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# PROCEDURAL RHETORIC AND UNDOCUMENTED MIGRANTS: PLAYING THE DEBATE OVER IMMIGRATION REFORM

Oswaldo Cleger

**Abstract:** *The main purpose of this article is to analyze how a representative selection of computer games, set mostly in a Latin American context or at the US-Mexico border, are capable of mounting arguments about immigration policy by making good or poor uses of what Ian Bogost has conceptualized as “procedural rhetoric” (Bogost 2007). In other words, my goal in this article is to explore to what extent videogames can be effectively persuasive in the way they manage to create a computational representation of the experience of migrating, and its associated consequences, independently of the legal or illegal status of such displacements. This article revises current research on procedural representation to offer a detailed analysis of a representative selection of digital games dealing with this particular issue (Border Patrol, Tropico (I-IV), ICED!, Rescate: Alicia Croft, and Papers, Please). Finally, I will show how two commercial games produced mostly for entertainment purposes (such as Tropico and Papers, Please) can be more effective at mounting a procedural argument and, plausibly, at influencing players’ opinions on a particular issue than a “serious game” (such as ICED!). Based on this analysis, I propose to move beyond this distinction between entertaining and serious to focus on what is particular about videogames in general, that can make them into more efficient tools to disseminate ideas and provide players with more opportunities for experiential learning.*

**Keywords:** Immigration in videogames, procedural representation, Latinos in New Media, serious games.

## Introduction

In 2006, a Flash-based game released anonymously over the Internet sparked great controversy in the US, particularly among immigrants' rights activists, US Latino organizations and gamers from all sides of the political spectrum. The game in question, entitled *Border Patrol*, was set at the US-Mexican border, where the player in the role of a border patrol agent was instructed to shoot and kill as many illegal border crossers as possible before the game ended. In the opening screen, unwanted undocumented immigrants were cartoonishly portrayed as falling into one of three categories: Mexican Nationalists, Drug Smugglers and Pregnant Breeders. Once the game started and after a brief period of frantic shooting - lasting usually less than 30 seconds – players were shown the final score, which tabulated the total amount of “wetbacks” he/she had been able to eliminate.



Figure 1. Opening Screen of Border Patrol

Since its ominous debut - and to no one's surprise - most players and commentators have described *Border Patrol* in very negative terms, viewing it as an attempt to promote a "racist agenda" and "spread hatred" against Mexican immigrants and US Latinos in general<sup>1</sup> (Silverstein 2006, Daniels and LaLone 2012). Nonetheless, the general agreement about the malicious nature of this game has not prevented other players and critics from offering the opposite interpretation. Professor Frederick Luis Aldama is among those who believe the real objective of *Border Patrol* is "to open eyes to the everyday violence against Latinos, human-rights violations and racist policy making behind anti-immigration laws" (Aldama 2012, p.358). According to Aldama, "the game's cartoonlike graphics and general design aims to caustically poke fun at racists;" and this denunciatory message is conveyed in part by putting the player into "the uncomfortable position of shooting border crossers" (Aldama 2012, p.358).

The fact that a game with such a low production value like *Border Patrol* has been able to generate so much controversy and conflicting opinions underscores the growing impact videogames have in our society, as well as the medium's capacity to encapsulate ideas, political messages and social agendas promoted by different interest groups and constituencies. In 2010, a similar game commissioned by the Spanish conservative party (Partido Popular), showed Alicia Sánchez Camacho, the Party's pick for the regional elections in Catalonia, shooting illegal immigrants while they tried to enter the country jumping from helicopters. The game was removed from the campaign's website after causing outrage among large segments of the Spanish electorate. According to a statement released by the Party, the inclusion of "illegal immigrants" in the game was a mistake made by the developers, and not an expression of the Party's position on this issue. The original intention had been to show Alicia Sánchez Camacho shooting "illegal mafias," as well as other icons alluding to the Catalan nationalist movement, such as the movement's flag, or denouncing wasteful spending by the local government (El País 2010).

<sup>1</sup> Some of the words most commonly used to describe the game are "violent," "vicious," "mentally sick" (Slocum-Bradley 2008),



Figure 2. Screenshot of *Rescate Alicia Croft* (2010)

This was not the first time a major political party in Europe used videogames to express its views on immigration in an attempt to attract the attention of young voters. A year earlier, the Italian Northern League (or *Lega Nord*) had made headlines in Italy when two young members of the party, Renzo Bossi and Fabio Betti, released a game on *Facebook* inviting players to sink boats full of undocumented immigrants trying to reach the Italian coast (Pasqua 2009, Melchionda 2009). The game, extremely simple in design, consisted of a map of Italy surrounded by approaching boat icons, which the player had to click on to make them disappear from the map. If players managed to prevent enough boats from reaching the coast, they were immediately promoted to the next level; otherwise they would get a message saying: “Prova ancora. Vedrai che la prossima volta riuscirai a dimostrare di essere un vero leghista” (Pasqua 2009). (“Try again. You will see, next time you will be able to prove you are a good Lega supporter”). After being decried as racist by the National Association for Social Promotion, this game was also promptly removed from the Northern League’s Facebook account. But the decision to remove the game was not made this time by the developers or the party, but by Facebook site administrators.

On the other end of the political spectrum, human-rights organizations, such as Breakthrough, have also used videogames to promote their political agenda in defense of immigrants’ rights. *ICED!* is the title of a Breakthrough production in which the player is put in the role of both legal and undocumented immigrants living in the US who must make good decisions to avoid deportation. Another production by Breakthrough, *Homeland Guantanamos*, puts the player in charge of investigating the atrocities committed by US officials at an immigration detention center (Bernstein 2008). And there are a handful of other computer games developed during the last fifteen years, in which the topic of border-crossings has been approached from a variety of perspectives, both in reference to the US-Mexican border and other international state boundaries.

My main goal in this article is to analyze how computer games are capable of mounting arguments about immigration policy by making good or poor uses of what Ian Bogost has conceptualized as “procedural rhetoric” (Bogost 2007). In other words, my purpose in the following pages is to explore to what extent videogames can be effectively *persuasive* in the way they manage to create a computational representation of

the experience of migrating, and its associated consequences, independently of the legal or illegal status of such displacements.

## Immigration as human and computer process

Migration is a human process strictly regulated by a set of rules, laws, practices and protocols that define, with more or less clarity, the manner in which this process should be carried out between the citizens of two or more nations (Johnson 2009). In countries such as the United States, immigration laws can be highly complex, allowing for multiple exceptions to some general rules<sup>2</sup>. These rules are often defined by a body of legislation that has been enacted over the course of several decades, responding to different historical circumstances and political or socio-economic imperatives<sup>3</sup>. Immigration laws are not only written and applied differently depending on the country of origin of the prospective visitor or immigrant; but they can also treat in different ways people coming from the same country depending on their socio-economic status, criminal records or political affiliation<sup>4</sup>. For instance, a 20-year old Ecuadorian citizen without a steady job in his country and a certain amount of funds in a saving account will be less likely to get a visa to visit the US than an upper-middle class student of that country who has been accepted to MIT and offered a scholarship to pay for his graduate studies in the US (or he can otherwise prove that he has the financial resources to pay for his studies and living expenses while in the US). Although immigration laws, like any law, are written to provide a general legal framework that should be applicable to all individuals falling under the categories defined by the law, they are always applied on a case-by-case basis; and it is usually up to immigration authorities – or to be more specific, to one immigration officer – to determine whether a specific individual should be granted or denied his request of a visa, based on a quick and personal assessment of the potential risks associated with allowing that person into the country<sup>5</sup>.

As one can easily conclude from the previous paragraph, legal immigration occurs within an extremely complex system that allows for multiple possible outcomes from the single action of an individual seeking formal entry into a foreign nation. This system becomes even more complicated when one also consider the parallel world of illegal immigration (Motomura 2014). In this case, one are also dealing with a very complex subsystem, made up of intricate rules, complicated and risky procedures and a labyrinth-like structured support network. Both systems put together (the legal and illegal one) give rise to an almost unmanageable space of migratory practices, regulated by laws as well as by multiple ways to circumvent them. It is not surprising to see that legislative bodies and elected officials are always so reluctant to deal with such a complex problem; and try usually to postpone its deliberation and the adoption of new immigration laws until the political cost of maintaining the *status quo* becomes to high to be a viable option.

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<sup>2</sup> To gain an insider's perspective on how the immigration system works see Zimmer 2013.

<sup>3</sup> An example of this is *the Cuban Adjustment Act*, passed by the US Congress in 1966 in response to Cuba becoming a mayor player in the Cold War. Under this law, Cuban citizens are eligible to obtain a green card after “they have been present in the United States for at least 1 year” or right after “they have been admitted or paroled.” The alleged purpose of this law was to contribute to the weakening of Castro's regime; but even after the Cold War had ended, the Cuban Adjustment Act still remained in effect; and it's still in place today despite the fact that both countries are currently moving towards normalizing diplomatic relations. More on the Cuban Adjustment Act in US Citizen and Immigration Services and Anderson (2010).

<sup>4</sup> For a very well documented discussion of how different criteria has been applied throughout history by the US immigration system to justify the exclusion of those prospective immigrants perceived as “undesirable” see Hing 2004.

<sup>5</sup> For a discussion on how discretion is used exceptionally (and excessively) in the field of immigration law see Koulish 2010.

Now, the fact that the immigration system is extremely complex doesn't mean that it cannot be computationally modeled. Actually, the strictly procedural nature of immigration rules and practices makes this an ideal topic for computational media. Let's not forget that the immigration system, with all its complexities, is built around a simple yes-or-no question: "Should subject X be granted or denied access into country Y?" Initially, that is all. Next, setting the conditions under which subject X should be allowed to enter and stay in country Y for a given period of time is the first predicate that turns what was a simple yes-or-no question into a much more complex proposition. Finally, the fact that both granting and denying subject X's request of a visa could potentially have both positive and negative consequences for country Y – due to the close connection that exists between immigration, public security and economic policy – is what makes immigration rules so difficult to write, and so contingent upon the specific security concerns held by any country, as well as the particular economic development plan that country is pursuing.

Computationally modeling the immigration system in all its intricacies is neither a viable idea at the present nor something I intend to propose in this paper. The purpose of videogames, viewed as an expressive medium, is not as much to create an all-inclusive simulation of a world system, as it is to "selectively [model] appropriate elements of that world" (Bogost 46). Videogame aesthetics is based on procedural representation, which as Bogost has argued, is concerned with modeling "only some subset of a source system, in order to draw attention to that portion as the subject of the representation." (Bogost 46) In this sense, one could say that procedural representation is not that much different from literary representation, since they both work by abstracting significant elements from the real world or the human experience in order to re-articulate those elements in a new structure that can only be understood or interpreted symbolically.

## **Procedural representation in videogame portrayals of migratory processes**

But what is procedural rhetoric and how is it different from other forms of persuasion commonly found in literary discourse and visual media? Ian Bogost has defined "procedural rhetoric" as a type of persuasive discourse that is native to computer processes, and therefore, should not be confused with other forms of argumentation, such as the use of verbal or visual rhetoric. According to Bogost "A procedural rhetoric makes a claim about how something works by modeling its processes in the process-native environment of the computer rather than using description (writing) or depiction (images)" (Bogost, n.d.). Of course, videogames can also rely heavily on graphics and texts to convey their message. In fact one could argue that one of the factors that has spearheaded the development of the videogame industry, since its very inception, has been the interest in creating increasingly sophisticated graphics and eye-popping visual effects. These visual effects, in and of themselves, contribute somehow to enhance the persuasive effectiveness of videogames, due to the public's inclination to grant authority to any media product that has been packaged with high-end visuals. As Bogost points out:

The use of highly polished visual and sound design builds an expectation of authority. Images hypnotize many consumers, and even the largest videogame companies often repackage the same games with improved (or simply

different) graphics. Considerable attention and investment has gone into improving the visual fidelity of commercial games, including the move to high definition and higher polygon models on the now-current Xbox 360 and PlayStation 3 consoles. Visual fidelity implies authority (Bogost 2007, p.49).

But regardless of the higher or lower role high-end graphics may play in the videogame industry, visual representation is not quintessential to computer games, and is not as defining a feature as their process-driven architecture. As Bogost argues, what is quintessential to videogames is their capacity to “represent process with process,” something that “only procedural systems like computer software” can accomplish (Bogost 2007, p.14)<sup>6</sup>.

To illustrate what I have previously said, let’s go back now to the example of *Border Patrol*. One can see in this game all three forms of rhetoric at work. First of all, most of the initial message is conveyed by verbal and visual means, through the cartoonish depiction of the “bad guys” in the game – the invaders, – as “Mexican Nationalists,” “Drug Smugglers” and “Pregnant Breeders.” As Scott McCloud has argued in *Understanding comics: The invisible art* (1994), cartoons derive most of their expressive power from their capacity to amplify their meaning by simplifying the representation or drawing, which in this case is accomplished by reducing each character to one or two salient features that clearly define them as undesirable border-crossers. An angry-looking bearded man flanked by two pistols and with the Mexican flag in the background, a tattoo-touting Drug-smuggler carrying a backpack full of cannabis, and a pregnant woman with three children in tow occupy the right side of the opening screen, while the cursor is immediately turned into a rifle crosshair that follows the movements of the mouse to point in the direction the player wants it to. Here we have all three representational modes commonly used in videogames working in unison, that is, visual and verbal signifiers and a discrete process that simulates the action of aiming a rifle at an objective. All three together introduce with great economy of resources what the game is about. The verbal instructions on the lower left side of the screen (“There is one simple objective to this game: keep them out... at any cost!”) sums up the information needed before the player hits the “play” button and begins to play. (*Border Patrol* 2006).

Most commentators who have approached *Border Patrol* with training in literary and visual culture studies have probably relied solely on these basic visual and verbal elements to interpret its meaning. The need to actually *play* the game to see how its message is reinforced or further expanded through gameplay is something that has been mostly overlooked by critics. This is largely due to a limited understanding, within the literary and cultural studies field, of how videogames work, and the central role procedurality plays when mounting an argument through gameplay. In the case of *Border Patrol*, two main variables are manipulated to model the illegal border-crossing process during the few seconds the game usually last: speed and distance. It is by changing the value stored in these two variables during a playing session that the designers try to illustrate their views about the issue being represented. For instance, the faster the player is at eliminating his targets the faster and further away from the shooter (that is, smaller, since distance in Flash games is represented in a bidimensional way) these

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<sup>6</sup> As those readers familiar with the literature on procedurality will notice, my purpose in this article is not to engage in the ongoing discussion about the virtues (Bogost 2007, Voorhees 2009), and flaws (Sicart 2011) present in the procedural approach to game studies. Coming myself from the field of literary and cultural studies, I consider current research on procedural rhetoric very instrumental in helping us better understand how videogames operate and impact our culture. For a discussion of some of the flaws and limitations attributed to this model see Sicart (2011).

targets become, making it harder for the player to kill them all before many manage to enter American soil. At first glance, the game seems to be mocking those who are in favor of militarizing the US-Mexico border as a remedy to stop the constant flow of undocumented immigrants coming from Mexico. By procedurally modeling to players that no matter how fast and deadly border patrol agents can be, this will not deter undocumented migrants from attempting to cross the border, and the only effect – if any – will be to speed up that process, *Border Patrol* seems to suggest that such extremist views about immigration policy are doomed to be counterproductive. From this perspective, Frederick Luis Aldama appears to be right in his assertion that *Border Patrol* “aims to caustically poke fun at racists” (Aldama 2012, p.358), contrary to the more widespread opinion that it is just a hate videogame (Silverstein 2006, Ituarte 2009, Daniels and LaLone 2012).

Now, when the player adopts a different strategy and decides not to shoot his targets, the speed at which his victims are approaching the border slows down dramatically, as they also start coming increasingly closer to the shooter. By manipulating speed and distance in this way, the game is now making the opposite procedural argument: that if Americans don’t do something radical to stop the constant flow of illegal immigrants coming from Mexico, these individuals will become increasingly emboldened by such inaction, to the point of just strolling through the border into the US, passing right in front of immigration authorities. One more element in the game that supports this interpretation is the fact that every playing session starts with the character of the pregnant woman attempting to cross the border. If the player, showing basic feelings of compassion and humanity, decides not to kill her, more pregnant women towing two kids immediately follow, coming every time at a slower speed and closer to the shooter. The player will not even see any drug smuggler or Mexican nationalist approaching the border until he decides first to shoot the woman and her children. The message, again, is very clear: “protect the borders at any cost!” even if it means murdering innocent women and children.

After examining more closely *Border Patrol* it becomes very clear that this is actually a hate game, rather than an over-the-top depiction of extremist ideas to make bigots feel ashamed of the views they uphold. The player in the game is presented with two choices and two possible outcomes: either a bloody war with illegal border crossers that cannot result in a perfect win situation (innocent people will be killed and many will still succeed in their attempt to enter the country illegally), or a passive acceptance of defeat by allowing border crossers to enter the country unchallenged, using pregnant women and innocent children as their “front-line of attack.”

One can conclude then that *Border Patrol* is indeed staunchly anti-immigrant; but this conclusion should be reached by considering the options the player is presented with during a playing session, and through the way the game handles procedurally the consequences associated with the player making in-game decisions. It is through this choice-decision-consequence modeling process that videogames encode ideology, even in the case of a very simplistic flash game such as *Border Patrol*.

As already commented at the beginning of this article, videogames can and have been used to support both anti- and pro-immigration views and sentiments. And these views have been expressed both relying on very emotional arguments and presenting more rational propositions. In some cases, like the game developed by the Italian Northern League, *Rimbalza il clandestino*, the



expressiveness of the game clearly overpowers its ability to persuade people who don't share already the game's ideology. This is due, in part, to the fact that the designers in this case were not as much interested in attracting or persuading undecided voters on this issue to adopt their anti-immigrant views, as they were in reinforcing those views among their own constituents. The message the player receives after failing the mission, "next time you will be able to prove you are a good Lega supporter," makes this purpose particularly clear. This game was not as much about gaining new supporters for the cause or expanding the party's base, as it was about keeping and energizing those voters that have already embraced the party's platform. Voters who are undecided on this issue will most likely find inhumane and unviable the solution to fix the immigration system proposed by the game producers: let's sink their boats in the ocean before those undocumented migrants manage to reach our coasts. But among the most extreme members of the party and the Italian society, the game is likely to be an effective tool for energizing that base or recruiting those extreme elements.

In the example provided by *Border Patrol* we have a game that is slightly more difficult to read and more ambiguous in meaning not only due to its slightly subtler use of procedural rhetoric (that is, the alteration of the speed and distance of the targets in reaction to the player's response to encode in this processes the game's real message) but also due to its anonymous nature. The fact that we don't know who produced or commissioned the game generates uncertainty about the political intentions of the game designers. As we have already noticed, even a very smart analyst like Frederick Luis Aldama has considered the game to be pro-immigrant's rights, when as we have just deducted it is quite the opposite. But not knowing who made the game makes much more difficult to answer that question. The anonymous character of *Border Patrol* also accounts – possibly – for its survival on the Internet. While both the Catalanian and Italian anti-immigrant games were removed from the party's website after causing national outrage among moderate and liberal segments of the Spanish and Italian population, *Border Patrol*, on the contrary, has been hosted and curated in many different sites, owing in part to the lack of a person, company or group that could be held accountable for producing the game. One online gaming site where the game is hosted (<http://nerdnirvana.org>) reports that *Border Patrol* has been played over eleven million times, receiving a 3.5 stars rating from a total of 18 802 reviewers (*Border Patrol* 2006).

But regardless of the differences we can enumerate over the manner in which these games were produced or distributed over the Internet, all three share the same purpose: they all speak to a segment of society with very strong views about immigration policy. These games are not so much about persuading others to join a cause, as they are about channeling people's emotions regarding one of the most controversial issues of our time.

If we turn now our attention to *I Can End Deportation!* or *ICED!*, the videogame produced by Breakthrough in support of immigrants' rights, we not only see a different perspective in terms of ideology, but also a different way to approach the persuasive nature of videogames. Since its founding in 2000, Breakthrough has worked continuously on spreading their message in support of minorities' rights, with a focus both on women and ethnic or racial minorities. Even though Breakthrough is not a videogame company, they have embraced videogames, as well as advertising campaigns and pop music, as effective tools for their mission to create awareness in the public about issues of discrimination and injustice. Mallika Dutt, founder and CEO of the company, has spoken on

numerous occasions about the need to bring young people into the discussion about human rights, and instill on them a passion for making the fight for justice an integral part of their everyday lives (Bhagavan 2012, Dutt 2012). From this perspective, videogames look certainly like a natural ally considering the strong influence they have on young people.



Figure 3 *ICED!* Opening Screen.

But the question that needs to be asked is to what extent a videogame like *ICED!* really succeeds at persuading gamers that both legal and undocumented migrants living in the US deserve more respect from the public and the US government, and/or that current immigration laws and practices need to be changed to be fairer to this particular group? Since the release of the game over the Internet, in 2008, Breakthrough has been collecting data to try to provide an answer to that question. According to their own survey, 56% of players declare that playing the game changed their views about how immigrants are treated in the US (Diamond, & Brunner 2008). These numbers are based on a questionnaire that players have volunteered to answer both before and after playing the game. The questionnaire's aim is to identify the presence of certain general misconceptions and erroneous beliefs regarding immigrants living in the US. For instance, one item in the questionnaire states: "Undocumented immigrants pay many of the types of taxes that US citizens pay." (Diamond, & Brunner 2008, p.17) The designers of the game clearly anticipate that many players will believe this statement to be false, due to the widespread misconception that undocumented immigrants don't pay any taxes. Then, the purpose of the game will be to help players correct those misconceptions by exposing them to "the true" about the real situation of undocumented immigrants living in the country. Finally, players are asked to take the same questionnaire at the end of the game as a way to assess the impact playing the game has had on their opinions. Breakthrough reports that more than half of the respondents have acknowledged a change of perspective regarding this issue (Diamond, & Brunner 2008).

Some commentators attribute these positive results to "the combined use of procedural rhetoric and simulated situated learning" in the game (Maiolini, De Paoli & Teli 2012). According to Maiolini *et al*, *ICED!* "uses the mechanic of player frustration in a very clever way. In *ICED!*, in-game frustrations are used to communicate to the players the daily difficulties and injustices that clandestine migrants face in the U.S." And these authors conclude that: "Such a strategy is extremely efficient to teach users about legal issues" (Maiolini *et al* 2012). Mitgutsch and Alvarado seem to agree, at least partially, with the previous assessment. According to them, *ICED!* manages to model how unfair the US

immigration system is to immigrant residents by making the option of voluntary deportation the easiest outcome in the game: “Leaving the country is the only easy option the player has – all other options are complicated and frustrating” (Mitgutsch & Alvarado 2012, p.127). Showing players that they can put an end to all the difficulties they are confronting in the game by volunteering to leave the country is a good example of an effective use of procedural representation in *ICED!*. But as I will discuss next, the game ultimately falls flat due to its heavy reliance on verbal rather than procedural means for conveying its main message, as well as other problems with its general design.

*ICED!* is essentially a role-playing game (RPG) that offers players the opportunity to experience the lives of five different young adults who are currently being sought by immigration authorities. One thing all characters have in common is that they all live in fear of being deported to their country of origin, despite the fact that most of them are either green-card holders or have some sort of legal status. This is one of the most interesting and educational decisions made by the game designers: instead of making undocumented Latinos the main focus of the game, they opted for presenting a variety of situations in which legal foreign residents of very diverse backgrounds are being harassed by immigration authorities, due in some cases to very minor offenses such as taking less school credits than they were required to register for while on a student visa. The only Latino character in the game is Javier, a Mexican-born young adult who was brought to the US when he was only five, and whose parents made the decision “to stay in the United States to work and make a life” (*ICED!* 2008) after losing the family business they had in Mexico. We are further told that Javier’s family lost their business “because of NAFTA,” in an attempt to present the US government as partially responsible for this family’s fate and their decision to leave their country of origin. Finally, the acculturation of Javier as “American” is underscored by the fact that “his English is stronger than his Spanish” (*ICED!* 2008). Javier is essentially the embodiment of a “dreamer<sup>7</sup>,” that is, one of many undocumented residents in the US who were brought by their parents when they were children, and whose cultural and linguistic ties to their country of origin are either very weak or nonexistent.



Figure 4. Javier, one of five playable characters players can choose to play the game.

<sup>7</sup> After the introduction of the DREAM ACT (or the Development, Relief, and Education for Alien Minors Act) in the US Senate (2001), those undocumented residents who would be eligible to adjust their status if this law was ever adopted came to be known as “dreamers” in US media channels.

Other playable characters in the game are Ayesha, a green-card holder from India who was arrested by the FBI and blacklisted as a threat to the US after writing a school essay on the Patriot Act; Anna, a girl from Poland whose parents died shortly after they came to the US, and who has spent most of her teenage years in a detention center on marijuana possession charges; Marc, an Iraq veteran from Haiti who joined the military as a way to escape from the corrupt environment of his neighborhood in Brooklyn, but who came back from Iraq suffering of Post-Traumatic Stress Disorder and unable to find a job; and Suki, a Japanese student who is at risk of being deported for registering only 9 school credits during his first semester at Cornell University. These are all credible characters, experiencing real-life problems partially stemming from current immigration laws and practices.

To actually play the game, players have to choose one of these characters and enter the city environment where the game takes place. This environment consists of a realistic urban space, rendered in 3D, that players experience from a first-person perspective. Arrow keys are used to move around the city and the mouse to solve the “challenges” the player is presented with during a playing session. The mission of the game is to stay out of detention by “making good decisions and doing positive things for [the] community” (ICED! 2008). Players have to collect “civic points” by walking through several icons shaped as hands that represent their willingness to help the community by completing tasks such as donating blood or planting a tree. Other icons found around the city are light bulbs that are marking the locations where the player will be quizzed on his knowledge about US immigration laws and practices. Most of the ideological content of *ICED!* is made explicit through these questions, which are aimed to teach players to distinguish myths from facts regarding immigration laws and the reality of immigrants living in the US. For instance, one of the questions states: “Nearly half (45%) of all undocumented immigrants now living in the United States entered the country legally” (*ICED!* 2008). If the player answers that that is a “Fact,” he will receive 10 points and will see a dialog box providing further information on that topic. If on the contrary, he answers that it is a “Myth,” he loses the points and an immigration officer starts chasing him along the city streets. At certain locations, players are also presented with situations in which their characters may feel tempted to do something inappropriate, illegal or risky, like registering to vote in the elections, sneaking into the metro without paying the fare, or buying counterfeit DVDs from a shady street vendor. If the player decides to engage in any of these activities, more immigration officers will be after him. Once there are five officers chasing the player, in a Pacman-style mini-game, it will be very difficult not to get caught.

*ICED!* has received some unfavorable reviews based both on its content and its design. Regarding its content, some critics have noted that the game offers a negative and stereotypical view of immigrants, after all, by presenting them as more prone to engage in illicit activities that will ultimately get them in trouble. In this regard, Frederick Luis Aldama points out that:

Breakthrough’s *ICED* or *I Can End Deportation* (2007) is arguably meant to raise awareness by allowing players to feel what it’s like to live as an undocumented Latino. Ultimately, however, *ICED* falls back on racist stereotypes; you play an undocumented teen running from *la migra* (immigration) but score points by *not* jumping subway turnstiles and *not* stealing from local *tiendas*. The points

keep you from being deported. The expectation: that stealing and taking advantage of the system is in the Latino DNA (Aldama 2013, p.246).

Although it is necessary to underscore that *ICED!* is not mostly about Latinos or undocumented immigrants and, as we have already noted, there is only one Latino character in the game, Frederick Luis Aldama is right in his observation that the game offers a stereotypical view of foreign residents as more prone to engage in illegal activities. Design-wise, the game has also been criticized for the designers' decision to make a realistically looking city that is otherwise empty and lifeless. *ICED!* is supposed to take place in an urban environment populated enough to justify the need for a subway system. However, the city looks empty with the exception of the immigration officers chasing the player and a few other non-player characters located at certain points for the player to interact with. Interactive sound effects that are activated at specific locations are supposed to create the impression of a bustling city with an active crowd moving in the background. But this low-budget effort to generate the illusion of a dynamic city, rather than tricking the eye, only highlights the incongruity of the environment players can gaze upon.

But the mayor problem of this game doesn't lie on its content or its aesthetics, but on its very limited use of effective procedural rhetoric to mount an argument in favor of immigrant's rights. If we put aside the character selection segment, at the beginning of the game, and the pacmanesque persecution of the player by the immigration officers, we are only left with a large set of text boxes, describing different situations in which players have to prove that they are capable of telling right from wrong, and myths from facts. Users are left with the impression that they are just taking a quiz as part of a training program on civic education, which will be as engaging or persuasive as the words quiz or program can possibly encompass.



Figure 5 Screenshot of one of the questions that players must answer correctly in order to prove their ability to distinguish myths from facts regarding the current state of the immigration system in the USA.

*ICED!* developers could have done a better job at justifying the need to create a videogame to present this content. Working with the premise that a videogame,

in an of itself, should be an effective tool to educate young audiences disregards the fact that what makes videogames particularly persuasive is the specific way in which they are capable of delivering content to users. Repackaging a quiz as a game to add a “fun factor” to the presentation of information is a misguided use of the format, and one completely at odds with the principles of procedurality.

Procedural rhetoric can be an effective tool to train and educate audiences, regardless of age, because it is based on the capacity of computers to simulate real life processes; and therefore, this expressive medium is not as much about inculcating knowledge to users as it is about providing them with simulated experiences at a pre-cognitive stage. The lessons or knowledge to be learned, from playing the game, are not a given, but rather a result of the user’s free interaction with the environment. In other words, in procedural games learning outcomes should always be a byproduct of gameplay, and not their main focus. The effectiveness of such a learning framework stems from the fact that the resulting knowledge is not perceived as something given to the user, but rather as something he has independently acquired.

Let me illustrate with an example what I have just discussed. One of the myths about undocumented residents *ICED!* producers want to debunk is the idea that they don’t pay any taxes. The way this is accomplished in the game is by prompting players with a myth-or-fact question when they walk through one of the light bulb shaped icons placed around the city. If players answer that undocumented residents don’t pay any taxes, they lose points and are presented with a new text box expanding on the type of contributions these residents make to the state and federal government. The appearance of another immigration officer chasing the player is the price he has to pay for making such mistakes in the game.

A procedural way to present this content, rather than quizzing users for a specific answer, would have focused more on putting the player in the situation of having to pay taxes. Playing as Javier, the only undocumented resident in the game, the player could have discovered that, despite being undocumented, he still has payroll taxes deducted from his paycheck, which are regularly credited to the fake social security number he uses to work. To complicate things further, the player could at some point in the game find himself unemployed and unable to collect social security benefits, despite having made contributions to these funds for several years. This same situational learning model, which is at the core of procedural rhetoric, could have been used throughout the game, providing players with a more vivid and enticing way to explore the world of immigration. The conclusions players would draw from going through these processes would be the result of their own deductions instead of something they feel forced to accept.

The next example I am going to examine here will serve to illustrate, in a much clearer way, an effective application of the principles of procedurality to the design of a game approaching the topic of immigration in a Latin American environment. *Tropico*, first released in 2001 by Gathering of Developers, is a classic in the construction and management simulation (CMS) genre, whose initial and subsequent success made possible the expansion of the game, to include a total of nine new releases in the course of a decade. Daniel Chavez, who has studied this game from a cultural studies standpoint, conceptualizes *Tropico* as a ludic variant of what in Latin American literature is known as “the Dictator Novel,” as cultivated by authors such as Alejo Carpentier, Gabriel García Márquez, Miguel Ángel Asturias and Augusto Roa Bastos, in reference to several dictatorial regimes prevalent in the region since acquiring its independence from



Spain (Chavez 2010). With the exception of the first sequel of the game, *Tropico II: Pirate Cove* (2003), which is a pirates game with a focus on loot and plunder, most other versions (*Tropico I, III and IV*) take place in a dystopian Caribbean island, a sort of “Banana Republic,” caught up in the middle of the conflicts of the Cold War period. The player, embodying the role of *El Presidente*, is tasked to complete several missions, which range from developing the industrial or agricultural sector of Tropico’s economy to just managing to stay in power while several internal and external forces try to overthrow him.

*El Presidente* wields unlimited power over the citizens of *Tropico* and the island’s natural resources. It is up to him to decide what new facilities he wants to build and where he wishes to place them, as well as how much salary should be paid to workers in all sectors, including farmers, industrial workers, bureaucrats, professionals and military personnel. In exercising his great powers, the player is only limited by the free will of his people – he cannot force his citizens to love him or be loyal to him, – the plausibility of the different situations – in the way what is considered “plausible” in the game has been predetermined by the game designers, – and finally by the consequences associated with any decision he has previously made. For instance, the player may want to build a new fishery to exploit the coastal resources of the island, but this will only be possible provided that there is a physical space available for the new wharf, enough construction workers to complete the project and willing to do it, and sufficient funds in the government’s coffers to pay for the initiative. In other situations the player may want or be asked to develop the industrial sector. But unless there are enough qualified professionals in *Tropico* to manage those industries the whole sector is doomed to be unproductive.

A game strategy to succeed in this mission could be to invest significant resources to provide an education and professional training for the people of *Tropico*. Building a strong K-12 and university system could do just that. But the same could also be accomplished in the game through immigration policy.

Although not strictly speaking a game on immigration, *Tropico* manages to simulate, in a very effective manner, the way the immigration system works in most modern societies. The immigration office is one of several government facilities the player can build; and actually opening this office will prove to be extremely beneficial to the player, since it will allow him to set the immigration policy he considers more effective in achieving the game goals. For instance, setting the immigration policy to “skilled workers [only]” could help the President get the qualified professionals he needs to develop an industry or staff positions that require a high school or college diploma. To make things more interesting, in most cases just activating this policy will not be enough, since the player will also need to offer lucrative salaries in those positions that are available or be willing to pay hiring bonuses and relocating expenses to prospective foreign experts to really succeed at attracting highly qualified individuals to the Island. Furthermore, the adoption of a policy offering the highest paying jobs to foreigners is likely to create resentment among the local population, which could eventually lead to a strong opposition movement fueled by the Nationalist faction.

If *El Presidente* continues to favor foreigners over locals as game strategy, or refuses to curtail the immigrant influx into the country, the Nationalist faction will call for elections and do everything in their hands to feed the social unrest and oust him from power. In this new scenario, the player will have to consider all the options available in the game to ease the situation and regain the trust of Nationalist leaders. He may decide, for instance, to close the borders, adopting a

“Tropico First” policy. But this will also come with a price. After closing the borders, the sudden reduction in the immigrant influx will create a shortage in the workforce. While the President may have regained the support of the Nationalists by stopping the immigrant influx, he will now find himself unable to finish his construction projects; and with a shrinking population that will become increasingly unproductive. The scarcity of food and goods in the Island, and the ensuing lowering of living standards will soon generate new social unrest among Tropicans, including those members of the Nationalist faction that the President had tried to appease through restrictive immigration policies. An unproductive economy will also have a negative impact on international relations, reducing the ability of the President to get loans and foreign aid from international superpowers such as the US and the USSR. The size of the national debt is also tied in the game to an increase in the possibilities of a foreign invasion, which will also end the President’s regime. Once the Island’s economy is totally in shambles, either a superpower’s army or the local rebels coming from the mountains and other hidden areas will oust the President from power, and the game will be over.



Figure 6 "Viva Tropico" is a mission (From Tropico 3) in which El Presidente will have to prove his ability to ease the tensions between the immigrants and the Nationalist faction of the Island.

The previous description of one of the paths players could follow during a playing session may suggest that the designers of *Tropico* have linked the adoption of an “open borders policy” to an increased likelihood of a positive outcome in the game. But that is not necessarily the case. Only during missions in which the President needs to rebuild the Island – after a political or environmental disaster has occurred – and he starts his mission with just a few citizens, his advisers will encourage the adoption of an open borders policy to repopulate the Island quickly and bring the economy up to speed. But in most scenarios, to succeed in his mission the player will need to strike the right balance between promoting adequate population growth through foreign immigration, and keeping his native population happy through policies that will be beneficial to them mostly. Failure to do so will most likely result in constant challenges to his ruling by the nationalists and other factions; or it could even have a negative economic impact by contributing to overpopulation, high unemployment rates, or the proliferation of shacks built by the newcomers.



After playing several missions and trying different paths to complete a campaign, players realize that the world of *Tropico* is neither in favor nor against any particular view on immigration policy. Except for a few general principles, such as the idea that an expanding economy cannot rely solely on natural population growth to satisfy labor demands or that an unregulated immigration system can threaten social and economic stability, outcomes in the game are not tightly linked to the adoption of a specific immigration policy. In some situations, closing the borders could be the best way to achieve a specific political or economic goal; while in other situations doing the opposite might be the best solution. Everything depends on many variables that are connected to other socio-economic areas, such as the size of the population, the amount of construction projects that are in course, the high or low demand of labor to complete these projects, the need of low- or high-skilled workers and so forth. It is this ability to show, in a procedural way, the interconnectedness of immigration policy to other social and economic areas what makes *Tropico* a particularly effective game at approaching this issue.

In 2013, another game was released with a focus on the issue of immigration. *Papers, Please*, an indie game developed by Lucas Pope, drew enough attention upon its release to be included among the finalists for a Spike Video Game Award in the category of “Best Independent Game” of the year. Set at a border checkpoint in the fictional country of Arstotzka, *Papers, Please* documents the everyday life of an immigration officer, who must decide who should be admitted and who should be denied to enter the country, based on an increasingly complicated body of immigration policies, rules, and protocols that his superiors constantly set and modify as the game progresses. The goal of the player is to make ends meet at the end of every day, by making enough money to be able to provide food, heat and medicine for his family. The player’s earnings are in relation to the amount of individuals he manages to process, without making any mistake, at the immigration checkpoint. His supervisors will micromanage every decision he makes, issuing warnings or penalties whenever there is a breach of protocol that results in an individual being rejected or admitted wrongfully into the country. A person wrongfully admitted could result in a terrorist attack or contribute to the smuggling of illegal goods across the border.

The game also presents players with difficult moral decisions, such as accepting bribes from potential terrorists and criminals trying to enter the country with fake documents, as a way to pay for the medicines his sick son or wife so desperately need. In another situation, the player will have to decide whether he will allow a known sexual trafficker to enter the country, putting in risk the life of a woman he has just interviewed and admitted who is allegedly being exploited by this man. If the player rejects this individual, whose papers are otherwise in perfect order, he will receive a warning or penalty from his superiors; which could result in a reduction of his salary and the inability to cover his most basic expenses, such as rent, food, or basic healthcare. If he decides to let him in, he will learn later in the game, while reading the local newspaper, that the woman who asked him for help was found dead at a local strip club. Similar situations, with difficult ethical implications, will re-emerge during the game, putting the player in the uncomfortable position of having to decide other people’s destinies, from individuals who are being politically persecuted in neighboring countries to members of a family who are just trying to stay together while fleeing from a variety of threats, or attempting to cross the border to reunite again.

While *Tropico* approaches the issue of immigration from the perspective of the higher power in charge of setting the rules, *Papers, please* introduces us – very effectively – to the world of the lower power responsible for implementing such policies. In doing so, both games complement each other very well, and emerge probably as the two best simulations on this topic the videogame industry has produced to date<sup>8</sup>.

## Moving beyond the serious games theoretical framework

In April 2011, an article published in *FoxNews.com* documented one of the initiatives recently undertaken by the Department of Homeland Security, aimed at leveraging the potential of video game technology to increase border security at the US-Mexico border (McCarter 2011). The article referred to a 1.6 million investment made by the DHS to fund the acquisition of three prototype simulators developed by companies such as Breakaway Ltd., Metron Inc., and Sandia National Laboratory. The purpose of this initiative was to provide border enforcement authorities with virtual models that could help them identify ways to allocate their resources more effectively, “and work out questions like how much fence and what kind of fence is needed or how sensors, vehicles and other technical equipment can best be used” (McCarter 2011). One of the simulators, developed at the Sandia National Laboratory (the *Sandia Borders High Level Model* or BHLM), provides users with a touch surface table in which they can monitor movements across the border, both from incoming border-crossers and CBP officers responding to these incidents. “Users can also view a leaderboard of sorts that shows how many suspects have been apprehended, the dollar amount spent implementing the chosen architecture and other metrics that matter to CBP decision-makers” (Redorbit 2011). According to Jason Reinhardt, the Sandia project manager in charge of overseeing the development of the BHLM, they saw in this initiative by the DHS an opportunity to use gaming platforms previously developed at Sandia (such as their force-on-force engagement modeling technology, *Dante*, and their serious gaming technology, *Ground Truth*) to design a “high fidelity simulation and analysis tool” that could help policy makers, both at the local level and in Washington, to evaluate the infrastructure and human resources needs at the US-Mexico border (Sandia National Laboratories 2011).

The reference to serious gaming technology by Reinhardt highlights one of the theoretical frameworks currently used to discuss the impact of videogames beyond the scope of the entertainment industry. The abundance of recently published research on this topic (Michael, Chen, & Chen 2006, Davidson 2008, Ritterfeld, Cody, & Vorderer 2009, Aldrich 2009, Ma, Oikonomou & Jain 2011, Ma, Oliveira & Hauge 2014) shows the success of Clark Abt early definition of “serious games” as a particular type of game that has “an explicit and carefully thought-out educational purpose and [is] not intended to be played primarily for amusement” (Abt 1970, p.9). But there is a danger associated with this idea that only games produced explicitly for training or educational purposes deserve to be taken “seriously.” From the examples discussed in this article only the *Sandia Borders High Level Model* commissioned by the DHS, and the other games

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<sup>8</sup> *Papers, please* also serves to illustrate that effective procedural expression is not necessarily constraint by budgetary limitations. While it could be argued that it's unfair to compare a big-budget production, such as *Tropico*, to an indie game, such as *ICED!*, *Papers, please* proves that a low-budget game can still be effective at mounting a procedural argument by relying minimally on those aspects that could increase the production cost of the game (such as the use of high-end visuals, 3D graphics or complex animations and physics) and putting the emphasis on representing real-life processes in a more evocative way, while leaving the player at liberty to decide how he/she wants to experience those processes, as well as what conclusions should be drawn from them.

produced to support explicit political agendas (*Rimbalza il clandestino*, *ICED!* and *Rescate: Alicia Croft*) fall clearly in the category of “serious games.” Neither the blockbuster *Tropico* nor the indie production *Papers, please* can be considered as games whose capacity to entertain has been diminished in order to emphasize or enhance their educational powers. As political sims go, *Tropico* is as entertaining and engaging as it gets. But entertaining should not be confused with lacking substance or being unable to influence the user’s opinions regarding the different topics presented throughout the game.

As Clark Aldrich has pointed out: “most examples of serious games are neither very serious nor very good games” (Aldrich 2009, p.33); to which we could add that most examples of commercial games should be taken more seriously than users and scholars from outside the field of Game Studies currently do<sup>9</sup>. When compared to a commercial game like *Tropico*, a “serious game” like *ICED!* reveals some of the limitations of this theoretical framework to approach the growing impact of videogames on Culture and Society. The scope of influence of *Tropico*, both in terms of the number of users who have played the game during very long gaming sessions, and in terms of the effectiveness of the game to present its content, clearly dwarfs what *ICED!* producers have been able to accomplish in this regard, despite the fact that their explicit intention was to develop a game with more unequivocal educational purposes. A number of elements in *ICED!* – from its explicit political agenda, which is likely to displease users who don’t share already the game’s ideology, to its dull gameplay – contribute to reduce considerably the potential impact this game could have on gamers from a broader political spectrum, including those who don’t play games with the intended purpose of “learning something.” *Tropico*, on the other hand, by creating a more engaging simulation, showing a better use of the principles of procedural rhetoric, resorting to dark humor and parody to mask the more serious ideological content encoded in gameplay, as well as by porting the game to most available platforms in the market (PC, Mac, Xbox 360), has been able to create a portrayal of Latin American societies that will live longer and sink deeper on players’ minds.

To this we should add that serious game theory hasn’t been particularly successful at explaining why we should set apart a group of games from commercial games, based solely on its allegedly graver content. It is not clear what makes serious games structurally or expressively different from commercial ones. By the same token, it is not clear why commercial games, produced primarily for entertainment, could not have a serious influence, in either positive or detrimental ways, in gamers’ minds. In some sectors of the videogame industry, the distinction between educational and entertaining is becoming increasingly blurry. While a music simulation game like *Guitar Hero* (2005) promised players an opportunity to experience how it feels to be a guitar virtuoso by mastering a guitar-shaped controller in ways that were not transferable to real-life playing skills, more recent releases within this genre, such as Harmonix’s *Rock Band 3* (2010) and Ubisoft’s *Rocksmith* (2011-2014), have finally managed to turn long gaming sessions into an opportunity to actually learn how to play an instrument. This promising convergence of entertaining and educational content that can be already enjoyed in the case of some music and rhythm games sets a standard (a very high one, I admit) for game developers working with other issues or content areas, including those whose focus is on producing games for a better world.

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<sup>9</sup> For a discussion of this topic as it relates to Latin American Cultural Studies see Penix-Tadsen (2013).

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