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ABSTRACT: This article examines the use of literary and narrative elements including letters, text, and dialogue in recent works from Latin American videogame designers. Beginning with a review of scholarship on the so-called "crisis in written expression," the essay then turns to an examination of the relationship between textual and ludic modes of analysis and their relative usefulness for game studies. Bringing this scholarship to bear on real-world examples of video games from Latin America, the article then offers an examination of games categorized as Horror, Science Fiction, Neomedievalism. Based on an examination of these examples, this essay ultimately argues that since the relationship between games and narrative continues to evolve in previously unforeseen ways, textual analysis remains both insufficient and indispensable to game studies.

**KEYWORDS:** Video Games, Videogame Design, Latin America, Narrative, Text, Dialogue, New Media, Electronic Media, Literature, Horror, Science Fiction, Neomedievalism, Argentina, Brazil, Chile, Colombia, Costa Rica, El Salvador, Mexico, Uruguay, Venezuela

RESUMEN: Este artículo examina el empleo de elementos literarios y narrativos—como letras, textos y diálogos—en una serie de obras recientes, desarrolladas por diseñadores de videojuegos latinoamericanos. Se comienza ofreciendo una revisión de las investigaciones que se han ocupado de la llamada "crisis de la expresión escrita," para luego ofrecer un examen de la relación entre los modos textuales y lúdicos de análisis de los videojuegos y su utilidad relativa para los estudios ludológicos. Apoyándose en este marco teórico e investigativo, el artículo procede a examinar una serie representativa de videojuegos, categorizados en cuatro clases específicas: videojuegos de horror, de ciencia ficción, de inspiración neomedieval y "otros mundos." A través de una discusión de estos ejemplos, el ensayo propone que teniendo en cuenta la evidencia de una evolución cambiante y difícil de predecir entre la narración y el juego, el análisis textual sigue siendo una herramienta al mismo tiempo insuficiente e indispensable para los estudios ludológicos.

PALABRAS CLAVE: videojuegos, diseño de videojuegos, América Latina, narración, texto, diálogo, nuevos medios, medios electrónicos, literatura, horror, ciencia ficción, neomedievalismo, Argentina, Brasil, Chile, Colombia, Costa Rica, El Salvador, México, Uruguay, Venezuela

BIOGRAPHY: Phillip Penix-Tadsen es especialista en estudios culturales latinoamericanos contemporáneos, con un enfoque en las intersecciones entre la política, la economía, los nuevos medios y la cultura visual en la región. Su primer libro, Cultural Code: Video Games and Latin America [Código cultural: Los videojuegos y América Latina] (MIT Press, febrero 2016), reúne los vocabularios críticos de los estudios ludológicos y los estudios culturales latinoamericanos para ofrecer una teorización sintética de la relación entre los videojuegos y la cultura, basada en el análisis tanto de la representación cultural dentro de los juegos mismos como de los efectos económicos, políticos y sociales de los videojuegos en el mundo real. Penix-Tadsen tiene un Ph.D. de Columbia University.

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# Letters, Text, and Dialogue in Contemporary Latin American Videogame Design

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For decades now, scholars and intellectuals have anticipated or acknowledged a crisis in written expression, brought on by the ever greater societal saturation of multimedia products and the relative decline in the prevalence of works published on paper. In 1986, Michel Foucault reflected,

We are at a moment, I believe, when our experience of the world is less that of a long life developing through time than that of a network that connects points and intersects with its own skein. (22)

A few years later Fredric Jameson described the space of postmodernity as a "saturated space," one characterized by "a perceptual barrage of immediacy from which all sheltering layers and intervening mediations have been removed" (413). Jesús Martín-Barbero, bringing Benjamin and Jameson to bear on the Latin American context, cites technological change as part and parcel to a broader spirit of the times, "an acceleration and compression which blur the contours and the meaning of art by dissolving the common culture in which it took root and spread" (57). However, unlike Benjamin and the Frankfurt School at large, Martín-Barbero sees artistic creation as a saving grace for technology beyond its functionality for political power and social control, due to "its ability to communicate, to make the modern communicate with the traditional, the personal with the other, the global with the local" (70).

This is the situation described by Edmundo Paz-Soldán and Debra A. Castillo as

the context of a contemporary audiovisual culture in which mass media such as photography, film, and the Internet have threatened writing's 'representational privilege' as a technology of information processing and storage. (16)

Indeed, it could be argued that new media technology does not just threaten the privileged place of writing, it signals the end of representation as the epistemological basis for our way of understanding the world, replacing it with an episteme of interactive practice. It used to be that an ever-expanding number of satellite television channels and perennially renewed generations of game and video hardware signaled the future of new media. But this was before the advent of the Internet and its model of participatory informational exchange, in which users craft their experiences through a process of selection; before cellular phones became widespread throughout the globe, and before smart phones connected these two technological waves, bringing the Internet deeper into global society than ever before; and it was before the advent of video games, a technological medium that occupies more time for the generations coming up today than any of the other media mentioned above. Ever more, by cyborgian means of kinetic interaction, immersion, and incorporation, contemporary subjects select, navigate,

and otherwise actively participate in the creation of meaning, signaling an epistemic shift that is echoed in the technology of networks, databases and computational code.

Given the increased prevalence of interactive media technologies in Latin America and across the globe, it is worth taking pause to examine the ways these new media respond to and transform existing expressive traditions. The aim of this essay is to examine the various ways that letters, text, and dialogue contribute to the meaning of video games produced by Latin American developers over the past several years. All in their own unique ways, the games examined demonstrate that in a world of shifting expressive terrain, textual analysis is at once insufficient and indispensable for understanding new media.

There is a longstanding relationship between Latin American cultural production and games of all types, and as I have stated previously, the search for an active reader and the use of play are, in a sense, nothing new (Penix-Tadsen 208). Authors and artists play games in their works, and game developers and designers create games that contain literary elements, and so it has been across the history of each medium. Although this relationship has begun to receive scholarly attention, there is a need for an expansion of the analytical framework for examining the role of narrative elements such as literary genres, letters, text, and dialogue in contemporary Latin American video games by looking at specific examples that round out the conceptual framework provided by game studies scholarship. In this article, I focus almost entirely on games produced within the past five years (2010-2015), which provide examples of the ways Latin American game production is rapidly expanding and diversifying, as well as the ways in which contemporary game developers are grappling with age-old questions related to storytelling.

Today, in Latin America and across the globe, once isolated spheres of mediated expression are crossing over in previously unforeseen manners. Matthew Bush and Tania

Gentic characterize this as "an age of mediatized sensibilities where the lines between local, national, and global are constantly shifting," in which "publics and subjects continue to converge through textual, felt, and bodily experiences that complicate the idea of a posthuman, global, networked subjectivity" (19). This is to say that contemporary society is developing new ways of creating and conveying meaning through mediated affective experiences. Even still, more effort is needed to show the ways these changes play out in the real world, and in regions outside of the global centers of technological production and consumption. As Eden Medina notes in her study of software development under the administration of Salvador Allende in Chile during the early 1970s, "technological innovation in the area of computing has occurred across a broader geography than is typically recognized" (14), though the diverse cultural history of hardware and software development is only beginning to emerge into the light.

Moreover, technological innovations are never simply transmitted from the top down, and therefore

[i]t must be asked if the predominant cultures—the Western or the national, the state or the private—are capable only of reproducing themselves or also of creating the conditions whereby marginal, heterodox forms of art and culture are manifested and communicated. (García Canclini 105)

Video games come not only from enormous multinational corporations, but also from lone designers and small teams of artists producing grassroots games meant to challenge the medium's dominant paradigms. Geoff King and Tanya Krzywinska have observed that "game content that raises questions about dominant social-political assumptions is more likely to be found in niche products than those which seek to reach a mass market" (227), and there is much evidence of this in the games examined below, developed by

independent designers and firms in Argentina, Brazil, Chile, Colombia, Costa Rica, El Salvador, Mexico, Uruguay, and Venezuela.

#### Games and/as Texts

However in order to understand how the games examined here make meaning as well as how they relate to existing literary and textual traditions, it is necessary to understand the uniqueness of video games as cultural artifacts and semiotic domains. Games are not books, and therefore analyzing them is not as simple as applying a literary framework to a new type of text. In Remediation, Jay David Bolter and Richard Grusin argue that conventions and techniques are fundamentally transformed when practices are transferred from one expressive medium to another, and that specific attention to the inner workings of audio-visual media is necessary in order to understand those "remediated" products' meaning (99-100). Indeed, game studies scholarship tends to work under the assumption that "[m]eaning generated by play is different to meaning generated by reading," due to the fact that "[t]o read is to create meaning cognitively in the encounter with the text," while "[t]o play is to generate meaning, to express it through play" (Dovey and Kennedy 102). Games' difference from other media also opens up new possibilities for making meaning. For example, Ted Friedman suggests that the incompatibility of dialectical processes with film audiences' expectations of linear narratives kept Soviet Formalist director Sergei Eisenstein from realizing his dream of using the montage to bring Marx's Capital to life, but a "computer game based on Capital, on the other hand, is easy to imagine" (Friedman). This is because meaning in video games is not simply narrative or representational, but a product of what Ian Bogost refers to as procedural rhetoric, a signifying framework that depends upon the player's participation as well as the encoded and interactive elements of the game's software and hardware (*Persuasive Games 37*). Still, due to the preeminence of the representative and narrative frames, that uniqueness can sometimes be difficult to recognize. Uruguayan game theorist and designer Gonzalo Frasca explains:

Representation is such a powerful and ubiquitous formal mode that it has become transparent to our civilization. For millennia, we have relied on it for both understanding and explaining our realities. This is especially true with a particular form of structuring representation: narrative. [...] It is because of its omnipresence that it is usually difficult to accept that there is an alternative to representation and narrative: simulation. (222-23)

And unlike linear narrative, simulations are open-ended structures for creating a different set of outcomes based on each situation and the input of the player.

Therefore, meaning in video games is created in multivalent, recursive manners that produce multiple possible outcomes and messages. Bogost argues that "games create complex relations between the player, the work, and the world via unit operations that simultaneously embed material, functional, and discursive modes of representation" (Unit Operations 105), again highlighting the multiple levels of meaning-making that function in concert in the videogame medium, and the ways they relate to existing traditions of expression. Games' meaning is also situated and contingent, defined through the process of play, and thus the meaning of signs employed in the semiotic systems of video games differs from the meaning of those same representational signs in another context. James Paul Gee refers to gaming as "a new literacy" (17), arguing that meaning in video games is "situation specific and embodied," making every "potentially meaningful sign" an "invitation to embodied action" that changes according to the possible contexts and situations of a given video game (81-83). Ken Perlin points to player agency as one of the major differences in the meaning of video games relative to literature, along with the particular tools of game design for conveying story and emotion through character interactions, including

body language, facial expression, rhythm of conversational response, varieties of ways to convey focus and attention between actors, and various ways to convey internal emotional states and awareness while playing a scene. (18)

It is due to the necessity of "embodied action" on the part of the player that games offer "the potential for meaningful exertion of agency" in ways that affect their meaning for the player (Calleja 55), and this is one of the primary ways games differ from narratives in written form, whether a conventional linear novel or a postmodern textual pastiche. In any of these cases, the basic content of the written work is static and unchangeable, unlike the content of a video game, which is variable and depends on subjective user input and interaction.

Early videogame scholars tended to interpret the meaning of video games in terms of either the representational form of games as displayed on the screen, or the underlying "game form" consisting of the coded rules, leading many to call for greater interdisciplinarity and overlap between these approaches (Myers 48). When scholarship focuses strictly on the visual display of games, it suffers from what Nick Montfort refers to as "screen essentialism" (qtd. in Kirschenbaum 31), or the bias toward "reading" display technologies rather than the meaning produced through user interaction with the underlying code of the games displayed. After all, games do not make meaning in a universal objective manner-video games

> are not just texts that can be interpreted in different ways but rich semiotic spaces that are specifically designed to have multiple layers of meaning,

which in turn appeal to different audiences. (Devane and Squire 279)

This means that there are multiple interpretive possibilities and perspectives from which games' meanings can be analyzed, with or without blending with conventional interpretations of representative or coded structure. Indeed, there are many scholars within the field of game studies who might simply prefer to leave literary analysis behind.

And in spite of all this, narrative remains a nagging presence for the analysis of electronic media such as video games. More than one critic in Latin America has justified the use of the metaphor of "reading" with regard to multimedia "texts" (Escandón Montenegro 69). Following Roland Barthes' definition of textual analysis in Mythologies, Clara Fernández-Vara employs a "broad understanding" of the term "text" that "allows us to approach games as texts, whether they use cardboard, computers, or spoken words" (6). Moreover, Fernández-Vara's analysis takes into account not just the primary game "text," but also games' "paratexts," or "texts outside of the work being analyzed but directly related to it" (15), examples being online reviews, player communities, game wikis, instruction booklets, and packaging. In spite of expanding beyond texts in written form, Fernández-Vara describes her own approach to games in terms of "textual analysis," pointing to the usefulness of a lengthy tradition of scholarship and criticism based on a poststructuralist understanding of "texts" in literature as well as cinema and the visual arts. This point echoes Christopher A. Paul's argument that the relationship between games and linguistic discourse needs further development. In Wordplay and the Discourse of Video Games, Paul advocates for using "wordplay" as the basis for game analysis, using "the tools of rhetorical criticism to examine various elements of games, from the words found within and around them to the design, play, and coding of them" (4). Similarly, in Literary Gaming, Astrid Ensslin advocates for "a new, systematic method for analyzing literary-ludic texts that takes into account the analytical

concerns of both literary stylistics and ludology" (3), the term coined by Frasca for the study of games as such, and of video games in particular. Ensslin uses the tools of literary analysis in concert with those of ludology to examine games in which, "literariness in the sense of linguistic foregrounding is part of the authorial intention and where human language (spoken or written) plays a significant aesthetic role" (1). Many games are (at least partially) literary or textual in nature, and therefore it is important to understand how written expression and spoken dialogue in games respond to age-old literary traditions, even while recognize the need for analytical tools and conceptual frameworks specific to the medium being examined, in this case the video game.

## Letters, Text, and Dialogue in Recent Video Games from Latin America

The terrain of video game production and consumption is shifting rapidly in Latin America today, responding not just to literary and poetic traditions but also transformations in the ways that cultural products are made, distributed, and put to use. Specifically, the past decade or so has seen the emergence of new distribution networks for video games such as the U.S.-based online gaming and game distribution platform Steam, Apple's App Store, and Sony's PlayStation Network, all of which have been adapted in multiple ways for the Latin American market, including extensive monetary and cultural localization measures. Sony officially expanded the full PlayStation hardware line to 13 Latin American countries in 2009 (Ralph), and by 2011 they had opened the PlayStation Network and its associated Store to consumers in Brazil, adopting the use of pre-paid PSN cards rather than strictly credit card payments in response to the demands and expectations of the local market (Martin). By December 2011, Apple had made its iTunes Store and App Store fully accessible across Latin America (Moren), and in June of 2015 Apple got on board with the Bango Payment Platform and its related app store, supported in multiple countries across the region in collaboration with cellular providers like Telefónica Colombia, Nextel, and Iusacell ("App Stores"). Steam has also focused notable attention on the Brazilian video game market the largest in Latin America by a considerable measure—and started accepting payments in Brazilian Reais in 2012, marking the first time Steam had adjusted its business plan to make room for a foreign currency (Conditt). In 2013 the Android Appstore expanded to 200 countries worldwide, including several in Latin America (Lunden). All of this is representative of a shift in the global terrain of the game industry, a change that has not only provided Latin American gamers with more diverse opportunities as consumers, but that has also opened new doors to production by small, independent game developers in regions far removed from the global centers of the game industry.

Today, many independent game developers in Latin America and other so-called "peripheral" regions have a greater chance than ever to find success on the global videogame market. There are a great many game producers who would love to create Latin America's version of a hit like Vietnamese designer Dong Nguyen's Flappy Bird (GEARS Studios, 2013) or the Finnish company Rovio's Angry Birds (2009), both renowned for being worldwide successes that required a relatively small initial investment to get off the ground. Indeed, Eduardo Marisca focuses precisely on the latter example in his analysis of the multiple peripheries that are active in the global game industry, specifically examining Peru. Marisca's analysis centers on the way Rovio's representatives presented themselves to an audience of Peruvian game designers, declaring, "If we did this in Finland, there's no reason why you couldn't do it in Peru" (Marisca 114). The problem with this reasoning is the assumption that "both contexts (Peru and Finland) in as much as they're both removed from established and acknowledged centres of the practice such as the US, UK, Canada or Japan, become somehow interchangeable, or the relative differences in their performance or success strictly an accidental matter," a conclusion that ignores the reality, which is that

not all peripheries are created equal, and it is not the same to make games in Helsinki than to make them in Lima, just as it is not the same to make them in Lima than it is to make them in Iquitos. (Marisca 116)

Therefore an understanding of how game design operates at the periphery—or peripheries—can inform our understanding of the global operations of the game industry.

Indeed, as we will see in the remainder of this chapter, Latin American game development is flourishing today more than ever, with events in Argentina (EVA), Brazil (SB-Games), and Mexico (DevHour) showcasing the work of thousands of regional designers, and a number of standout games from the region like Chile's Zeno Clash (ACE Team, 2009) and Uruguay's Kingdom Rush (Ironhide, 2011) winning worldwide recognition from critics and users alike (Wong). Along the way, the region's game developers and designers have produced games that respond to new technologies and platforms while at the same time reworking generic conventions established in video games as well as other media. The remainder of this essay examines games that incorporate and transform conventions from a variety of genres and expressive modes, focusing specifically on recent Latin American games that fit into the categories of Horror, Science Fiction, Neomedievalism, and Other Worlds.

#### Horror

Horror video games have existed since the era of textual adventures, but they have been notoriously tough to define in a precise or generalizable way. In "Games of Fear: A Multi-Faceted Historical Account of the Horror Genre in Video Games," Carl Therrien highlights this difficulty, as games from many different genres, platforms, and formats overlap into the area of horror:

In spite of the various attempts to restrict horror to one or a combination of the three dimensions of the uncanny, the marvelous, and the fantastic, and to define survival horror according to very specific aspects, it appears that these labels have a tendency to become more inclusive than exclusive. (35)

Therefore, when examining games that contain elements of horror but that correspond to distinct genres and narrative frameworks, it is helpful to look at the ways specific examples respond to the varied traditions and ways of telling horror stories. In recent years, a number of independent Latin American designers have also produced unique takes on the horror game, each of which incorporates and modify horror conventions in different ways.

My first example, *Poltergeist: A Pixelated Horror* (Glitchy Pixel, 2012), is a horror-themed 3D role-playing game (RPG) from Bogotá Colombia, distributed through Steam for PC, Mac, and Linux, as well as through PlayStation Network. *Poltergeist* takes a novel approach to the horror game genre by pitting the player as the ghost of Mr. Henry B. Knight, the former owner and current haunter of the mansion in which the game takes place. The player proceeds through the game by scaring

out successive waves of inhabitants in 60 levels of puzzles based on the number of individuals to be frightened and the tools available to the player as a ghost. Against a backdrop of black, the simple 3D RPG interface shows the layout of the various rooms of the mansion, inhabited by small, two-dimensional characters. A readout indicates the number of individuals that need to be scared out of the mansion in the present scenario, while a menu of buttons at the bottom of the screen indicates the player's particular options for creating a haunting, from moving objects around and between rooms, to invoking spectres, to possessing enemy players. Special characters and bosses provide additional challenges for what is essentially a puzzle game spread out over 60 different areas. The game's cut scenes feature two-dimensional drawings in shades of black, white, and brown intercut with narrative descriptions of the protagonist's past. But during gameplay, language is done away with almost entirely, replaced by emoji-like text bubbles that indicate players' moods, buttons featuring visual icons, and a range of sounds including a hypnotic music-box-like soundtrack, the bleeps of player interactions with the menu, the rumble of moving furniture and other items, and the nonlinguistic gasps, grunts, and screams of the mansion's inhabitants. In Poltergeist: A Pixelated Horror, narrative and language are a part of the backdrop that sets the tone for gameplay, but their signifying power is quickly subordinated to the exigencies of puzzling situations with strict limitations on the number of haunting devices and approaches available to the player within a given scenario. Narrative therefore takes second place to the procedural creation of meaning through gameplay as the player progresses through each successive puzzle and level in the game.

Another recent example, *Into the Gloom* (Flying Interactive, 2015), is a Venezuelan puzzle-solving "pixel horror" game distributed on Steam for the PC that uses simple visual aesthetics—think the corridors and passageways of a first-person shooter (FPS)

such as Doom (GT Interactive, 1993) rendered in simple grayscale, plus red-as a backdrop to atmospheric and sonic puzzles centered on the player's flight from a redeyed apparition, in search of clues regarding the mysterious environment in which the player has awoken without any memory of the past. In spite of using highly simplistic, retro-style graphic elements (for example, a group of blocky-looking black-and-white hanging victims, strung up together in one of the blood-spattered rooms featured in the game), it provides a surprising number of frightening moments without resorting to cutting-edge graphic realism. For that matter, the use of language in Into the Gloom is kept to a minimum, primarily consisting of onscreen readouts that indicate when the player finds a new item, or unlocks new content in the game. The game enhances replayability by providing five "bad" endings, inviting the player to go back and discover another possible outcome by using a different set of strategies. This multicursal way of storytelling is unique to electronic media, and shows how a relatively simple game like Into the Gloom, which takes only a few hours of gameplay to complete, plays with textual conventions even while working within a largely visual and interactive, non-textual framework.

One more game that plays with the conventions of both literary and ludic horror is Enola (Domaginarium, 2014), a horroradventure game for Windows and Mac designed by Salvadoran Sergio Arístides that situates the player as a first-person character on a mysterious island, seeking clues to identify a serial killer. Along the way, the player picks up items (such as keys and written clues) that can open new passageways and trajectories in the narrative. The atmosphere of the game is a fairly simplistic first-person interface divided between shadowy corridors, gloomy interiors, and equally dark expanses of outdoor space. Though the player advances through the game procedurally by solving a series of puzzles, the narrative is driven along textually, through dialogue and snippets of text that are encountered alongside the bodies and other objects strewn throughout the map. In many ways, the gameplay of Enola bears a greater resemblance to classic textual adventure games than to many more recent variations on the horror genre, with the player being informed of the atmospheric dynamics via written messages—"It's stuck. I can't open it," when encountering a locked door, or "This is the first time I see this painting, and yet it looks very familiar... It makes me feel uneasy," when approaching an important clue. To be sure, the sense of unease constructed by the game's narrative is echoed in other elements like the tense, high-toned strings of the game's soundtrack and the glum environments the player explores, however the game remains highly narrative-driven, and that narrative is moved forward in the form of written texts and annotated dialogue that offer a reminder of the lasting relevance of the written word, even for telling stories in interactive media such as video games.

A final example from the horror genre, Damned (9heads Game Studio, 2014), is a cooperative multi-player online PC survival horror game from three-person 9heads Game Studio in Florianopolis, Brazil, in which the player is situated as one of five characters in a horror narrative requiring them to work together to find the keys to escape from the hell in which they have awoken. The game's dark interiors and shadowy spaces are reminiscent of games like Enola as well as horror game classics such as Resident Evil (Capcom, 1996) and Silent Hill (Konami, 1999). The player's view in the game is limited to the small portion of the screen occupied by the glow of her flashlight, and the designers' aim is to explore the terrifying feeling of defenselessness, by requiring the player to dodge and escape the monster they are fleeing without ever coming into direct contact. This dynamic is transformed due to the fact that the player can also choose to play as the monster in Damned and as in Poltergeist, the player gets to supernaturally experience what it is like to produce horror and not just respond to it. This is yet

another demonstration of the unique possibilities for approaching the same narrative from multiple viewpoints that are opened up by the mechanics of video game simulations, which as previously mentioned, frequently offer opportunities to play out a variety of narratives, perspectives, and scenarios within the framework of a single game.

#### Science Fiction

Like horror games, science fiction games enjoy a lengthy history that has produced a highly varied range of examples, each of which responds in different ways to traditions of science fiction in literature, film, television, and radio. In his introduction to *Science Fiction Video Games*, Neal Tringham highlights the difference between science fiction games and works of science fiction in other media, arguing that,

where science-fictional cinema and television are often characterized by their visual qualities and 'spectacle,' sf [science fiction] games can arguably be defined by their interactivity. The emergence of videogames as a commercially important form thus suggests a possible categorization of sf media as either written (meaning essentially novels and short stories), audible (radio and music), or interactive (indicating games). (2)

This is a useful framework for thinking of the ways video games both relate to and differ from other traditions of expression, opening up new possibilities for expressing classic themes of science fiction such as space exploration, alien interactions, and future dystopias.

The point-and-click adventure game *Reversion* (Bulky Pix, 2014) is a particularly unique example of a recent science fiction game from Latin America, due in part to the fact that the game is released chapter-by-chapter in a way that resembles the serial

publication of popular literature in different moments and contexts throughout history. Developed by independent studio 3f Interactive in Buenos Aires, Argentina, Reversion involves a story in which the protagonist, Christian, awakens in 2035 after a twentyyear coma, finding himself in an Argentine capital that has been ruined by warfare, with no memory of his own or his country's past. The gamespace of Reversion—a game playable on iOS, Windows, Mac, and Linux—is presented in third-person perspective with cartoonish, stylized characters and environmental elements. The plot is moved along by spoken dialogue accompanied by on-screen subtitles, meaning that written language provides much of the key information regarding dystopian world in which the game takes place as well as the mysteries and puzzles the player must solve. Against a tango-inspired soundtrack, the game opens with an explanation delivered by the doctor attending to the protagonist:

It looks like you have completely lost your memory after the 2015 attack. Buenos Aires was taken over by a paramilitary organization. And we are still facing the consequences of a war.

From this point, the player navigates the game either by moving the cursor across the screen's surface until identifying functional parts of the area by placing the cursor over them (which provides a readout of the item's name and causes the cursor to glow), or by using the other procedural, navigational, and narrative mechanisms provided by the game, such as a dialogue box providing hints and a radar mechanism that highlights all potentially interactive items currently on the screen.

Meanwhile, the plot of *Reversion* progresses by way of player interactions with the non-player characters (NPCs) in which the player is free to choose from a number of possible responses with various possible

effects on the situation. For example, when interrogated by a uniformed guard as to why he's in such a hurry, the player may choose from four responses: "Someone is waiting for me at the cinema!," "I'm gonna miss my flight, I must leave!," "I'm feeling sick again, I need to go to the toilet!," or "He! Just a joke!" The player's choice will affect the possible conclusions for each scenario, and a process of trial-and-error is required to locate the correct combination of responses within a given situation and interactions with a given set of characters to move through this highly story-driven puzzle game, as the player quickly becomes embroiled in a cloak-and-dagger chase from the authorities. This basic format for gameplay and player input resembles that of games produced by Telltale Games like The Walking Dead (Telltale, 2012), The Wolf Among Us (Telltale, 2013), or Minecraft Story Mode (Telltale, 2015), showing that Reversion responds to and incorporates the generic conventions of video games as well as those of the literary tradition. As mentioned before, the narrative is delivered chapter-by-chapter, in installments with subtitles such as The Escape and The Meeting. Reversion developer Francisco Ignacio Sáenz explains that 3f Interactive chose to take this approach in an attempt to make their studio's work cyclical and cumulative, creating longevity and sustainability for this small start-up developer ("Versiones de Reversión"). In both its narrative structure and its distribution, then, Reversion is a game that plays with the conventions of the sci-fi genre and the serial fiction format, demonstrating both a lasting link to the past and an innovative new take on existing literary traditions.

There are several other games that relate to common themes of science fiction such as space exploration and interplanetary interactions with alien beings, while departing considerably from the generic conventions of science fiction narratives. Instead, these games offer primarily procedural ways of playing with signifying dynamics. An example is *Kerbal Space Program (KSP)* (Squad, 2015)

an off-the-wall space flight simulator developed in Mexico City that has found success with audiences worldwide through distribution for Windows and Mac on Steam. In KSP, the player controls a squadron of tiny miniature NPC aliens who speak an indecipherable foreign language. In addition to controlling vehicles as they fly from one location to another, the player must build spacecraft from scratch using an interface of menu buttons, each of which corresponds to one of the many rockets, modules, control panels, and other mechanical components available. This game is another example of a nearly language-free interface and gameplay experience, demonstrating how non-narrative media such as simulation games can offer novel reinterpretations of conventional science fiction themes like space exploration.

Like KSP, the Windows, Xbox 360, and PlayStation 3 games Zeno Clash and Zeno Clash II (Atlus, 2013) demonstrate the unique visions of Latin America's independent designers today. The Zeno Clash series consists of first-person brawler/fighter games with an interface resembling a conventional FPS, but with that genre's usual weapon replaced by the protagonist's meaty fists, the primary means of interaction with the surrounding characters and environment. The Zeno Clash games take place on another planet, inhabited by humanoid and other-worldly beings of all shapes and sizes. Through snippets of spoken dialogue and cinematic cutscenes, the player pieces together the backstory of the protagonist, Ghat, who is on a quest to flee his homeland in exile after slaying his father-mother. The bizarre twists and turns of the game's outside-of-the-box narrative echo the unconventional aesthetic of Zeno Clash's surreal and otherworldly environments, which are filled not just with strange beings but also dramatic geological features and startlingly varied flora and fauna. These elements combine to create a unique game that turns science fiction themes as well as game design conventions on their heads.

Zeno Clash and the other games reviewed in this section represent unique takes on the conventions of science fiction, including familiar themes and environments, plot elements, and distribution practices like episodic publication. But when future dystopias, space exploration, and alien cohabitation are represented in video games, these familiar scenarios are transformed substantially through the process of remediation. Therefore, the stories science fiction video games tell are different, replacing linear narratives with open-ended, multicursal simulations and supplanting the point-of-view of a single protagonist with a multitude of perspectives.

#### Neomedievalism

Turning from the future to the past, another set of Latin American game designers are finding success in the remediation of the iconography and narratives of medieval times to games that are played on tablets, smartphones, and other personal electronic devices. In Digital Gaming Re-imagines the Middle Ages, Daniel T. Klein explains that games set in medieval times tend to "appropriate and translate the raw material of the Middle Ages for interactive gameplay while going beyond simple storytelling to incorporate narrative as well as audio, visual, haptic, and kinesthetic elements into coherent interactive worlds" (3). Klein uses the term neomedievalism to describe this "unique approach to medieval material" in video games (3). Neomedievalist games are informed by lengthy storytelling traditions in fantasy literature, film, and video games, bringing mythological creatures and forces into the familiar realm of videogame neomedievalism.

In addition to the aforementioned *Zeno Clash* games, Chile's ACE Team also developed *Rock of Ages* (Atlus, 2011), a game in which the player rolls a large boulder down a series of ramps and bridges toward a goal, impeded along the way by obstacles that are

also familiar signifiers of the neomedieval environment: catapults and castles, farm animals and haystacks, ogres and crusaders. Though the game's procedural pleasures derive from its challenge to a player's capacity to build defenses and respond offensively to an ever-more tenuous path to victory set against a medieval backdrop, the game's narrative is also driven by a set of cinematic cut scenes made to resemble Greek shadow-puppet theater and/or Monty Python films. This narrative element adds to the humorous tone of the game, which is echoed in the melodramatic gasps and trumpet flourishes that abound in its soundscape. In concert, these elements offer a multisensorial experience that builds on multiple traditions of representation of the Middle Ages, but goes beyond those representational legacies by producing an interactive, multimodal form of neomedievalist cultural production.

If ACE Team found a way to make neomedievalism into a unique side project, Uruguay's Ironhide Studios has practically made a career of it. Their variations on this theme began in 2010 with Clash of the Olympians (Ironhide, 2010), an app game for iOS and Android devices. In this action/tower defense game, the player chooses from among a pantheon of ancient Greek gods and goddesses, then proceeds to defend a base on the left side of the screen from the oncoming humanoid hordes, armed ogres, and flying beasts that scroll continually from toward the player from right to left. The interface is filled with two-dimensional moving characters and objects set against cartoon-like mythical backdrops, in a gamespace with no spoken dialogue and in which written text is reduced to the on-screen score readout. As the player masters the touch-screen controls and becomes immersed in the mechanics of spearchucking and defensive maneuvers, textual expression and narrative arc take a back seat to puzzle-oriented gameplay, albeit in an environment replete with the signifiers common to the neomedieval semiotic domain.

The success of Clash of the Olympians is what many small, independent game designers in Latin America hope for: a game for play on mobile devices that uses original intellectual property and proves to be a success on an international level. And Clash of the Olympians allowed Ironhide to do what most independent game studios in Latin America aim to achieve with such a release: its success permitted them to build upon their work and create a sustainable business plan in order to continue developing more ambitious future projects. In the case of Ironhide, even greater success was in store when they returned to the neomedieval milieu in 2011 with the online Adobe Flash, iOS, and Android tower defense game Kingdom Rush, which was followed by the sequels Kingdom Rush: Frontiers (Ironhide, 2013) and Kingdom Rush: Origins (Ironhide, 2014). These games present players with a series of map-based defensive challenges, perching them high above a miniature world in what is referred to as isometric perspective. Leaving behind the Greek mythology of their previous games, this series delves ever deeper into the fantastical side of neomedievalism, with all manner of dragons, orcs, ogres, and elves as the player sets up defenses consisting of archery brigades, catapults, and artillery.

Like the other neomedievalist games referenced above, the *Kingdom Rush* series eschews narrative in favor of environmental immersion, using very little written language and no spoken dialogue. And nonetheless, each of the games from Latin American developers discussed in this section represents a reinterpretation of the conventions and norms of representing the medieval and the fantastical that cross over into multiple media. Their particular reliance upon game mechanics and the use of a complex network of

visual and interactive signs allows such video games to generate a new type of embodied experience couched in a familiar expressive motif.

#### Other Worlds

A final group of games I would like to discuss deals not so much with the generic conventions of written texts and literary genres, and more with creating unique worlds that would be virtually unimaginable in any other medium. These types of games do more than remediate past traditions—though they also do plenty of that. They create their own fantasy environments with their own existential and procedural rules and norms, offering the player an opportunity to inhabit an exotic and unfamiliar space while providing the keys necessary to master and take control over that environment. Not surprisingly given the imaginative and dreamlike landscapes of Zeno Clash and the quirky neomedieval environment of Rock of Ages, Santiago-based ACE Team once again provides key examples of game worlds that use familiar mechanics and scenarios in innovative ways. Their two-dimensional Windows, Xbox 360, and PlayStation 3 fighter/brawler Abyss Odyssey (Atlus, 2014) is a quintessential example of a game that uses its own utterly original aesthetic and environment, yet builds on many of the conventions germane to fighting games as a genre, defined by games like Street Fighter (Capcom, 1987), Tekken (Bandai Namco, 1994), and Super Smash Bros. (Nintendo, 1999). The player can choose to inhabit the richly layered and procedurally-generated levels (meaning the platforms and devices present in each level change position each time the player replays the level)—which range from dark castles and caverns to lush forests and gardens, to frozen wastelands and marshy wetlands—as either a human protagonist or a number of beasts, such as a "wood golem," a large and powerful monstrosity that

is useful when brute force becomes a necessity. All of the characters are imbued with certain characteristics that make them advantageous in some scenarios and burdensome in others. Thus, mastering the game requires the dynamic switching of identities on the part of the player, who plays the role of many protagonists simultaneously and continuously. Once again in Abyss Odyssey, the background story—which in this case involves a warlock who creates a giant, monster-filled chasm beneath Santiago, Chile—quickly fades away as narrative and text disappear and the rich visual environment of the game takes its hold on players, allowing them to virtually experience another world unfathomable as a written text or motion picture.

ACE Team's most recent project, The Deadly Tower of Monsters (Atlus, 2015), released in 2015 for PlayStation 4 and Windows, again creates its own unique world, but this time one that references a different representational tradition, that of cult classic lowbudget Hollywood monster movies, in all their cheesy, over-the-top glory. In this game, the player must proceed layer by vertical layer while climbing a sky-high tower replete with film sets, movie props, and mechanical devices belonging to an old-time movie maker. The game pokes fun at works from the science fiction and horror traditions, situating the player among a contingent of marooned astronauts on a mysterious planet. Again, the player can choose from among multiple identities—in this case Dick Starspeed, Scarlet Nova, and The Robot—each of which allows for unique obstacles and affordances. As described by one critic, this

single-player, isometric adventure game ups the B-movie charm by occasionally letting players catch a glimpse of the terrible special effects—two ropes holding a rocket, a giant stick moving the giant gorilla's hand—as they work their way up the deadly tower. (Crecente)

In this way, *The Deadly Tower of Monsters* creates an environment whose slapstick dialogue is in harmony with its visual aesthetic, both of which reveal the superficiality of the films and filmmakers being parodied, while adding to the pleasure and dynamism of gameplay.

Another game that creates a world unto itself is the Ecuadorian vertical-scrolling 2D platformer To Leave (Freaky Creations, 2013), developed by Guayaquil-based Freaky Creations and distributed on Sony's PlayStation Network for PlayStation 4 and the PS Vita mobile console, with plans for future release on Windows, Mac, and Linux. In the game, the player embodies a protagonist named Harm who clings to the edge of a rickety wooden door in the vibrant and exotic city of Candice, as he ascends vertically through a series of ever-more complex puzzles replete with obstacles such as falling bricks, flaming balls of gas, and narrow passageways blocked intermittently by moving pillars. These mechanical devices will feel familiar to many players, but unlike the horror, science fiction, and neomedievalist motifs discussed above, they are unique to the world of video games. Ludic signs without real-world referents, these nonlinguistic elements define the space where meaning is made in To Leave and games like it. The game centers on the threatening proposal of leaving one's comfort zone to attempt to survive a hostile and unwelcoming world, bringing emotional tone and gravitas to what is otherwise a quirky and fun-filled experience. The environment is excruciatingly difficult to navigate at times, requiring the player to continually collect glowing icons that build up the protagonist's level of "Drive," with the door disappointingly disintegrating and the player falling back to the starting point with each successive and frequent failure. In this way, To Leave transmits a procedural story of failure and success, discouragement and perseverance that allows the player to experience all of these emotions and acts with little to no use of written or spoken language.

Like the previous example, the Costa Rican puzzle-platformer *Fenix Rage* (Reverb Triple XP, 2014) features 2D gameplay action set among vivid and fantastical environments made up of mechanisms and interactive devices that are unique to the videogame medium. Released in 2014 for Windows with plans to expand onto Mac, PlayStation 4, PlayStation Vita, and Xbox One in 2015, the game employs mechanics reminiscent of home console classics like Sonic the Hedgehog (Sega, 1991) as well as contemporary indie favorites like Flappy Bird and Super Meat Boy (Team Meat, 2010). Along with a soundtrack inspired by classic 8-bit and 16-bit videogame music, these ludic touchstones are more likely to produce a greater sensation of familiarity for game-literate consumers than any narrative elements within Fenix Rage, which are virtually nonexistent. Nonetheless, these features both draw upon and increase game literacy, demonstrating the unique parameters for signifying experience enabled by worlds that could only be imagined, or compellingly narrated, in interactive, ludic form. In these ways, the "other worlds" in the games analyzed in this section show that contemporary Latin American game designers do not just adapt modes of expression from traditions in literature, cinema, and the visual arts, but also respond to the genre conventions and expressive traditions specific to the videogame medium itself.

## The Insufficiency and Indispensability of Textual Analysis for Game Studies

As the examples examined in this essay have demonstrated, video games share innumerable characteristics with written texts, and yet cannot be satisfactorily analyzed in merely narrative terms. In some ways, perhaps Janet H. Murray did have "the last word" in the debate over the role of narrative in videogame analysis. A decade ago, in a keynote talk at the Digital Games Research Association Conference, Murray argued that the

debate between narrative and ludological approaches to videogame analysis had already been done to death:

It is time to reframe the conversation. At some point in all of these debates, these two commonsensical facts are usually acknowledged: games are not a subset of stories; objects exist that have qualities of both games and stories. (Murray)

Therefore, we must at once recognize the insufficiency of narrative or literary analysis for looking at video games, and at the same time accept its indispensability for the interpretation of the many textual elements that games often do contain. And even still, recent developments in game design such as the advent of casual games have allowed for new tendencies to emerge that demonstrate the ways the relationship between games and narrative continues to evolve.

Looking at the Latin American games examined in this essay, several different trajectories can be identified in terms of the ways contemporary game designers use letters, text, and dialogue to contribute to videogame meaning. First, there are those games that are mostly narrative in the way they develop plot and allow the player to progress through the game. Games like Sergio Arístides' Enola show that textual communication and written dialogue remain relevant even in an interactive medium, and this game's story is told in a way that relies fundamentally on written narrative elements. Next there are those games that are both moderately narrative and moderately procedural, blending together both literary conventions and game design touchstones in the stories they create. To varying degrees, games such as the episodic science fiction thriller Reversion and the imaginative gamescapes of Zeno Clash, Rock of Ages, and Abyss Odyssey incorporate spoken dialogue and references to the literary and poetic tradition into the messages they communicate; however, that narrative frequently functions as a background element

vis-à-vis the centrality of gameplay. And finally there are those games that are mostly or entirely procedural in their communication of meaning, disavowing language in favor of self-referential meta-videogame environments. Among them, games like Poltergeist: A Pixelated Horror, Damned, and The Deadly Tower of Monsters allow players to inhabit multiple characters and perspectives, bringing new facets and experiences to classic literary genres and expressive modes. Meanwhile, a broad range of game designers have created unique self-contained game worlds, in titles ranging from the pixel horror game Into the Gloom, to flight simulator Kerbal Space Program, to neomedievalist games like Clash of the Olympians and Kingdom Rush, to microcosms of ludic signification like To Leave and Fenix Rage.

Though most of these games in some way adapt written and spoken words into their design, the continual process of remediation again produces fundamental changes. These include the capacity to experience a story from multiple perspectives and the subordination of textual elements and narrative devices to game mechanics and game design conventions in terms of their relative weight in a game's meaning. Video games also have unique means of transmitting meaning and telling stories procedurally, from interactive objects with situated meaning, to layered visual environments, to procedurally-generated levels to the ways they use humor, horror, and fantasy as contributions to meaningful experience. As Gee has pointed out, even games that are made mostly or entirely for the purposes of entertainment can teach players important lessons, including learning to experience the world in a new way, joining new affinity groups, developing resources for future problem solving, and learning to think critically about the relationship between games' designed spaces and the real world (37-38). And therefore it is important to think about the ways video games create meaning in dialogue with other expressive traditions as well as with other games and game genres. As the recent examples from Latin America examined here have shown, videogame development is a booming field of cultural production that is picking up speed, showing promise for future growth and diversification of the games, and scholarly approaches to games, related to Latin America. New types of mediated expression require a renewed effort to reinterpret and revisit our critical foundations. As such, we must avoid becoming overly reliant on conceptual frameworks that are not entirely applicable to games, such as examining games' narrative or literary elements in isolation. And therefore, in some ways we may indeed have arrived at the kind of crisis in written expression described in the introduction to this essay. But even still, as I hope I have demonstrated here, the last word in the relationship between video games and narrative has yet to be written.

#### Works Cited

- "App Stores Choose Bango Platform to Power Next Generation Carrier Billing Across Latin America." *Bango Newsroom.* 11 June 2015. Web. 15 November 2015.
- Bogost, Ian. *Persuasive Games: The Expressive Power of Videogames*. Cambridge, MA: MIT P, 2007. Print.
- —. Unit Operations: An Approach to Videogame Criticism. Cambridge, MA: MIT P, 2006. Print.
- Bolter, Jay and Richard Grusin. *Remediation*. Cambridge, MA: MIT P, 1999. Print.
- Bush, Matthew and Tania Gentic. Introduction: Mediatized Sensibilities in a Globalized Era. Technology, Literature, and Digital Culture in Latin America: Mediatized Sensibilities in a Globalized Era. Ed. Matthew Bush and Tania Gentic. New York and London: Routledge, 2015. 1-20. Print.
- Calleja, Gordon. *In-Game: From Immersion to Incorporation*. Cambridge, MA: MIT P, 2011. Print.

- Conditt, Jessica. "Steam Now Accepts Brazilian National Currency via Boleto." *Engadget*. 11 June 2015. Web. 15 November 2015.
- Crecente, Brian (2015). "The Deadly Tower of Monsters turns Every Sci-Fi B-movie into an Adventure Game." *Polygon*. 12 June 2015. Web. 15 November 2015.
- DeVane, Ben and Kurt D. Squire. "The Meaning of Race and Violence in Grand Theft Auto: San Andreas." *Games and Culture* 3.3-4 (2008): 264-85. Print.
- Dovey, Jon and Helen W. Kennedy. *Game Cultures: Computer Games as New Media*. Berkshire,
  UK: Open UP, 2006. Print.
- Ensslin, Astrid. *Literary Gaming*. Cambridge, MA: MIT P, 2014. Print.
- Montenegro, Pablo Andrés Escandón. "Cibermedios y cibercultura,; senderos narrativos que se bifurcan?." Chasqui. Revista Latinoamericana de Comunicación 119 (2012): 66-72. Print.
  - Fernández-Vara, Clara. Introduction to Game Analysis. New York and London: Routledge, 2015. Print.
- Frasca, Gonzalo. Simulation versus Narrative: Introduction to Ludology. The Video Game Theory Reader. Ed. Mark J. P. Wolf and Bernard Perron. New York and London: Routledge, 2003. Print.
- Friedman, Ted. "The Semiotics of SimCity." *First Monday* 4.4 (1999). Web. 15 November 2015.
- Foucault, Michel. Of Other Spaces. Trans. Jay Miskowiec. *diacritics* (1986): 22-27. Print.
- García Canclini, Néstor. Hybrid Cultures: Strategies for Entering and Leaving Modernity. Trans. Renato Rosaldo. Minneapolis: U of Minnesota P, 1995. Print.
- Gee, James Paul. What Video Games Have to Teach Us About Learning and Literacy (2<sup>nd</sup> ed.). New York: Palgrave Macmillan, 2007. Print.
- Jameson, Fredric. Postmodernism, or, The Cultural Logic of Late Capitalism. Durham and London: Duke UP, 1991. Print.
- King, Geoff and Tanya Krzywinska, *Tomb Raiders* and Space Invaders: Videogame Forms and Contexts. New York: I. B. Tauris & Co, 2006. Print.

- Kirschenbaum, Matthew G. *Mechanisms: New Me*dia and the Forensic Imagination. Cambridge, MA: MIT P, 2008. Print.
- Kline, Daniel T. *Digital Gaming Re-imagines the Middle Ages*. New York and London: Routledge, 2013. Print.
- Leopard, Dan. "Mobilizing Affect: The Politics of Performative Realism in Military New Media." *Joystick Soldiers*. Ed. Nina B. Huntemann and Mathhew Thomas Payne. New York and London: Routledge, 2010. 131-45. Print.
- Lunden, Ingrid. "Amazon Expands its Android Appstore to Nearly 200 Countries; It's All About Scale." *Techcrunch*. 17 April 2013. Web. 15 November 2015.
- Marisca, Eduardo. Developing Game Worlds: Gaming, Technology and Innovation in Peru. Master's Thesis. Massachusetts Institute of Technology, 2014. Web. 15 November 2015.
- Martin, Matt. "Sony Opens PSN Store for Brazilian Gamers." *Gamesindustrybiz*. 25 July 2011. Web. 15 November 2015.
- Martín-Barbero, Jesús. "Art/Communication/Technicity at Century's End." Trans. Hugh O'Donnell. Cultural Politics in Latin America. Ed. Anny Brooksbank Jones and Ronaldo Munck. Basingstoke, UK: Macmillan (2000). 56-73. Print.
- Medina, Eden. Cybernetic Revolutionaries: Technology and Politics in Allende's Chile. Cambridge, MA: MIT P, 2012. Print
- Moren, Dan. "Apple Releases iTunes Store in Latin America, Match in Brazil." *Macworld*. 2011. Web. 15 November 2015.
- Murray, Janet H. "The Last Word on Ludology v Narratology in Game Studies." International Conference of the Digital Games Research Association. Vancouver, British Columbia. 17 June 2005. Keynote Address. Web. 15 November 2015.

- Myers, David. "Signs, Symbols, Games, and Play." Games and Culture 1.47 (2006): 47-51. Print.
- Paul, Christopher A. Wordplay and the Discourse of Video Games: Analyzing Words, Design, and Play. New York and London: Routledge, 2012.
- Paz-Soldán, Edmundo and Debra A. Castillo. "Introduction: Beyond the Lettered City." *Latin American Literature and Mass Media*. Ed. Edmundo Paz-Soldán and Debra A. Castillo. New York: Garland, 2001. 1-18. Print.
- Penix-Tadsen, Phillip. Latin American Game Design and the Narrative Tradition. *Technology, Literature, and Digital Culture in Latin America: Mediatized Sensibilities in a Globalized Era.* Ed. Matthew Bush and Tania Gentic. New York and London: Routledge, 2015. Print.
- Perlin, Ken. "Can there be a Form between a Game and a Story?" First person: New Media as Story, Performance, and Game. Ed. Noah Wardrip-Fruin and Pat Harrigan. 2004. 12-18. Print.
- Ralph, Nate. "Sony Expands Playstation Biz into Latin America." *Wired.* 20 February 2009. Web. 15 November 2015.
- Therrien, Carl. "Games of Fear: A Multi-Faceted Historical Account of the Horror Genre in Video Games." *Horror Video Games: Essays on the Fusion of Fear and Play.* Ed. Bernard Perron. Jefferson, NC, and London: McFarland & Company, 2009. 26-45. Print.
- Tringham, Neal. Science Fiction Video Games. Boca Raton, FL, London, and New York: CRC P. 2015.
- "Versiones de *Reversión*." *Reversión– El juego– blog.* 11 October 2013. Web. 13 November 2015.
- Wong, Luis. "Videojuegos hechos en Latinoamérica," Revista Velaverde. 8 November 2013. Web. 13 November 2015.