretical concept and people practice of diplomacy through to the more explicit and material depictions present in Grand Strategy games. Figure 3 illustrates this diplomacy and international relations spectrum. Grand Strategy games could potentially be used just as a way of raising interest in the subject matter. However, there is also clearly an opportunity for players to apply International Relations and diplomacy knowledge in game, to achieve in game goals and navigate the game world; hence learning (potentially at a deep level) of the subject matter can occur. Particularly, in the latter two player-based manifestations which could allow players a more real and applied use of diplomacy and international relations that is not otherwise available in other learning mediums such as books or documentaries.

Collectively these different levels of digitised diplomacy can feed into and support each other to reflect the larger themes and concepts of diplomacy and international relations. For example, a nation X may make an offer of an alliance to nation Y which is rejected.

The opinion scale shows the Y nation does not want to make an alliance because nation X has been conquering a lot of nations in the region. Furthermore, nation X is an authoritarian regime compared to nation Y who is a democracy. In fact, nation Y has been forming alliances with surround democracies to counter balance the expansion of nation X; thus we see the Balance of Power Theory and Democratic/Liberal Peace Theory in play. Hence the more explicit forms of digital diplomacy and international relations can feed into, support and help simulate the higher-level theories discussed in International Relations.
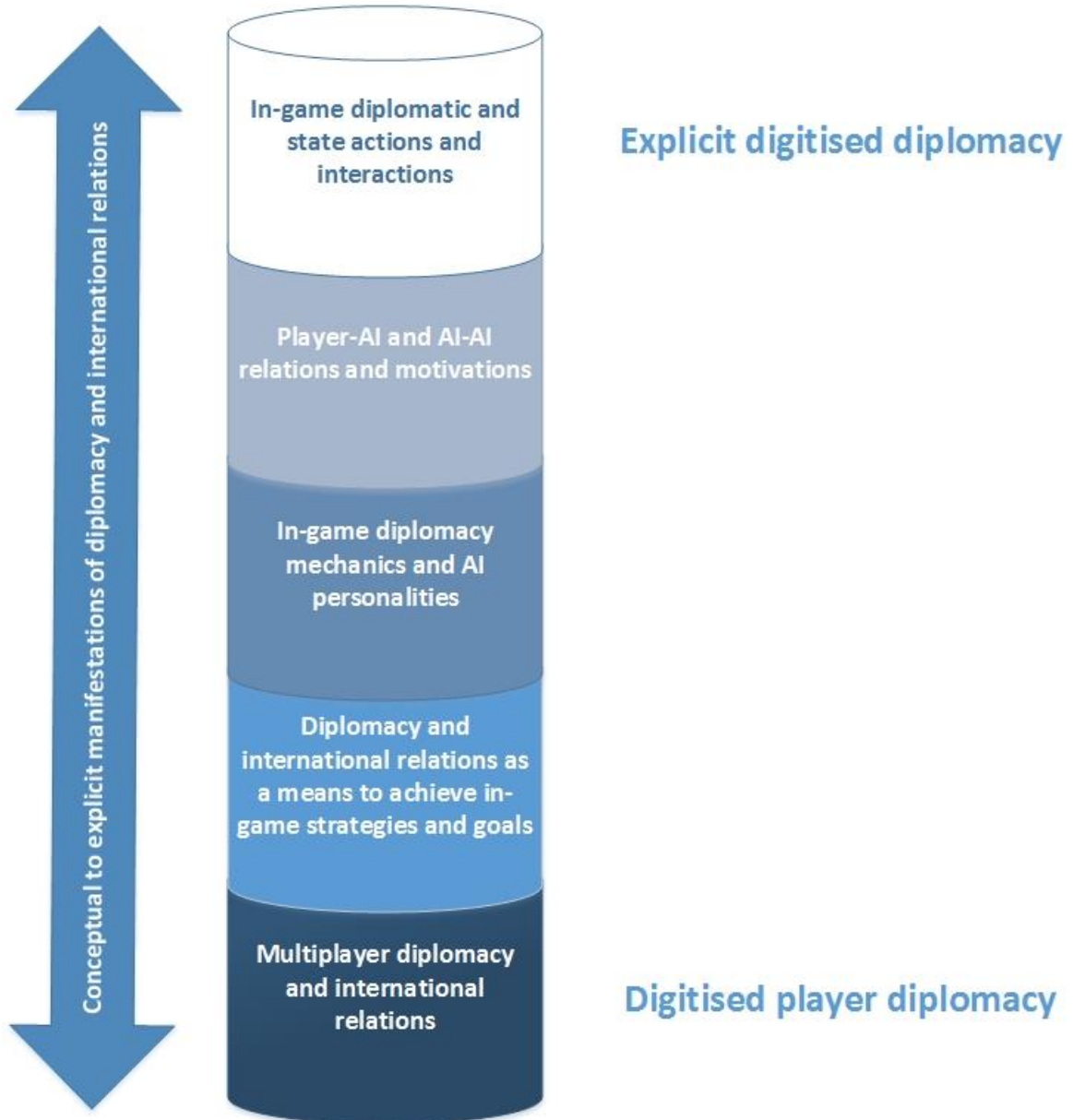

Figure 3: The conceptual to explicit spectrum of diplomacy and international relations present in Grand Strategy games

CONCLUSION

In conclusion, the paper has demonstrated the wealth of diplomacy and international relations content within Grand Strategy video games and the potential to use them for

learning and teaching the subject matter. This was achieved by, first, briefly exploring learning and video game literature with a focus on strategy games. Second, briefly defining diplomacy and international relations as a point of comparison for the games. Third, exploring the gameplay, game mechanics, and strategies which simulate diplomacy and international relations allowing the player to learn about the subject matter. Fourth, interpreting and analysing the EUIV online survey responses from respondent experiences with diplomacy and international relations within EUIV. Finally, illustrating how these different manifestations and simulations of diplomacy and international relations collectively represents a spectrum digital diplomacy from explicit depictions to more conceptual and player based forms.

The discipline of diplomacy and international relations will remain people centric with the study of relations between states, their actors and their people. However, the way in which we teach and learn the subject must improve, diversify and digitise. Grand Strategy games allow the player to experience diplomacy and international relations in a spectrum of digitised forms. From the explicit game representations allowing players to understand international relations, diplomatic structures and discipline terminology; to the simulative, raw and Machiavellian player diplomacy which the player must use to help navigate his/her nation through the game timeline. All manifestations have something educational to offer the discipline even at just an elementary level. Grand Strategy games could offer students an alternative medium, in contrast to traditional learning mediums such as books or documentaries, to learn about the diplomacy and International Relations discipline. The discipline of diplomacy and International Relations needs to look beyond their current teaching and learning methods, and take advantage of this rich and enjoyable medium. By utilising the educational content of these video games; their full potential can be unlocked.

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BIBLIOGRAPHY

Aldous, R. (1996). 'A Family Affair': Macmillan and the Art of Personal Diplomacy. Harold Macmillan and Britain's World Role, Springer: 9-35.

Apperley, T. and C. Beavis (2011). "Literacy into action: Digital games as action and text in the English and literacy classroom." Pedagogies: An International Journal 6(2): 130-143.

Arnold, R. (2015). "Where's the Diplomacy in Diplomacy? Using a Classic Board Game in "Introduction to International Relations"." PS: Political Science & Politics 48(01): 162-166.

Barston, R. P. (2014). Modern diplomacy, Routledge.

Benson, P. and A. Chik (2014). Popular culture, pedagogy and teacher education: International perspectives, Routledge.

Berridge, G., M. Keens-Soper and T. Otte (2001). Diplomatic theory from Machiavelli to Kissinger, Springer.

Bogost, I. (2007). Persuasive games: The expressive power of videogames, Mit Press.

Brand, J. E. and S. Todhunter (2015). Digital Australia 2016. Eveleigh, NSW, Interactive Games & Entertainment Association.

Caffrey Jr, M. (2000). Toward a history-based doctrine for wargaming, DTIC Document.

Calhamer, A. (1974). "The invention of diplomacy." Games and Puzzles 21.

Clemens Jr, W. C. (2002). "Complexity theory as a tool for understanding and coping with ethnic conflict and development issues in post-Soviet Eurasia." International Journal of Peace Studies: 1-15.

Creative Assembly (2015). Total War: Attila, Sega.

Darkest Hour Team (2011). Darkest Hour: A Hearts of Iron Game, Paradox Interactive.

Devetak, R. (2011). An Introduction to International Relations: The Origins and Changing Agendas of a Discipline. An Introduction to International Relations. R. Devetak, A. Burke and J. George. Cambridge, Cambridge University Press.

DMLResearchHub (2011). Games and Education Scholar James Paul Gee on Video Games, Learning, and Literacy, Youtube.

Doyle, M. W. (1983). "Kant, liberal legacies, and foreign affairs." Philosophy & Public Affairs: 205-235.

Egenfeldt-Nielsen, S. (2005). Beyond edutainment: Exploring the educational potential of computer games, Lulu. com.

Elliot, A. B. R. and M. W. Kapell (2013). Introduction: To Build a Past That Will "Stand the Test of Time" - Discovering Hisotrical Facts, Assembling Historical Narratives. Playing with the past: digital games and the simulation of history: 1-29.

Entertainment Software Association. (2015). "Essential Facts About the computer and video game industry." Retrieved 29/02/2016, 2016, from http://www.theesa.com/wp-content/uploads/2015/04/ESA-Essential-Facts-2015.pdf.

European Union Offical Website. "EU Presidents – who does what?" Retrieved 09 February 2017, from https://europa.eu/european-union/about-eu/presidents_en.

Firaxis Games (2016). Civilization VI, 2K Games.

Gee, J. (2008). "Video games and embodiment." Games and Culture.

Haas, E. B. (1953). "The balance of power: Prescription, concept, or propaganda." World Politics 5(4): 442-477.

Hamilton, K. and R. Langhorne (2011). The practice of diplomacy: its evolution, theory, and administration, Taylor & Francis.

Jujubee S.A. (2017). Realpolitiks, 1C Company,.

Kainikara, S. (2003). Effective Wargaming: Impact of the Changing Nature of Warfare, Aerospace Centre.

Knutsen, T. L. (2009). The Development of International Relations. International Relations. J. Wiener and R. A. Schrire. Oxford United Kingdom, Eolss Publishers Co. Ltd. 1.

Kontour, K. (2009). "Revisiting violent videogames research: Game studies perspectives on aggression, violence, immersion, interaction, and textual analysis." Digital culture and education 1(1): 6-30.

Larres, K. (2002). Churchill's cold war: the politics of personal diplomacy, Yale University Press.

Levy, J. S. and W. R. Thompson (2005). "Hegemonic threats and great-power balancing in Europe, 1495-1999." Security Studies 14(1): 1-33.

LionsHeart Studios (2015). Playconomics, LionsHeart Studios.

Marine Corps War College (2014). World War II Strategy Exercise After Action Report.

Marques, B. R., S. P. Levitt and K. J. Nixon (2012). Video games as a medium for software education. Games Innovation Conference (IGIC), 2012 IEEE International, IEEE.

Marriott, W. (1908). The Prince by Nicolo Machiavelli, London: JM Dent.

Menon, K. (2001). "Dictionary of diplomacy."

Merriam-Webster Dictionary. "International Relations." Retrieved 09 February 2017, from https://www.merriam-webster.com/dictionary/international%20relations.

Nassal, K. R. (1982). "Personal Diplomacy and National Behaviour: Trudeau's North-South Initiatives." The Dalhousie Review.

Office of the Historian (2004). A History of Diplomacy, Unites States Department of State.

Organisation for Economic Co-operation and Development. "Organisation for Economic Co-operation and Development." Retrieved 10 February 2017, from http://www.oecd.org.

Paradox Development Studio (2010). Victoria II, Paradox Interactive,.

Paradox Development Studio (2012). Crusader Kings II, Paradox Interactive.

Paradox Development Studio (2013). Europa Universalis IV, Paradox Interactive.

Paradox Development Studio (2016). Hearts of Iron IV, Paradox Interactive.

Paradox Development Studios (2016). Stellaris, Paradox Interactive.

Perla, P. P. (1990). The art of wargaming: a guide for professionals and hobbyists, Naval Institute Press.

Perla, P. P. and E. McGrady (2011). "Why wargaming works." Naval War College Review 64(3): 11.

Prensky, M. (2001). "True believers: Digital game-based learning in the military." Digital game-based learning.

Prensky, M. (2007). Digital game-based learning, Paragon house St. Paul, MN.

Reynaud, D. and M. Northcote (2014). "The World Wars through tabletop wargaming: An innovative approach to university history teaching." Arts and Humanities in Higher Education: 1474022214556899.

Ryan, R. M., C. S. Rigby and A. Przybylski (2006). "The motivational pull of video games: A self-determination theory approach." Motivation and emotion 30(4): 344-360.

Sabin, P. (2015). Lost battles: reconstructing the great clashes of the ancient world, Bloomsbury Publishing.

Sabin, P. (2015). "Wargaming in higher education: Contributions and challenges." Arts and Humanities in Higher Education: 1474022215577216.

Satow, E. M. (1922). A guide to diplomatic practice, Longmans, Green.

Smartsims "MikesBikes."

Squire, K. (2011). Video Games and Learning: Teaching and Participatory Culture in the Digital Age. Technology, Education--Connections (the TEC Series), ERIC.

Sutch, P. and J. Elias (2007). International relations: the basics, Routledge.

taffy3 (2013). "MC War College WWI AAR." https://forum.paradoxplaza.com/forum/index.php?threads/mc-war-college-wwi-aar.736522/.

taffy3. (2014). "2014 dh@mcwar wwii aar." Retrieved 13/08/2015, from https://forum.paradoxplaza.com/forum/index.php?threads/2014-dh-mcwar-wwii-aar.770718/.

Tzu, S. (2012). The art of war, e-artnow.

U.S. Department of State. "Diplomacy 101." Retrieved 09 February 2017, from https://diplomacy.state.gov/discoverdiplomacy/diplomacy101/.

United Nations. "Main Organs." from http://www.un.org/en/sections/about-un/main-organs/index.html.

Weiner, M. G. (1959). "An introduction to war games."

Wiggins, B. E. (2016). "An Overview and Study on the Use of Games, Simulations, and Gamification in Higher Education." International Journal of Game-Based Learning (IJGBL) 6(1): 18-29.

Woessner, M. (2013). Teaching with Simcity: Using Computer Games to Construct Dynamic Governance Simulations. 2013 APSA Teaching and Learning Conference Paper.

World Trade Organization Offical Website. "World Trade Organisation."   Retrieved 10 February 2017, from https://www.wto.org/.