

# THE LOCAL IN VIDEOGAMES: TEXTUALITY, MEANING-MAKING, AND AFFORDANCE

CULTURA LOCAL EM VIDEO GAMES: TEXTUALIDADE, CONSTRUÇÃO DE SIGNIFICADO E PERMISSÃO

Tamer Thabet <sup>1</sup>
(UFVJM)
Ana Priscilla Christiano <sup>2</sup>
(PUCPR)
Alexandre Vilas Boas da Silva <sup>3</sup>
(SEED/PR)

<sup>&</sup>lt;sup>1</sup> Professor, Letras, Faculdade Interdisciplinar em Humanidades, Universidade Federal dos Vales do Jequitinhonha e Mucuri (UFVJM), Diamantina, Minas Gerais. tamerthabet@outlook.com

<sup>&</sup>lt;sup>2</sup> Professora, Departamento de Psicologia, Pontifícia Universidade Católica do Paraná (PUCPR), Londrina, Paraná. ana.christiano@pucpr.br

<sup>&</sup>lt;sup>3</sup> Professor da Secretaria de Estado da Educação do Paraná (SEED/PR). Doutor em Letras - Estudos Literários, pela Universidade Estadual de Londrina (UEL). Bolsista CAPES/DS. alexandrevbs@seed.pr.gov.br

**ABSTRACT:** This article aims at relating a research project about locality of videogame content to the larger body of knowledge in game studies. Based on the belief that video games function as a cultural voice that is not generation-specific, in the same way films are, the research project "Local Videogames" seeks to create and apply a special model of building game narratives out of local experiences; stories from the collective popular memory of one region as opposed to the familiar and metropolitan narratives. The goal of our article is to place the project and its game production in the perspective of game studies. We attempt to construct this relation in the light of Melcer's (2015) study and based on key concepts in game studies: gamification, textuality, flow, meaning-making, and affordance.

**KEYWORDS**: Videogames, local narratives, textuality, meaning-making, affordance.

**RESUMO:** Este artigo tem como objetivo fazer um relato de projeto de pesquisa sobre localização de conteúdo de *video game*, como parte da área de estudos de jogos eletrônicos. Com base na crença de que os jogos de *video game* funcionam como uma voz cultural, que não é específica de uma geração da mesma forma que os filmes são, o projeto de pesquisa *Local Videogames* procurou criar e aplicar um modelo especial de construção de narrativas de jogo a partir de experiências locais; histórias originárias da memória popular coletiva de uma região em oposição às narrativas familiares e metropolitanas. O objetivo de nosso artigo é situar o projeto e sua produção de jogo na perspectiva dos estudos de jogos. Nós tentar construir essa relação à luz dos estudos de Melcer (2015) e com base em conceitoschave em estudos de jogo: gamificação, textualidade, fluxo, construção de significado e permissão.

**PALAVRAS-CHAVE**: Jogos de *video game*, narrativas locais, textualidade, construção de significado, permissão.

### Introduction

Originally, the project "Local Videogame" aimed to train students and literature researchers to think and act on game creation. Efforts in the project also focused on strategies to translate Brazilian literary heritage and cultural themes into games. The "Local Videogames" project's methodology is mainly based on praxis but it theoretically stands on three concepts developed by Aarseth (1997), Nitsche (2008), and Tavinor (2009). The concepts of textuality, meaning-making, and affordance guided the project's researchers through the development of a model for the treatment of literary works into a video game script and eventually into the game itself. One year after the project delivered its first videogame, the *Red Foot Saga*, researchers began to think about how project relates to the big ideas in game studies.

In a 2015 publication, Edward Melcer and other researchers analyzed publications from 48 core publication venues of videogame research from the years 2000 through 2014 using Co-word and Covenue analysis to discover major published themes and hence provide a broad overview of the field. The study reveals an image of the academic landscape through a hierarchy of keyword clusters representing and classifying the most frequent keywords used in game research. At the top of this hierarchy the first six clusters are very important in game studies and below we present them:

- The first cluster: Game Design, Serious Games, Game Based Learning, Educational Games, Game Development, Motivation, Case Study, Engagement, Gamification, Collaborative Learning. This cluster sure looks like it belongs to folks of pedagogy.
- The second cluster: Interactive Storytelling, Interactive Narrative, Role Playing, Real World, Multiplayer Online, Massively Multiplayer, Interactive Drama, Game World, Non Player, Digital Storytelling. This cluster belongs to those who have interest in storytelling.

- The third cluster: Real Time, Virtual Reality, Virtual Environments, Virtual Characters, Game Engine, Motion Capture, Time Strategy, Animation, Virtual Storytelling, Computer Animation. This is the keyword cluster of the computational and technical thinkers.
- The forth cluster: Virtual Words, Massively Multiplayer Online Games, Second Life, Online Games, Avatars, Social Interaction, Gender, Multiplayer, World of Warcraft, Ethnography. This is the cluster where the periphery of videogames is explored.
- The fifth cluster: Gameplay, User Experience, Entertainment, Player Experience, Immersion, Usability, Flow, Interface, Ludology, Game Environment. This one is for those who study games as games.
- The sixth cluster: Narrative, Art, Interactivity, Emotion, Aesthetics, Music, Agency, Interactive Art, Affective Computing, Interactive Systems. This cluster is also for those who study games as games, but lesser and lesser number of researchers.

One way of thinking about game studies is to look at these clusters through the perspective of relativity. Melcer's findings are transcribed here in order to relate some game studies keywords to the functioning and philosophy of the "Local Videogames" project.

# Relating "Local Videogames" to game studies

The project's researchers grew up reading the works of Jorge Amado and enjoyed his depiction of space, time, and people. Unfortunately, such literary gems are now overlooked in a global consumerist climate that favors digital technologies. It is no secret that many people do read the book because the film brought their attention to it. The "Local Videogames" project aims at bringing the literary culture back to the spotlight by transforming local literature into an interactive form that can be experienced online for free and anywhere. The project "Local Videogames" presents a

design model for the researchers and students to use local culture, fiction, folklore, music and history to create video game content that promotes the Brazilian literary heritage. This video game content is one that Brazilians can relate to, and can help promote local culture and literature internationally.

While the project methodology is based on praxis, the driving theory is based mainly on the studies of Portnow (2010) and Barry Atkins (2003), in which the challenges for Brazilian game development and the potential of games narratives are discussed. This project culminated in the development of the videogame called Red Foot Saga<sup>4</sup>, a free to play 3D browser adventure game about the history and culture of Londrina city. This is the first product of the Local Video Games Project, which was an international partnership between universities and private sector to explore new design and content and to use games to create bridges of knowledge between cultures. The Red Foot Saga tells a modern Brazilian story about a young city's history.

The language of video games has become a new universal language that allows people from all over the world to learn and experience different cultures. This opens the door to many opportunities to communicate the local culture and literature to the world in an extremely powerful, engaging and interactive. One of these opportunities allows the Brazilian literary community in academia to promote the local cultural heritage on the global platform of the internet by introducing the world audience to experience Brazil's culture. This also means to place game design in the literary perspective, for example, to examine a classical work of Brazilian literature, such as Jorge Amado's stories, and translate the textual world into a navigable game world where Amado's characters, settings, plotlines are experience through gameplay.

One of the "Local Videogame" project researchers is a Canadian who realizes that not everyone outside Brazil is able to know, enjoy, and get immersed in the Brazilian stories, and therefore

the researchers acknowledge the need to use interactive technologies to bring the attention to Brazilian literary heritage in an interactive form. The theoretical support of the project is rooted in Barry Atkins' approach to the subject. In More Than a Game: The Video game as Fictional Form (2003), Atkins emphasizes "how the reading experience offered by game-fiction texts can be related to the reading experience offered by other forms of narrative fiction" (ATKINS, 2003, p. 26). The primary question to be asked is whether game fictions are capable of being more than a game. According to Atkins (2003, p. 7), video games represent a new form of fiction as it confronts us with a "form of narrative storytelling where the production of story is the end result of play". The project also builds on Janet Murray's ideas about the immersive potential games and their unique aesthetics in her book Hamlet on the Holodeck (1997). She maintains that in games stories the player experiences immersion, agency, and a sense of transformation, which motivates this research to utilize the distinctive expressive power of the game medium to present game content driven by Brazilian culture.

The "Local Videogames" project also uses Portnow's study (2010). In his report entitled "Analysis: Inside Brazil's Video Game Ecosystem", James Portnow discusses the hurdles facing the Brazilian game industry. The Local Video Games project aims to address the most relevant two problems in Portnow's report:

- (1) While Brazilian universities greatly invest in exploring the sociological and historical aspects of games, they do not provide sufficient training for future game developers since game development is not part of the potential coursework for students. The project aims at training students on how to use the free software tools to create video games.
- (2) The "interdepartmental cooperation" issue, which means that game development students do not have the opportunity to study in multidisciplinary groups with their counterparts from humanistic and artistic disciplines. The Local Videogames projects

will seek to build a multidisciplinary teamwork similar to the previous success in the State University of Londrina. The project's methodology is mainly based on praxis but it theoretically stands on three concepts developed by Aarseth (1997), Nitsche (2008), and Tavinor (2009). The concepts of textuality, meaning-making, and affordance guided the project's researchers through the development of a model for the treatment of literary works into a video game script and a playable videogame.

### Gamification

Although "gamification" appears in the first cluster in Melcer's study, we opted for avoiding the explicit use of it. Ian Bogost's position statement (2011) discusses the abuse of the enormous rhetorical power of the word "gamification" and how it is employed by business consultant to attract customers.

This rhetorical power derives from the "-ification" rather than from the "game". -ification involves simple, repeatable, proven techniques or devices: you can purify, beautify, falsify, terrify, and so forth. -ification is always easy and repeatable, and it's usually bullshit. Just add points. (BOGOST, 2011, s.p.).

During the course of the "Local Videogames" project, researchers attempted to illustrate that symbolic mediation requires adaptation and recoloring of history to make it playable, comprehensible beyond language barriers, and enjoyable. The principal goal was to articulate that game adaptation of local memory yields a cross-cultural game design ideal. The "Local Videogames" avoided the use of cumbersome terms and resolved to simply explain that its ultimate goal is to simply make stories of the local playable. The production of the game *Red Foot Saga*, a narrative videogame about the cultural memory of Londrina city, was the goal and resulted

in the examination of the role of symbolic mediation through a nonverbal language. The project researchers later expressed how the interactions with the symbols in the game world allows the player to construct either evocative or enacted stories inspired by Londrina's cultural and territorial history. In the publication that followed the game release, authors elaborated that the game's nonverbal language can be used as means of mediation through virtual places, visible identity markers, and the player's performance (THABET, 2015).

## **Textuality**

Video game worlds are places where players perform and create meaning. There is this recurrent concept of a machine, and this concept is best tackled in the work of Aarseth (1997). Other scholars dealt extensively with the idea of fiction. From what has been said, the videogame could almost be described as a storytelling machine that affords us to react, express, and perform. Uncomplete without its reader, the videogame is a text to be acted out rather than read, and an art form that challenges the players with fictional plights. Games then function as texts that contain participatory stories about a contest, a story told by a human and a machine. Johan Huizinga (1964, p. 9) describes the play world as secluded and limited; it is distinct from ordinary life in locality and duration, and it "contains its own course and meaning". The world of play is not only a place for having fun; it is also a medium of expression where we actively create meaning. This world has a unique textuality. Huizinga maintains that play serves two functions. It can be either a contest for something or a representation of something. He argues that "[t]hese two functions can unite in such a way that the game 'represents' a contest, or else becomes a contest for the best representation of something" (HUIZINGA, 1964, p. 13), and thus he underlines the element of "performance" in this process. Huizinga describes performance as

an imaginative "stepping out of common reality into a higher order" (HUIZINGA, 1964, p. 13), which other game discourses treat as transformation of the self and consciousness. Both functions of contest and representation are interconnected and evident in discourse about game textuality. In the case of fiction in books and films, only representation can be a function; the story is not a contest with which the audience is engaged.

Huizinga's *Homo Ludens* (1964) shows the conceptual bond between play and game textuality in terms of three significant traits: the creation of a pretend world with its own time, space, and consciousness; the inevitability of the suspension of disbelief so as to sustain this world; and the fact that the players are challenged to achieve the best performance. The unique textuality of video games left a clear mark on game studies. Researchers and developers of the "Local Videogame" project tapped into these game studies concepts and into the narrative richness of local history to employ gameplay ideas and create diverse videogame levels and environments in the *Red Foot Saga*.

# Meaning-making

Aarseth (1997) proposes that the notion of cybertext, as a form of ergodic literature, can be used to describe the organization of a text in a way that recognizes the influence of the medium as a principal element in its literary dynamics. For Aarseth, this organization of the text has a vital function during the process of interpretation. He alludes to the hermeneutic dilemma, according to which it is both necessary and impossible to distinguish between the text and its reading, which has led theorists such as Stanley Fish to question the existence of the text itself as an autonomous, separate object. Aarseth claims that this problem exists in all forms of textual communication, and that the organization of a text makes the distinction between the text and its reading possible by allowing us

to differentiate between the text's teleology – the way in which it invites the reader to "complete" the text – and the reader's strategic approach to it (AARSETH, 1997, p. 20).

Videogames contain the basic elements to express locality. Michael Nitsche's 2008 study *Video Game Spaces: Image, Play, and Structure in 3D Game Worlds* concentrates on the concept of spaces in computer games. Its relevance for the present study resides mainly in how it provides valuable insights and new ideas on game narratives, while being clearly informed by the previous research in the field of game studies. Nitsche's discussion centers on how the narrative functions as a means to comprehend the game world, how the learning aspect in games is dependent on the narrative, and what this tells us about the importance of the player in creating the narrative in games. In the context of the "Local Videogames" project, these ideas were central in comprehending what is necessary to transmit a real life experience to the videogame player.

For Nitsche, the narrative in games creates the necessary context for interpretation and prevents a "chaotic and meaningless explosion of possibilities" (2008, p. 43), and so it functions as a means to comprehend the space, time, and causality of the game itself. He argues that narrative is the means by which players make sense of the in-game situations as it helps the player to construct meaning in the game (NITSCHE, 2008, p. 44). He stresses that these evocative narrative elements are "suggestive markings" that aim to generate context and significance in the game's world. The representation of cultural symbols of Londrina was an immediate challenge but nevertheless crucial to the videogame to guide the player in meaning-making related to the space and the story.

Nitsche points to Raph Koster's argument (2005) that the most important aspect of games is learning: the player gets engaged in the game via a learning process, which is a different perspective on the player's immersion in computer games. Players learn new skills in order to master the game, adapt to a new reality that is

different from their own, and be engaged in that reality. For Nitsche, such learning is dependent on the narrative element that determines the situatedness of the player in the game's world.

More concretely, Nitsche draws on Jerome Bruner's understanding of narrative, as developed in Acts of Meaning, as the dominating discourse form in human communication (BRUNER, 1990, p. 77) and as "comprehension that helps to make sense of actions" (NITSCHE, 2008, p. 43). In order to describe the production of narrative in the game's context, Nitsche argues that our comprehension is shaped through a narrative structure in almost any situation: following Bruner (2003, p. 20), he argues that the narrative in games is about the plight that exists in the player's mind as fueled by stimulants from the game. The player gets stimulated by the game and creates the narrative. This conceptual lineage, as we might have expected, leads Nitsche to Wolfgang Iser's readerresponse theory, which is built on the claim that readers fill in the gaps in the text using their imaginations so as to create the story. He concludes that the narrative in games comes to life through the work of the player, and thus the story exists in the player's mind.

The player in a video game is obliged to act in order to keep the textual machine working. Agency is not only an option but also a demand. It can even turn into a curse, for example, in any moral dilemma that a video game might pose to the interactor and that demands a dubious decision. (NITSCHE, 2008, p. 50).

This quotation from videogame spaces should inspire us to think harder about the player's own significance in game world, especially when developing a critical approach to game fiction. Nitsche indicates that the player is the central agent in the creation of meaning in a game story and is also central to the telling of the story. The fact that, like many other scholars who have attempted to analyze game narratives, Nitsche finds it inevitable to refer to reader-

response concepts can be attributed to the obvious centrality of the player in the creation of meaning in computer game narratives. His description of the player's plight and the dilemmas he/she encounters while playing the story, furthermore, concretizes our earlier statement regarding the disposition of the game story as a challenge.

To think about textuality one also must think about criticism. The discussions that followed the game included questions related to the dynamic between real history, fictiveness and believability. Six questions were asked to better understand a critical paradigm for the *Red Foot Saga* gameplay experience: How did the game challenge the player? How did the player respond to the challenge? What could and couldn't the player do? What does the player's response mean? How did the game world react to the player's response? What happened when the player replayed the game? These six questions constitute the player-response criticism and are directly related to the game player's own reaction to the challenges of the fictional experience. As the name implies, player-response is based on reader-response critical philosophy, and more specifically influenced by Norman Holland's views on subjectivity and identity.

The set of questions we ask about a gameplay experience is used to articulate and explain the player's own meaning-making process. Player-response treats the video game as an intelligent fictional world that challenges the player emotionally and intellectually. The model also treats the game story as the player's own personal experience. Hence, it is the player who could best describe the relation between their own responses and own subjectivity, which entails the practice of narrative reproduction (retelling) by the player/critic. Retelling is essential because it becomes an incubator for critical reflection by the player and the six questions guide the player's personal account of the game story.

Psychoanalytic literary critic Norman Holland (1968) writes that the interpretation of a literary work is based on the interaction between the reader and the text. He maintains that the text prompts the fears and desires of its reader who transforms the literary work into a private world. In this world, readers develop adaptive strategies to cope with anxieties triggered by the fiction. Holland calls the pattern of the reader's defenses the "identity theme" (HOLLAND, 1980, p. 125). The player-response criticism's principle goal is to uncover, for the purpose of interpretation, the identity theme based on the player's responses to the challenges of game world.

The fictive world of games is often constructed around a computer-simulated plight that tests its player and reveals his/her identity theme. The player does not only identify with a character; he/she is or soon becomes the character. Moreover, the act of response in game fiction is not limited to the player's response to the text. The game world responds back to the player in many ways, which sustains the dynamic of fictiveness and believability.

### Enactment

The player of the *Red Foot Saga* must impersonate a game character as primary means to be immersed. What happens next to learn the story of the game is enactment. Laurel (1993) reminds that Aristotle defined enactment in terms of audience rather than actors; for instance, a kinesthetic activity that is performed by actors is perceived visually rather than kinesthetically by the audience. Laurel argues that the element of enactment – referred to as "performance" in *The Poetics* – is not limited to visual elements but includes all the sensory phenomena in the representation, and that such multisensory phenomena (visual, auditory, and kinesthetic) are the basic material of both drama and human-computer activity.

Importantly, Laurel considers the kinesthetic functions as both the cause and effect of the representation (LAUREL, 1993, p. 54). Such an observation is valuable for our study of game narratives because it helps us better understand the reader-text interrelationship. The player's actions – e.g., moving his/her own character – influences the game's world and triggers events to which the player must respond. In Aristotle's reasoning, the pattern is the material cause of language, but this could be nonlinguistic as well. Laurel points to Aristotle's notion that the perception of patterns is pleasurable in itself, whether or not the patterns are formulated into semiotic devices or language (LAUREL, 1993, p. 56). The pleasure of perceiving patterns is clearly also at the heart of the human-computer experience.

Defending the importance of reports made by game players about the "metaphorical enactment of a life experience" (MURRAY, 1997, p. 1), Murray speaks of many leading aspects of the videogame experience "such as the feeling of immersion, the enactment of violent or sexual events, the performative dimension of gameplay, and even the personal experience of winning and losing" ((MURRAY, 1997, p. 1). In "The Last Word on Ludology v Narratology in Game Studies", Janet Murray maintains that formalist approach too has energized and focused the field of game studies by bringing to light the formal properties of games, as well as the more useful structuralist attributes of video games and play in general. Moreover, such approach led to the posing of a range of productive questions about the definition of videogames.

We went through some of the earlier definitional approaches to videogames; e.g. from Zimmerman (2004) to Tavinor (2009), which is an important mark in the history of game studies because such versatile technique did not quite succeed in defining videogames as it did in defining game studies itself. Using Wittgenstein Jonne Arjoranta (2014) argues it is not necessary to agree on a definition. Arjoranta argues that definitions help understanding videogames better by creating boundaries, but these very boundaries limit you. On the question of boundaries and definitions, we see that these boundaries and limitations help us define game studies are as a field by manifesting the differences of thought and perspectives. Many of us for instance have knowingly treated videogames as a form of

fiction while being aware that other game researchers do live outside such disciplinary walls.

### Flow

The game of the "Local Videogames" project aimed at immersing the player and maintaining a state of play flow based on Csikszentmihalyi (1990) attributes of such state of focus. Csikszentmihalyi, the psychology researcher, introduces flow by affirming the difference between pleasure and enjoyment. He stresses that they are two different sensations: pleasure is similar to the feeling resulting from the satisfaction of a homeostatic need such as hunger, while enjoyment is beyond homeostatic pursuits as it requires concentration and investment of psychic energy in new goals (CSIKSZENTMIHALYI, 1990, p. 47). We need to see how the different elements of the enjoyment necessary for an optimal experience correspond to a player's experience in game stories. According to Csikszentmihalyi, there are seven elements involved in enjoyment, but they are not all simultaneously required for the optimal experience to take place. These elements are: a challenging activity that requires skills, a merging of awareness and action, clear goals and feedback, concentration on the task at hand, the paradox of control, loss of self-consciousness, and a transformation of time.

Csikszentmihalyi's first condition for enjoyment is the presence of a challenging activity that requires skill. He maintains, furthermore, that there must be a balanced ratio between challenge and skill in order to remain on the level between anxiety and boredom; that is, if the activity is too difficult, it will create anxiety instead of enjoyment, if the activity is too easy, it will lead to boredom. The psychologist uses examples of game playing to establish his point. This use of games is germane to our analysis because the characteristic of challenge defines the story in computer games and is the keystone of the play experience in game fiction. Playing a game

narrative requires the development of the skills required to navigate through the game world so as to unfold the plot, which results in the concentration of the player's attention on the virtual world. Players of game narratives have the freedom to set different levels of difficulty to ensure the right balance between challenge and skill for them, and so we find that game narratives allow for more individual appropriations than books.

People experience an overwhelming sense of absorption in the activity they are doing when they achieve a state of oneness with the activity. This total concentration occurs when a person employs all relevant skills to handle a challenging situation. The author explains the resulting state of flow as follows: "There is no excess psychic energy left over to process any information but what the activity offers. All the attention is concentrated on the relevant stimuli" (CSIKSZENTMIHALYI, 1997, p. 53). In our understanding, another element of enjoyment directly links to the merging of awareness and action: what the author in his book describes as concentration on the task at hand, where he characterizes the flow experience with the absence of psychic entropy. Concentration is so intense that there is no room in the mind for preoccupations and anxieties (CSIKSZENTMIHALYI, 1997, p. 58).

This state of mind should remind us of what players experience when they are fully engaged in the play world, the alternative consciousness that Huizinga describes. Huizinga (1964, p. 8) also uses the term "absorption" to refer to the players' experience in the play world and notes how this absorption leads to "rapture". This concept has become a predominant keyword in the research field of computer games and is generally referred to as "immersion".

The merging of action and awareness that Csikszentmihalyi speaks of is relevant to my thesis as it explains how immersion occurs in game fiction. Since the player is challenged and uses and develops relevant skills to adapt to the virtual world in the game, he/she becomes overwhelmed and absorbed in the plot. In the context of

game fiction, this immersion, or the total concentration of psychic energy, is channeled through a specific undertaking: the impersonation of a character. Csikszentmihalyi points out that people lose awareness of themselves during an optimal experience, which is also the case in computer games; the psychic energy is invested in character impersonation, which creates a temporary mindset that leads players of game fiction to focus strictly on the demands of the fictional situation at hand. Character impersonation in game fiction fortifies the sense of belonging to the virtual world and engagement in the plot, and thus is the foremost defining attribute in game fiction as it necessitates both engagement and agency.

### **Affordance**

Tavinor (2009) further argues that the advanced digital graphics technology makes computer games aesthetically rich fictional worlds in which the player-character allows the player to both perceive and act while exploring the fictional world of the game. This is due to what he calls the *modality* in computer games, which refers to the various forms of sensations involved - the precise combination of vision, hearing, taste, smell, and touch. Games do not only engage a player in at least three of these sense modalities to provide him/her with epistemic access to the facts of the fictional world, they also provide the player with the possibility of fictional action. Affordances, Tavinor maintains, are the responsive parts of the environment: "A fictional affordance in the case of a videogame is thus an interactive aspect of the fictive representation that determines what a player can fictionally do" (TAVINOR, 2009, p. 80). He describes these affordances as the fictive means provided to the player (TAVINOR, 2009, p. 109).

To conclude, mainly the three notions of textuality, meaningmaking, and affordance, developed through game studies by many researchers, provide us with enough ideas to create videogames about locality, which is the concept of making what is local global without being out shadowed by the metropolitan influences, and this is because the textual in videogames is interactive and immersive and so it allows players to be there without leaving their homes. It is also because the meaning-making process is personal and affords the player to interact with a distant world.

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### NOTA

<sup>&</sup>lt;sup>4</sup> Available at: <a href="http://www.sagapevermelho.com.br/">http://www.sagapevermelho.com.br/</a> Accessed: July 14, 2016. Available at: <a href="http://www.sagapevermelho.com.br/">https://www.youtube.com/watch?v=RouCYoY3Ilo></a>. Accessed: July 14, 2016.